

Combined Campus Course Descriptions

SEATTLE COLLEGES

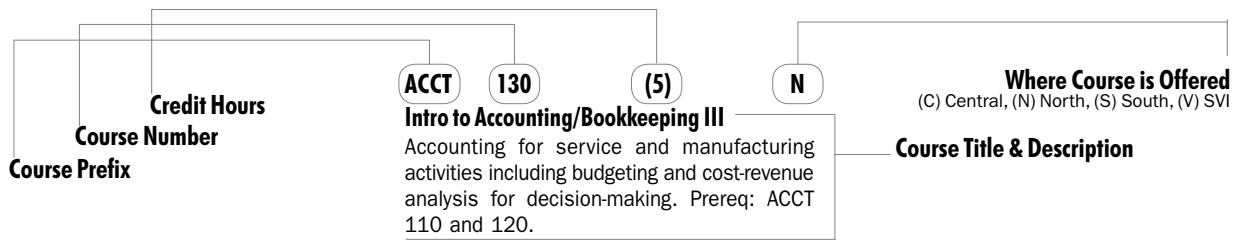
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Course Descriptions



Brief descriptions of courses offered at the Seattle Colleges are listed here. Guides on pages 225-227 contain prefix/course and course/prefix lists to assist you in locating courses associated with a particular program. Courses are updated on an ongoing basis, and the most current course information is available at: www.seattlecolleges.edu

How to Read Course Descriptions



Common Course Numbering (&)

All Washington community colleges, including the Seattle Colleges, are using a **Common Course Numbering (CCN) System**. The system identifies courses that are equivalent at community colleges across the state to make it easier for students to transfer between two-year colleges.

Courses identified with an ampersand (&) are part of the CCN system (examples: ACCT& or HIST&). However, courses without an “&” will continue to transfer between two-year and four-year colleges under individual Direct Transfer Agreements (DTA), as in the past.

For further explanation of the CCN system visit www.seattlecolleges.edu/coursesSearch.aspx.

Course/Prefix Index

PREFIX to Course

NOTE: Prefixes are revised to fit the statewide Common Course Numbering (CCN) system implemented in Summer 2008. See page 4 for further CCN information. Course listings for Central, North and South start on page 190.

ABD	Abroad/Study Abroad
ABE	Adult Basic Education
ABR	Auto Body Collision Repair
ABS	Applied Behavioral Science B.A.S.
ACCT	Accounting
ACM	Aerospace Composite Materials
AD	Application Development B.A.S.
AHD	Dental Assistant
AHE	Allied Health/Dental Hygiene/ Emergency Medical Technician/ Medical Assisting/Phlebotomy/ Respiratory Care
AHI	Health
AHM	Medical Assisting
AMA	Medical Assisting
AME	American Ethnic Studies
AMT	Aviation Maintenance Technology
ANTH	Anthropology
APPRL	Apparel Design & Development
ARAB	Arabic
ART	Art
ASL	American Sign Language – see Languages & Literature
ASTR	Astronomy
AUT	Automotive Technology
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BAK	Specialty Desserts & Breads – see Culinary Arts
BCT	Business Computers
BIOL	Biology
BOS	Business
BOT	Botany
BTS	Basic & Transitional Studies
BUS	Business
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CCE	Early Childhood Education
CDS	Chemical Dependency – see Social & Human Services
CFS	Child & Family Studies
CHED	Community Health Education B.A.S. – see Respiratory Care

CHEM	Chemistry
CHIN	Chinese – see Languages & Literature
CMST	Communication
COR	Core Employment Readiness
COS	Cosmetology (SVI)
CPP	Community Policing
CSC	Computer Science
CTN	Computing Technology
CUL	Culinary Arts
CWE	Cooperative Education/ Work Experience
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DES	Graphic Design
DHY	Dental Hygiene B.A.S.
DRMA	Drama
<hr/>	
ECED	Early Childhood Education
ECON	Economics
EDUC	Education
EEL	Sustainable & Conventional Energy & Control Technology
EET	Electronics Technology
EFDA	Expanded Function Dental Auxiliary
ENGR	Engineering
ENGL	English – see Languages & Literature
ENV	Environmental Sciences
ESL	English as a Second Language – see Languages & Literature
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FAM	Parent Education/ Senior Adult Education
FRCH	French – see Languages & Literature
FSD	Restaurant Production – see Culinary Arts
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GED	General Education Development
GEOG	Geography
GEOL	Geology
GERM	German – see Languages & Literature

HDC	Human Development
HDM	Diesel & Heavy Equipment Technology
HEA	Health
HIN	Watch Technology
HIST	History
HMG	Hospitality Management B.A.S.
HOS	Hospitality – see Culinary Arts
HSC	High School Completion – Adult Basic Education
HUM	Humanities
HVC	Heating, A/C, Refrigeration Design Technology
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IBN	International Trade B.A.S.
ICT	Computing Technology (IT)
IFS	Industrial First Aid
INT	Industrial Manufacturing Technology
ISC, ISD, ISP	International & Intercultural Studies
IT	Information Technology
ITAL	Italian – see Languages & Literature
ITC	Information Technology
<hr/>	
JAPN	Japanese – see Languages & Literature
JRN	Journalism
<hr/>	
LAN	Linguistics – see Languages & Literature
LHO	Landscape Horticulture
LIT	Literature – see Languages & Literature
LOG	Logistics
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MAS	Medical Administrative Specialist
MATH	Mathematics
MET	Mechanical Engineering Technology – see Engineering
MEY	Meteorology
MGO	Marine Deck Technology
MIC	Information Technology
MSC	Material Science – see Science and Engineering
MTA	Building Trades Pre-Apprentice Training
MTS	Marine Technology
MUSC	Music
MVM	Automotive Technology

NANO Nanotechnology
 NME New Media
 NTR Nutrition
 NUR Nursing

OCEA Oceanography

PEC Physical Education
 PHA Pharmacy Technician
 PHIL Philosophy
 PHO Photography, Commercial
 PHYS Physics
 POLS Political Science
 PSG Psychology
 PST Pastry Arts – see Culinary Arts
 PSYC Psychology
 PTE Professional Technical Teacher
 Education B.A.S.

RCP Respiratory Care
 REL Religion
 RES Real Estate

SBST Sustainable Building Science
 Technology B.A.S.
 SCI Science
 SEN Senior Adult Education
 SHS Social & Human Services
 SLN Service Learning
 SMG Supervision & Management
 SOC Sociology
 SPAN Spanish – see Languages & Literature
 SPS Audiology
 SSC Social Sciences
 SURG Surgical Technology
 SUST Sustainability
 SWF Social Welfare

TDR Drafting: Architectural Engineering
 Drafting & Engineering Graphics
 & Design Technology

UGR Undergraduate Research

VIET Vietnamese – see Languages
 & Literature

WCO Wood Construction
 WEB Web Design & Development – see IT
 WFT Welding Fabrication Technology
 WIN Wine Industry Training
 WMN Women Studies

COURSE to Prefix

Abroad/Study Abroad ABD
 Accounting ACCT
 Adult Basic Education ABE, HSC
 Aerospace Composite Materials ACM, AMT
 Allied Health AHE, AHI, AHL
 Allied Health Dental AHD
 American Ethnic Studies AME
 American Sign Language –
 see Languages & Literature ASL
 Anthropology ANTH
 Apparel Design & Development APPRL
 Application Development B.A.S. AD
 Applied Behavioral Science B.A.S. ABS
 Arabic ARAB
 Architectural Engineering Drafting
 see Drafting TDR
 Art ART
 Astronomy ASTR
 Audiology SPS
 Auto Body Collision Repair ABR
 Automotive Technology AUT, MVM
 Aviation Maintenance Technology AMT

Baking – see Culinary Arts BAK
 Basic & Transitional Studies BTS
 Biology BIOL
 Botany BOT
 Building Trades Pre-Apprentice MTA
 Business BUS
 Business Office Skills BOS
 Business Computer Technology BCT

Chemical Dependency –
 see Social & Human Services CDS
 Chemistry CHEM
 Child & Family Studies CFS
 Chinese – see Languages & Literature CHIN
 Communication CMST
 Community Health Education B.A.S. CHED
 Community Policing CPP
 Computer Science CSC
 Computing Technology CTN, ICT
 Cooperative Work Experience CWE
 Core Employment Readiness COR
 Culinary Arts BAK, CUL, HOS
 Culinary Arts FSD, PST

Dental Assistant AHD
 Dental Hygiene B.A.S. AHE, DHY
 Diesel & Heavy Equipment Technology HDM
 Drafting – Architectural/Engineering
 and Engineering Graphics &
 Design Technology TDR
 Drama DRMA

Early Childhood Education CCE, CFS, ECED
 Economics ECON
 Education EDUC
 Electronics Technology EET
 Emergency Medical Technician AHE
 Engineering ENGR, MET, MSC
 Engineering Graphics &
 Design Technology – see Drafting TDR
 English – see Languages & Literature ENGL, ESL

English as a Second Language – see Languages & Literature	ESL
Environmental Sciences	ENV
Expanded Function Dental Auxiliary	EFDA
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French – see Languages & Literature	FRCH
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General Education Development	GED
Geography	GEOG
Geology	GEOL
German – see Languages & Literature	GERM
Graphic Design	DES
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Health	HEA
Heating, A/C & Refrigeration Design	HVC
High School Completion – see Adult Basic Education	HSC
History	HIST
Hospitality – see Culinary Arts	HOS
Hospitality Management B.A.S.	HMG
Human Development	HDC
Humanities	HUM
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Industrial First Aid	IFS
Industrial Manufacturing Technology	INT
Industrial Power & Control Technology – see Sustainable & Conventional Energy & Control Technology	EEL
Information – see Library Information Research	INFO
Information Technology	IT, ITC, MIC, NET, WEB
International Business B.A.S.	IBN
International Studies	ISC, ISD, ISP
International Trade	IBN
Italian – see Languages & Literature	ITAL
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Japanese – see Languages & Literature	JAPN
Journalism	JRN

Landscape Horticulture	LHO
Languages ARAB, ASL, CHIN, ENGL, ESL, FRCH, GERM, ITAL, JAPN, LAN, RUSS, SPAN, VIET	
Library Information Research	INFO
Linguistics – see Languages & Literature	LAN
Literature – see Languages & Literature	LIT
Logistics	LOG
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Marine Technology	MGO, MTS
Material Science – see Science and Engineering	MSC
Mathematics	MATH
Mechanical Engineering Technology – see Engineering	MSC, MET, ENGR
Medical Assisting	AHM, AMA
Meteorology	MEY
Multiple Trades Apprentice	MTA
Music	MUSC
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Nanotechnology	NANO
Network Technologies	NET
New Media	NME
Nursing	NUR
Nutrition	NTR
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Oceanography	OCEA
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Parent/Senior Adult Education	FAM
Pastry – see Culinary Arts	PST, BAK
Pharmacy Technician	AHI, PHA
Philosophy	PHIL
Phlebotomy	AHE
Photography, Commercial	PHO
Physical Education	PEC
Physics	PHYS
Political Science	POLS
Pre-Apprentice Trades (SVI)	MTA
Professional Technical Teacher Education	PTE
Psychology	PSG, PSYC

Real Estate	RES
Religion	REL
Respiratory Care B.A.S.	AHE, CHED, RCP
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Science	MSC, SCI
Senior Adult Education	FAM, SEN
Service Learning	SLN
Social & Human Services	CDS, SHS
Social Sciences	SSC, SWF
Sociology	SOC
Spanish – see Languages & Literature	SPAN
Specialty Desserts & Breads – see Culinary Arts	BAK
Study Abroad	ABD
Supervision & Management	SMG
Surgical Technology	SURG
Sustainability	SUST
Sustainable Building Science Technology B.A.S.	SBST
Sustainable & Conventional Power & Control Technology	EEL
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Undergraduate Research	UGR
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Vietnamese – see Languages & Literature	VIET
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Watch Technology	HIN
Web Design & Development – see IT	WEB
Welding Fabrication Technology	WFT
Wine Industry Training	WIN
Women Studies	WMN
Wood Technology	WCO

Abroad/Study Abroad**ABD 150 (1-30) N | S**
Study Abroad

Students studying abroad through approved Seattle College District programs register for ABD 150, similar to the Learning/Coordinated Studies Programs. Once the student's enrollment schedule is confirmed, the course credits are broken out into discrete courses. All courses are marked "STDY ABD" in the course description. Study Abroad courses not offered in the Seattle College District are designated with "900" series of numbers. These courses may be used to satisfy distribution requirements in the Associate Degree.

Accounting**ACCT 110 (5) N | S**
Introduction to Accounting/Bookkeeping I

This introductory class covers the development of the accounting cycle for a sole proprietorship, from business transactions through closing entries and financial statements. Includes service and merchandising types of businesses, special journals, banking services, and payroll.

ACCT 120 (5) N | S
Introduction to Accounting/Bookkeeping II

Explores specialized accounting procedures for merchandising businesses and partnerships. Intro to accounting for corporations. Prereq: ACCT 110 with 2.0 or higher.

ACCT 131 (5) N
QuickBooks

Hands-on use of QuickBooks to record business transactions, prepare customer invoices, pay vendors and record payroll. QuickBooks organizes and summarizes all financial data and produces a myriad of reports. Prereq: ACCT 110 or ACCT 201 or permission.

ACCT 197 (1-5) S
Work Experience: Accounting

Earn work experience credit in the accounting field. Prereq: Permission.

ACCT 200 (5) N
Accounting for Non-Accountants

Overview of accounting practices, procedures, terminology and concepts needed to understand financial statements and accounting in every day financial transactions. For non-financial individuals and those involved in oversight of financial affairs.

ACCT& 201 (5) C | N | S
Principles of Accounting I

Defines basic accounting concepts, principles and procedures for recording business transactions and developing financial accounting reports. Recommended: ACCT 110 or sophomore standing (S).

ACCT& 202 (5) C | N | S
Principles of Accounting II

Examines application of basic accounting concepts, principles and procedures to more complex business situations in a corporate setting. Prereq: ACCT& 201 with a minimum GPA of 2.0 or permission.

ACCT& 203 (5) C | N | S
Principles of Accounting III

Analysis of accounting data as part of the managerial process of planning, decision-making and control. Concentrates on economic decision-making in enterprises. Prereq: ACCT 120, ACCT& 202 or permission (C, N); ACCT 120 or ACCT& 202 or permission (S).

ACCT 214 (5) S
Accounting Systems

Computer applications of basic accounting concepts, principles and procedures, including but not limited to discussions of QuickBooks, Excel, and Microsoft Accounting. Prereq: ACCT 110, 120, &201 or &202 with 2.0 or higher.

ACCT 251 (5) N
Intermediate Accounting I

Study of financial accounting theory and financial accounting reporting. Includes an in-depth study of generally accepted accounting principles and concepts. Prereq: ACCT& 202 or instructor permission.

ACCT 252 (5) N
Intermediate Accounting II

Further study of financial accounting theory and financial accounting reporting. Includes an in-depth study of generally accepted accounting principles and concepts. Prereq: ACCT 202 or ACCT 251 or instructor permission.

ACCT 255 (5) N
Individual Income Tax

Intro to individual tax laws (as opposed to business tax laws). Includes preparation of individual income tax forms using text and/or web based sites or income tax software..

ACCT 256 (1-5) N
Taxation of Corporations and Partnerships

A comprehensive study of the taxation of corporations and partnerships, including basic tax research and the theory of taxation. Prereq: ACCT& 202 and ACCT 255 or instructor permission.

ACCT 257 (5) N | S
Business Tax Accounting

Basic principles, practices and governmental regulations (federal, Washington state and local) involved in business tax accounting. Includes filing returns, record-keeping, tax planning, registrations and business licenses. Prereq: ACCT 120 or ACCT& 202 (N) or permission.

ACCT 260 (5) N
Peachtree Accounting

A hands-on approach to learning Peachtree Accounting Software, widely used by service and merchandising businesses and accountants. Utilize various modules to prepare internal and external reports. Prereq: ACCT 110, ACCT& 201 or permission.

ACCT 261 (5) N
Accounting Information Systems

Information systems as part of enterprise resource planning systems. Focuses on the activities performed in the major business cycles and the flow of accounting data and information in those systems, whether manual or computerized. Topics include systems analysis, design and implementation. Examines accounting internal controls, fundamental database concepts, and flowcharting. Prereq: ACCT 110 or ACCT&201.

ACCT 265 (5) N
Accounting for Not-For-Profit and Gov Entities

Overview of basic accounting principles and procedures relating to not-for-profit and government entities. Includes financial statement preparation and analysis. Prereq: ACCT& 201 or permission.

ACCT 267 (5) N
Not for Profit Financial Management

Covers fundamentals of financial management for public, health, and not-for-profit fields. Includes vocabulary, concepts, methods, and basic tools of financial management and analysis within the public sector.

ACCT 268 (5) N**Advanced QuickBooks**

Hands-on use of QuickBooks to record business transactions in the full accounting cycle, including those related to banking, payroll, inventory management, estimates, and progress billing. Advanced topics are covered, such as class tracking, sales tax, bank feeds, reimbursable expenses, employee time billing, and tracking fixed assets. Students will learn complex company file setup procedures, QuickBooks customization, and custom reports. Prereq: ACCT131 or instructor permission.

ACCT 269 (5) N**Not-For-Profit Practices and Procedures**

Provides an overview of the rules and regulations covering not-for-profit organizations. Topics addressed are preparation of Form 990 Return and Form 1023 Application for Exemption, charitable giving and fund raising issues, officer and board of director interaction and ethics, internal control and operational effectiveness.

ACCT 270 (5) N**Cost Accounting**

Covers theory of cost accounting, cost systems, sources of cost data and their accumulation, allocation, and analysis and managerial control through cost data. Prereq: ACCT& 203 or permission.

ACCT 271 (5) N**Ethics in Accounting**

Learn and cultivate the ethical commitment needed to ensure work in the business world meets the highest standards of integrity, independence and objectivity. Understand obligations and professional responsibilities of accountants and auditors. Uses case studies and SEC case files to study real world issues. Prereq: ACCT 202.

ACCT 272 (5) N**Fraud Examination**

Introduction to the field of fraud examination, including general methodology and fraud theory. Learn how and why fraud is committed, how fraudulent conduct can be deterred, and how allegations of fraud should be investigated and resolved. Includes a special interest project, such as health care fraud. Prereq: ACCT&201 or permission.

ACCT 273 (5) N**Introduction to Financial Crimes**

Intro to major categories of financial crime and the legal procedures which are frequently relevant to fraud accounting work, including both criminal and civil procedures. Prereq: ACCT&201 or permission.

ACCT 274 (5) N**Forensic Accounting**

Integrate accounting, auditing, and fraud investigative skills. Using case studies, analyze documents, evaluate internal controls, and trace funds to resolve accounting irregularities with an emphasis on fraudulent financial reporting. Includes indirect methods of reconstructing; income, litigation support, computing commercial and economic damages, and business valuation. Prereq: ACCT&202 and ACCT&203 or permission.

ACCT 275 (5) N**Auditing**

Intro to auditing, covering generally accepted auditing standards (GAAS), the auditor's opinion, professional ethics, audit evidence, internal control, and audit procedures. Prereq: ACCT 252 or permission.

ACCT 298 (1-5) N**Special Topics in Accounting**

Seminar on selected topics or activities in accounting. Prereq: Permission.

ACCT 299 (1-5) C**Independent Study: Accounting**

Independent study of selected accounting topics. Prereq: Permission.

ACCT 303 (5) C**Accounting for Healthcare Management**

An introductory course for students pursuing a Bachelor of Applied Science Degree in Healthcare Management--Healthcare Services Management track. Includes basic accounting principles and financial statement preparation, with application of accounting techniques to management issues using a spreadsheet program. Topics include the accounting cycle, financial statements, the cost of producing a product or service, cost behavior and breakeven analysis, budgeting, inventory, and payroll.

Adult Basic Education**ABE 020 (1-15) C | N****Adult Basic Education Level 2**

Covers reading and writing. Review and apply language skills, correct usage and spelling.

ABE 021 (1-15) C | N | S**Adult Basic Education Math Level 2**

Meets the needs of beginner level math students who want to improve their ability to solve math problems including addition, subtraction, multiplication, and division of whole numbers and measurements. Prereq: Appropriate score on Division placement test, or Instructor's permission.

ABE 022 (1-15) C | N**Adult Basic Education Communication Level 2**

Designed to meet the needs of beginning level communication students who want to improve their ability in reading and writing. Emphasizes basic grammar, sentence structure, group work, and understanding and recounting events and details in academic and professional texts and forms. Prereq: Appropriate score on Division placement test, or Instructor's permission.

ABE 024 (1-15) C | N**Adult Basic Education Level 2 - Computers**

Computer lab class provides an opportunity to practice basic skills learned in class or learn new skills independently. Use popular computer programs as well as specialized basic skills software. Emphasizes keyboarding and computer literacy skills for those new to personal computers.

ABE 030 (1-15) C | N**Adult Basic Education Level 3**

Concentrates on reading comprehension, making inferences, recognizing fact and opinion, vocabulary development and writing simple paragraphs. Prereq: Varies by campus.

ABE 031 (1-15) C | N | S**Adult Basic Education Math Level 3**

Designed to meet the needs of low-intermediate level math students who want to improve their ability to solve math problems including whole numbers, fractions, decimals, measurements and data sets. Prereq: Successful completion of ABE 021 (ABE Math Level 2), appropriate score on division's placement test, or Instructor's permission.

ABE 032 (1-15) C | N | S**Adult Basic Education Communication Level 3**

Designed to meet the needs of low-intermediate level communication students who want to improve their ability in reading and writing by developing their reading comprehension and single paragraph writing. The course emphasizes basic grammar, punctuation, spelling, vocabulary development, understanding main ideas, and making inferences. Prerequisite: Successful completion of ABE 022 (ABE Comm Level 2), appropriate score on division placement test, or Instructor's permission.

ABE 034 (1-5) C
Computer Assisted Adult Basic Education Level 3

More advanced computer-assisted practice in reading, writing and math. Learn from textbooks, fiction, policies and procedures manuals, and purchase agreements. Write résumés, reports and formal letters. Compute percentages, ratios, proportions, simple formulas and interpret graphs and charts.

ABE 040 (1-15) C | N
Adult Basic Education Language Arts I

Emphasis on reading comprehension, making inferences, recognizing fact and opinion, vocabulary development, basic sentence patterns, paragraphs, punctuation, capitalization and correct word usage. Covers multi-paragraph essays. Prereq: ABE 030 or division placement test (N,C).

ABE 041 (1-15) C | N | S
Adult Basic Education Level 4 Math

Adult Secondary Education Math Level 4 is designed to meet the needs of intermediate level math students who want to improve their ability to solve higher-level math problems including fractions, ratios and proportions, and percents and measurements.

ABE 042 (1-15) C | N | S
Adult Basic Education Communication Level 4

Designed to meet the needs of intermediate level communication students who want to improve their ability to read and write at the college level and professional level. Emphasizes vocabulary, grammar, organization, structure, and purpose in both writing multi-paragraph essays and reading texts. Prereq: Successful completion of ABE 032 (ABE Comm Level 3), appropriate score on division placement test, or Instructor's permission.

ABE 044 (1-15) C | N | S
Adult Basic Education Level 4 - Computers

More advanced computer-assisted practice in reading, writing, math and test-taking skills. Instructional activities will improve general reading, writing, math and test-taking skills. Take practice tests and work with instructor until ready to take the college division placement test (C,S). Covers the basics of Microsoft Office applications. Self-paced with a high level of student/teacher interaction (N).

ABE 047 (1-5) N
Intermediate Digital Literacy

Intermediate digital literacy/computer skills course for students in Adult Basic Education with an emphasis on online tools and apps, beginning MS Word, Canvas, and MS Excel, job searches and applications, and online safety and privacy.

ABE 049 (1-15) C | N | S
Basic Skills Support for Professional/Technical Prgrams

Provides specific support to assist students in completing Professional Technical programs and building job-related language skills. Coreq: Enrollment in a Professional Technical program.

ABE 050 (1-10) C | N
Language Arts II

Emphasis on preparing for college-level English courses with a focus on academic reading, writing and critical thinking strategies and skills, including identifying main ideas, making inferences, recognizing fact and opinion, developing more nuanced vocabulary, analyzing sentence patterns, employing advanced mechanics and word usage, writing paragraphs, transitioning between paragraphs, and drafting multi-paragraph essays.

ABE 051 (1-15) C | N
Geometry I

An introductory geometry course that covers the study of angles, triangles, quadrilaterals, polygons, circles, Pythagoras' Theorem, and measurement, including perimeter, area, and volume. Students will study practical applications of how geometry is used in the real world.

ABE 054 (1-15) C | N
Computer Assisted ABE 5

Use computers to improve basic skills of reading, writing and math. Prepare to take the College Placement Test and receive scores high enough to enter developmental education courses in English and math. Take practice tests and work with instructor until ready for the actual test.

ABE 057 (1-5) N
Advanced Digital Literacy for ABE

Advanced digital literacy/computer skills course for Adult Basic Education students in advanced word processing (Word), spreadsheet (Excel), database (Access), and presentation (PowerPoint) applications. Students will create a variety of common business documents and learn to edit and format. Students will also learn file management skills, including how to create and name directories, rename files, and delete, copy, and move files. Prerequisite: completion of ABE 047 or instructor permission.

ABE 059 (1-15) C
Vocational ESL

Intended to prepare students for further study or work in a variety of health care fields. Includes basic skills instruction to prepare students to meet their academic and vocational goals.

ABE 060 (1-15) C | N | S
Adult Secondary Education Level 6

Preparation to pass the college placement exam needed to enter a college program. Emphasizes effective essay writing, reading college text, solving higher-level multi-step math problems, and adapting to the college culture.

ABE 061 (1-15) C | N | S
Adult Secondary Education Math Level 6

Adult Secondary Education Math Level 6 is designed to meet the needs of high level math students who want to improve their ability to solve higher-level multi-step math problems.

ABE 062 (1-15) C | N | S
Adult Secondary Education Communication Level 6

Preparation to pass the Communications portion of the college placement exam needed to enter a college program. Emphasizes effective essay writing, reading college text and adapting to the college culture.

ABE 064 (1-15) C
Adult Secondary Education Computer Assist Level 6

Advanced computer-assisted skill-building in reading, writing, math and test-taking. Prepare for the COMPASS Test. Take practice tests and work with instructor until ready to take the actual test.

ABE 070 (1-3) C | N | S
Educational Interviewing for ABE/GED Students

Helps ABE/GED students at all competency levels identify their current abilities, characteristics, styles and readiness to learn. Intro to campus resources.

ABE 071 (1-3) C
ABE for Educational Planning

Provides information needed for college and career readiness during enrollment in ABE/GED Math or ABE/GED Communications courses. Prereq: Enrollment in ABE, pre-GED or GED class, placement test score, or instructor permission.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN Watch Technology

NAME TO PREFIX
Watch Technology HIN

Common Course Numbering explanation is on page 202.

ABE 079 (1-5) S
College Transitional English

The focus of this class is on the four basic communication skills: reading, writing, listening and speaking. The aim is to prepare students for the 090 level developmental English or ESL classes. The class meets daily, Monday through Friday. Students who enroll as College Transfer will earn 5 credits. Prerequisite: Students may be referred by intake testing (ASSET or ESL assessment), by counselor or instructor assessment or by self-selection.

ABE 080 (1-5) N
English Skills Shop

Support class for students enrolled in developmental English programs and students seeking to strengthen their academic writing skills. Individual and small group tutoring to improve listening; speaking; study skills; reading comprehension and rate; vocabulary; phonics and word skills; spelling; grammar; and writing sentences, paragraphs, and essays. Strongly recommended for students enrolled in developmental English courses.

ABE 081 (1-15) N
Basic Math Skills

This course covers whole and signed numbers, fractions, decimals, percent, ratio and proportion, units of measurement, and geometry. Prereq: ABE 021 or placement.

ABE 083 (1-5) C
Strategic Learning in A Content Area

Supports strategic learning in a college class. Develops students' study skills and strategies for college success including metacognitive strategies, previewing, skimming, and scanning of written materials, summarizing, paraphrasing, note-taking skills, and time management. Introduces information literacy and basic research skills. Co-requisite: Concurrent enrollment in a college-level (1xx) class.

ABE 084 (1-15) N
Algebra I

This course covers basic operations with algebraic expressions; solving and graphing linear equations and inequalities; word problems; and systems of equations. Prereq: ABE 041, ABE 081, MATH 081 or placement.

ABE 085 (1-15) N
Algebra II

This class will focus on factoring polynomial; rules of exponents; solving quadratic equations; equations and graphs; roots and radicals; solving rational equations; and problem solving. Prereq: ABE 084 with 2.0 or above or successful completion of MATH 084.

ABE 098 (1-15) N
Intermediate Algebra

This course covers real number systems, polynomial and rational expressions, exponents and radicals, first and second degree equations, linear systems of equations and graph. It also serves as an introduction to functions and logarithms. Prereq: ABE 085 with 2.0 or above, or successful completion of MATH 085 or MATH 097, or math placement, or instructor permission.

Aerospace Composites Materials

ACM 101 (3) S
Intro to Aviation Industrial Hygiene

This course covers the fundamentals of environment, health, and safety topics required to become a successful composites technician. In-depth and specific environment, health, and safety issues, policies, procedures, and regulations are discussed and practiced throughout the composites program. Topics include: hazardous communication, ergonomics, regulations, documentation, SOPs, LEAN, personal protective equipment, lockout/tagout, hand and power tool safety, and industrial housekeeping.

ACM 102 (3) S
Measurement and Drawings - Aviation

This course covers the fundamental skills common in industry related to measurement and drawings. In drawings, skills include: types and interpretation, prints, views, a working knowledge of the alphabet of lines, tolerances, dimensioning, and drawing 3-D views. In measurement, the skills include: the care and handling of semi-precision and precision instruments, the difference between semi-precision and precision measurement, and the introduction and practice of several measurement instruments.

ACM 103 (5) S
Materials: Properties, Choice and Application

In this course, students will learn about the physical and chemical properties of structures; includes uses, strengths, limitations, and other characteristics of metals, alloys, non-metals, and composite materials. Topics include: the terminology and fundamental knowledge of composites, knowledge and skills to work with metal and nonmetallic materials and various forms of hardware, and basic applied physics and chemistry concepts as related to aviation and other industries.

ACM 104 (6) S
Composites Lab A - General Aviation

Running parallel with the other General Aviation Certification courses, Technical Laboratory A projects are designed to introduce, reinforce, and practice aspects of many, if not all, of the courses in the General Aviation Certificate. The student will create increasingly complex projects to gain mastery in the materials and processes of aviation and other industries requiring the fabrication, assembly and repair of composite materials.

ACM 111 (4) S
Composite Fabrication & Tooling

This course is offered in the second quarter of the Aerospace Composite Technician program. It assumes students have had an introduction to material properties and processes and an introduction to composite fabrication, assembly and repair. This lecture course is taught in tandem with Composites Technician Laboratory B. Topics include: safety, matrices, fiber reinforcements, basic design, molding methods, core materials, tooling, and bonding and fastening.

ACM 112 (2) S
Composite Inspection & Repair

This course presumes that the student has had an introductory overview course that broadly describes composites fabrication, assembly and repair. This course hones the knowledge and skills necessary to inspect, test, and repair composite structures. Emphasis is on structural and nonstructural evaluation, material handling, surface preparation, and repair procedures.

ACM 114 (9) S
Composite Lab B - Advanced Composites

This course presumes the student has completed the Composite General Aviation Certificate which includes an introduction to composites fabrication, assembly and repair. Students create ever more complex projects to gain mastery in the proper use of tools, tooling, materials and processes, prints and drawings in order to fabricate, assemble and repair advanced composite materials.

ACM 120 (4) S**Composite Fabrication**

Develop skills in print reading, project planning, layout, distortion control, fixturing and other fabrication techniques. Apply knowledge to assigned or personal projects. Prereq: Permission.

ACM 125 (4) S**Composite Assembly**

Identify and use appropriate materials and processes to assemble structures made of composite materials. Lab covers safety of handling resins, reinforcements and related materials. Prereq: Permission.

ACM 130 (4) S**Composite Repair**

Learn to inspect, test and repair composite structures. Emphasizes structural and nonstructural evaluation, material handling, surface preparation, and repair procedures. Prereq: Permission.

ACM 145 (3) S**Special Projects**

Develop further skills in print reading, project planning, layout, distortion control, fixturing and other fabrication techniques through assigned and/or personal projects. Prereq: Permission.

ACM 198 (1) S**Capstone A - Aerospace Comp Tech**

Capstone A provides the tools, knowledge, and skills to successfully navigate a career in the field of composites. Skills covered are necessary behaviors, habits and documentation necessary to gain employment, navigate an organization, and advance in this career path. It is taught as a capstone throughout the certification pathway. Topics include industry relevant resumes, transferable job skills, interview skills and more. Capstone A is part one of two capstone courses.

ACM 199 (2) S**Capstone B - Aerospace Comp Tech**

Capstone B provides the tools, knowledge, and skills to successfully navigate a career in the field of composites. Skills covered are the behaviors, habits and documentation necessary to gain employment, navigate an organization, and advance in this career path. Topics include resumes, cover and thank you letters, transferable job skills, interview skills, project documentation and more.

Allied Health**AHD 150 (1) C****Intro to Dental Assisting**

Intro to the field of dentistry and the dental assistant program with emphasis on attendance policy, academic progression, and professional appearance. Covers history of dentistry, dental terminology and the dental healthcare team.

AHD 190 (2) C**Job Seeking Skills I**

Learn basic skills involving employment applications, résumé, cover and thank you letters, and job interviews. Prepare for externship work assignment.

AHD 192 (9) C**Dental Asst Man Clinical**

Clinical practice in dental assisting functions, performed under direct supervision of the Board Certified Dentist in private practice, specialty office, and/or community dental clinic. Students demonstrate knowledge and competency in clinical dental health care in accordance with minimum entry-level industry standards for dental assisting. Prereq: Permission.

AHE 103 (3) N**Math for Health Careers**

For those entering health care medical programs. Review basic arithmetic and algebra and apply concepts to health care of children and adults. Covers decimal and fractional numbers, ratios, percents and basic algebra techniques to solve equations involving unknowns and proportions. Prereq: MATH 081 or placement into MATH 084 and permission. Recommended: ENGL& 101.

AHE 106 (3) S**Math for Healthcare Careers**

Students will learn basic computations with fractions and decimals, ratio and proportion, percentage, measurement systems, diluting of solutions, graphs, dosage and concentration problems, and basic algebra and statistics.

AHE 111 (12) C**Nursing Assistant Certified**

Covers instruction and hands-on experience in basic nursing care skills and supervised clinical training in a long-term care facility. Preparation for WA State Nursing Assistant Certified examination. Current Healthcare CPR, First Aid and HIV/AIDS are required prior to clinical, and are scheduled as separate courses.

AHE 118 (5) N**Introduction to Phlebotomy I**

Provides theory of basic blood collection techniques and supervised blood collection practice. Provides support for ESL and Adult Basic Education students.

AHE 119 (7) N**Introduction to Phlebotomy II**

Provides theory of basic blood collection techniques, supervised blood collection practice and a clinical externship of 120 hours. Provides support for ESL and Adult Basic Education students.

AHE 124 (4) S**Software Applications for Health Care**

Learn Patient Accounting Software. Features include standard HCFA health insurance claims forms, diagnoses codes, patient ledgers, statements, patient appointment book and specialized reporting. Coreq: AHE 130.

AHE 126 (2) C**Essential Skills in Healthcare**

Learn core skills applicable to all health disciplines. Each healthcare program chooses which modules are required.

AHE 128 (4) C**Introduction to Healthcare Practice**

Covers elements of professionalism, ethical principles and basic assessment techniques for allied health practitioners in Washington state. Includes role of the healthcare practitioner, health history taking, vital signs assessment, patient management and infection control.

AHE 129 (1) C**Introduction to Healthcare Applied Practice**

Covers professionalism, ethical principles and basic assessment techniques, including patient health history, vital signs assessment, patient management, Infection control, and the role of the healthcare auxiliary.

AHE 130 (5) S**Medical Insurance and Coding I**

Covers basic diagnosis and procedural coding, ICD-9 and 10 (International Classification of Diseases) and the CPT (Current Procedural Terminology) coding systems recognized by the insurance industry. Course includes medical office insurance processing for billing and reimbursement, documentation, information flow, insurance forms and medical office policies. Course is part one of two insurance courses. AHE 131 follows this course. Pre Req: BUS 169, or Instructor Permission. Co-req: AHE 124.

AHE 131 (3) S
Medical Insurance and Coding II

Course is a topic continuation of AHE 130. Students will use ICD-9 and 10 (International Classification of Diseases) and the CPT (Current Procedural Terminology) coding systems to code insurance claims for the insurance industry, the physician, and medical office as the standard for billing and reimbursement. Insurance processing topics covered will include documentation, information flow, insurance forms, and medical office policies. Pre-req: AHE 130.

AHE 135 (15) S
Home Care Aide

This is a one quarter short term training course. The course runs as a cohort and covers 85 hours of learning and skills objectives mandated by WA State for Home Care Aides. Includes context-related basic skills, such as reading and study strategies, math, and oral communication. The course prepares students for success in passing the State of Washington Department of Health Home Care Aide examination, and is a step in continuing to Nursing Assistant Certified and health-related courses. Prereq: Permission.

AHE 140 (10) C
Central Supply/Instrument Technician

For students interested in being a certified Central Supply/Instrument Technician. Addresses infection control, supplying and processing and distribution of supplies. Gain knowledge in safety, inventories, interpersonal skills, communication, interdisciplinary teams, professionalism and ethics.

AHE 141 (2) S
Pharmacology I for Professional Coders

Intro to pharmacology. Includes medication laws, classifications, safety, medication effects and responses, pharmaceutical abbreviations, systems of measurement and safe dosage calculations.

AHE 143 (4) S
Medical Terminology and A/P I for Coders

This course provides the medical terminology and an analytical look at the human body's structure and functions as it relates to diseases, disease process and specifically coding for diseases and procedures. This course is developed specifically for coding professionals and is not meant for those entering nursing or the sciences. This course does not include a clinical science lab.

AHE 144 (4) S
Medical Terminology and A/P II for Coders

This course is a continuation of AHE 143 but can be taken out of sequence. It covers the medical terminology and an analytical look at the human body's structure and functions as it relates to diseases, disease process and specifically coding for diseases and procedures. The systems covered are distinct from those covered in AHE 143. This course is specifically for coding professionals and is not meant for those entering nursing or the sciences. It does not include a clinical science lab.

AHE 146 (5) S
Intermediate Icd-9 and Icd-10 Coding

Covers ICD-9-CM and ICD-10 diagnostic coding. Apply the numeric classification of codes to diseases and injuries, symptoms, disorders and for therapeutic interactions, using various source documents. Coding is used for billing, electronic health records, and HIPAA privacy. Prereq: AHE 130 or permission.

AHE 147 (5) S
Intermediate Cpt Coding

Learn appropriate service codes and methods for service and surgery: consultations, office visits, anesthesia, and specific surgeries. Apply CPT and HCPCS codes to medical data and records. Prereq: AHE 130 or permission.

AHE 148 (3) S
Human Diseases I for Professional Coders

Students will learn basic disease concepts, including mechanisms of disease, neoplasms, inflammation and infection. Students will acquire knowledge of common diseases, disorders, symptoms and injuries by each body system as it relates to coding for diagnoses and procedures in healthcare.

AHE 150 (0.5) C
HIV/AIDS Education

Meets requirements for health care professionals under RCW 18.130. Covers etiology and epidemiology of HIV, transmission and infection control, testing and counseling, clinical manifestations and treatment and psychosocial issues. Approved by the Washington State Department of Licensing.

AHE 151 (1) C
Standard Precautions/ First Aid

Covers blood-borne pathogens and infections that students may be exposed to in the health care setting, methods of prevention, and regulations surrounding workplace safety. Learn about equipment and supplies and practice using them.

AHE 152 (1-1) C
Health Care Provider CPR

American Heart Association Certificate –Health Care Provider CPR is for those in or entering health care with patient contact. Covers skills competency for infant, child and adult CPR that might be needed in the professional health care setting. Certificate awarded on completion. Prereq: Permission.

AHE 155 (1-6) N
Special Topics

Designed to meet the special needs of individuals or groups studying in the medical assisting field.

AHE 165 (3) C
Medical Terminology I

Fundamentals of medical terminology, with emphasis on basic rules, vocabulary building, abbreviations and knowledge of medical terms relating to body systems and medical specialties.

AHE 168 (5) C | S
Medical Terminology

Intro to the concept of word building with Greek and Latin word roots, prefixes and suffixes, resulting in the acquisition of a large medical vocabulary. Also available as correspondence course.

AHE 171 (4) S
Excel for Health Occupations

This course in Microsoft Excel for Health Care Occupations is a spreadsheet program you can use to manipulate numbers, track and chart medical sales, expenses, medical budgets help make informed medical business decisions. Students will learn to use calculations and pre-defined formulas to organize data, crunch statistical information, and more.

AHE 172 (4) S
Word for Healthcare

Covers comprehensive word processing using Microsoft Word Software for a Medical environment. Includes basic skills such as tables, envelopes, templates and mail merge. Includes advanced formatting skills and transcribing medical documents such as operative reports, radiology reports, discharge summaries, H&P reports and other medical documents and forms.

AHE 173 (3) S**Intro to Records Mngmt**

The study of the basic alphabetic, numeric, subject and geographic filing principles necessary to manage database filing systems utilizing ARMA rules. Course includes hands-on practice in creating and using database systems to create files, tables, forms and queries; enter and manipulate data and generate reports for a medical environment.

AHE 190 (12) N**Emergency Medical Technician**

Offers training in Emergency Medical care for those who provide pre-hospital emergency care. The course consists of 194 hours of classroom and practical laboratory training plus an additional 10 hours (minimum) of in-hospital observation in accordance with State of Washington law and King County EMS protocols. Contact Health and Human Services Division (206) 934-3790 for information on the mandatory orientation, entrance exam and cost. Prereq: entrance exam, Coreq: AHE 192.

AHE 192 (1) N**Basic Life Support for Healthcare Providers**

The American Heart Association BLS curriculum is the standard training for healthcare agencies/personnel. It meets the requirements for CPR certification and includes CPR for Adults, Children and Infants, AED (Automatic Defibrillation) and use of the Bag Valve Mask. For those in EMT program, this is a corequisite with AHE 190.

AHE 195 (4) C**Pathophysiology for Health Professions**

Overview of human physiological changes which cause or are the result of pathologic processes. Expands knowledge of human anatomy and physiology of the pathophysiological processes in major organ systems of the body. Covers key concepts of homeostasis.

AHE 197 (1-5) C | S**Work Experience-Allied Health**

Allows students to earn work experience credit in Allied Health field. Prereq: Permission.

AHE 198 (1-5) C | S**Work Experience - Allied Health**

Allows students to earn work experience credit in Allied Health field. Prereq: Permission.

AHE 199 (1-5) C**Work Experience-Allied Health**

Allows students to earn work experience credit in Allied Health field. Prereq: Permission.

AHE 202 (1) C**Respiratory Care Orientation**

Intro to the Respiratory Care Program. Covers curriculum, policy, clinical procedures, professional outlook and study and library skills.

AHE 209 (2) C**Introduction to Respiratory Care**

Explores the respiratory care profession. Focuses on historical development and the role of the respiratory care practitioner. Emphasis on professionalism, ethical thought, death and dying, and working in a multicultural environment.

AHE 213 (2) C**Respiratory Care Clinical Assessment**

This course is a study of the concepts and principles by which disease alters the normal function of the cardiopulmonary system. The main emphasis will be on cardiopulmonary assessment. Students will learn to analyze clinical data and synthesize patient case data into a formal assessment. Further emphasis will be placed on development of logic and reasoning for an advanced Respiratory Care Practitioner (RCP). Prereq: Permission.

AHE 215 (2) C**Basic Pharmacology**

Basic Respiratory Care Pharmacology introduces the learner to foundational principles of the study of pharmacology. Learners will also begin their study of pharmacologic agents with medications used universally in Respiratory Care to treat primary respiratory disorders. This course is directed at adding to the learner's knowledge of respiratory care and the performance of the skills needed to safely deliver medications as adjuncts to the delivery of Respiratory Care. Prereq: Permission.

AHE 217 (5) C**Cardiopulmonary Anatomy and Physiology**

This course is designed to provide an in-depth investigation into the structure and function of the respiratory and cardiovascular systems of the human body. The interdependence of the two systems will be emphasized and the physiology of respiration will be examined in detail. Also covers multiple body systems and their interplay with the respiratory system under normal and abnormal conditions. Prereq: Permission.

AHE 218 (4) C**Basic Therapeutic Approaches**

This course is an introduction to the procedures used to assess and treat common respiratory diseases. Emphasis is on knowledge and skills necessary to safely and effectively apply patient assessment techniques; body mechanics, medical gas therapy, oxygen therapy devices, aerosol and humidity therapy, hyperinflation therapy, chest physiotherapy, and airway clearance techniques. Prereq: Permission.

AHE 219 (1) C**Basic Therapeutic Approaches Equipment and Techn**

An introduction to the application of Respiratory Care therapeutics learned in RCP 218. In this class learners will apply theory acquired in RCP 218 using models, simulation and laboratory partners for practice. Focuses on assessment, documentation, communication, medical gas and aerosol therapy, airway clearance, and hyperinflation therapies. Prereq: Permission.

AHE 241 (3) S**Pharmacology II for Professional Coders**

This course continues pharmacology as the study of drugs. The course continues with pharmaceutical laws, classifications and safety, pharmaceutical processing by the body will be covered to allow comprehension regarding the pharmaceutical effects, responses. Abbreviations, systems of measurement and safe dosage calculations will be covered to stress the importance of accurate recording/transcribing/reporting of drug information. Continues to acquaint students with pharmaceutical affects.

AHE 242 (2) N**Basic Blood Collection Techniques**

Theory and laboratory practice in supervised blood collection to meet requirements for job entry as a phlebotomist (blood drawer). Prereq: Take or placement into ENGL& 101.

AHE 243 (4) S**Legal/Ethics in Healthcare**

This course provides an overview of law and ethics in the healthcare system. Students will gain advanced knowledge of patient, healthcare laws and ethics related to EDI.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN **Watch Technology**

NAME TO PREFIX
Watch Technology HIN

Common Course Numbering explanation is on page 202.

AHE 244 (4) S
Adv. Electronic Health Records (Ehr)

This course provides intermediate and advanced functionality and features of Electronic Health Records (EHR) with an overview of health information systems used to identify, file, and store patient health information, clinic administration, the patient chart, office visit, and clinical tools, such as customizing templates, tests, procedures and diagnosis codes, productivity and utilities.

AHE 246 (7) S
Advanced Icd and Cpt Coding

This course is intended to develop the advanced medical coding for the purposes of medical record coding, hospital coding, and applying advanced coding principles to medical situations, and clinical reports.

AHE 298 (1) S
Allied Health Special Topics
Special topics.

AHE 299 (1-3) C
Allied Health Seminar
Seminar format to address current trends and issues in allied health occupations.

AHE 301 (5) C
Principles of Healthcare Delivery

Introduces U.S. healthcare delivery topics such as purpose, history, components, organization, strengths and weaknesses, and proposed and implemented reforms. Covers current and future challenges of healthcare delivery and the development of healthcare policies to address these challenges. Prereq: Instructor's permission.

AHE 330 (5) C
Information Literacy for Health Sciences

Introduces the organization, retrieval, and evaluation of electronic and print information. Overview of college library systems, traditional scholarly resources, and the concepts underlying the research process. Emphasis on information literacy skills specific to the allied health sciences through examination and application of specialized resources. Prereq: Enrollment in a BAS in Allied Health track; and, ENGL& 102 and MATH& 146, each with a 2.0 or higher.

AHE 401 (5) C
Principles of Research

General principles of research design and methodology with emphasis on applications for allied health practice. Prereq: Instructor's permission.

AHE 426 (5) C
Leadership and Team Building/Organizational

Covers leadership, working in and developing teams. Develops personnel management skills.

AHE 498 (1-5) C
Special Topics in Allied Health

Covers special topics in allied health relevant to tracks in the BAS of Allied Health degree. Taught by industry experts in the content being covered. Prereq: Instructor permission.

AHL 101 (0.5) C
Hcp CPR/First Aid

Designed to provide health care professionals with the ability to recognize life threatening emergencies, administer Cardiopulmonary Resuscitation (CPR) for infants, children and adults, utilize an automated external defibrillator (AED) and alleviate choking. Upon successful completion students receive certificates in Healthcare Provider Basic Life Support (BLS) and Heartsaver First Aid issued by the American Heart Association. Prereq: Instructor or Dean's Permission.

AHL 105 (0.5) C
HIV/AIDS Training

Designed to meet the seven hour requirement for healthcare workers in Washington State. The course includes a focus on epidemiology, blood borne pathogens, clinical manifestations, at-risk populations, psychological impact, transmission of disease, risks to healthcare workers, patient education, health promotion, and disease prevention. Prereq: Instructor or Dean's permission.

AHL 111 (6) C
A&P I/Micro

Focuses on the structure/function of the human body and systems: tissues and membranes, skeletal, muscular, and nervous. Emphasis includes microbiology, disease processes relative to major conditions, infectious diseases, neoplastic conditions, and congenital diseases. Prereq: Instructor or Dean's permission.

AHL 112 (6) C
A&P II/Path

Focuses on the following structures/functions of the human body and systems: respiratory, digestive, cardiovascular, lymphatic, reproductive, and urinary. Emphasis includes disease processes relative to major conditions, infectious diseases, neoplastic conditions, and congenital diseases. Prereq: AHL 111 with a 2.0 or higher, Instructor's permission, or Dean's permission. Co-req: AHL 114, or Instructor's permission.

AHL 113 (3) C
Med Term

Explores the language of medicine. Focuses on basic word parts (prefixes, roots, suffixes), definitions, pronunciation, spelling, abbreviations, acronyms, symbols, eponyms and terminology for diagnostic testing and medical procedures corresponding to the structures/functions of the human body and systems studied in Anatomy & Physiology AHL 111: tissues and membranes, skeletal, muscular, and nervous. Prereq: Instructor or Dean's permission. Coreq: AHL 111, or Instructor's permission.

AHL 114 (3) C
Med Term II

Continuation of AHL 113. Focuses on basic medical words: prefixes, roots, suffixes, definitions, pronunciation, spelling, abbreviations, acronyms and terminology for diagnostic testing/medical procedures corresponding to the structures/functions of the human body/systems studied in AHL-112, A&P II: skeletal, muscular, digestive, reproductive, urinary, nervous. Prereq: AHL 113 with a 2.0 or higher; or, Instructor or Dean's permission. Coreq: AHL 112, or Instructor's permission.

AHL 123 (3) C
Insurance and Coding

Explores areas of health insurance and numeric/alphanumeric codes utilized in health care for the purpose of maintaining accurate medical records and ensuring efficient claims processes. Emphasis is placed upon various types of health insurance and the individuals they serve, diagnostic and procedural code identification/utilization, and the Health Information Privacy and Accountability Act.

AHL 124 (2) C
Med Office Finance

Covers financial accounting aspects of medical practices and relative duties in this area of responsibility. Emphasis is placed upon vocabulary and abbreviations relative to bookkeeping and accounting, accounts receivable, collection procedures and basic concepts in Microsoft Excel. Prereq: Instructor's permission.

AHL 125 (2) C
Mos

Covers front office procedures and provides students with opportunities to apply their administrative knowledge within a simulated medical office setting. Students demonstrate their competency through prescribed scenarios focusing on customer service, reception, scheduling, referrals, billing procedures, insurance processes, critical thinking, and working toward positive outcomes. Prereq: Permission.

AHL 126 (2) C
Recept & Sched/Med Recd

Covers medical front office reception, admission and discharge procedures and provides students with opportunities to acquire administrative knowledge of the medical front office. Students demonstrate their competency through prescribed scenarios focusing on customer service, reception, scheduling, medical record management, critical thinking, and working toward positive outcomes. Prereq: Permission.

AHL 127 (2) C
Ehr

Focuses on the skills and techniques required for the clinical and administrative functions of a medical assistant in an ambulatory care setting relative to electronic health records. Emphasis is placed on patient confidentiality and HIPAA requirements. Includes criteria established by the Office of the National Coordinator for Health Information Technology under the provisions of the American Recovery and Reinvestment Act of 2009. Prereq: AHL113 with a 2.0 or higher.

AHL 128 (3) C
Law and Ethics

The Law and Ethics course addresses legal and ethical matters relative to the allied health profession/professional and includes HIPAA regulations and how they are applied in a clinical setting. Patient advocacy, patient rights, the impact of the American Medical Association Council, cultural, social, ethnic diversity in ethical performance, tort law, scope of practice, informed consent as well as various laws and agencies relative to health care are included in this course. Prereq: Permission.

AHL 142 (2) C
Med Bill Apps

Covers insurance and the electronic billing process and provides students with opportunities to apply their knowledge within a simulated medical office setting. Students demonstrate their competency through prescribed scenarios focusing on guidelines for specific insurance types and their billing requirements/processes, customer service, insurance processes, critical thinking, and working toward positive outcomes. Prereq: Permission.

AHL 155 (2) C
EKG Technician

The Electrocardiogram Technician interacts directly with patients and performs diagnostic testing that monitors and records the activity of the heart. EKG Technicians work under the direction of a provider and/or clinical supervisor in a variety of clinical settings. The contents of this course includes anatomy and physiology, medical terminology, obtaining a 12 lead electrocardiogram, responding to and assisting providers with electrocardiogram requests in emergent and non emergent situations.

AHL 161 (3) C
Pharmacology

Examines the language of pharmacology, abbreviations, Controlled Substances Act, drug dependency, and prescriptions. Explores medication supply, patient care applications, drug classifications and interactions, safety, and routes of administration. Covers learning of skills needed to administer oral medication, calculate dosages, and prepare injections. Prereq: Instructor's permission. Core: AHL 183.

AHL 178 (6) C
Clinical I

Focuses on the skills, techniques and professionalism required in the educational process of Medical Assistants preparing to work collaboratively with medical professionals while caring for patients and interacting with family representatives of diverse communities. Prereq: Permission.

AHL 180 (8) C
Clinical II

Upholds a professional environment within a simulated clinic setting while focusing on non-invasive procedures. Includes wound care, ear lavage/irrigation, respiratory treatments, identification and use of surgical instruments, sterilization processes, set up/break down for minor procedures, patient positioning, assisting the provider, documentation, diagnostic imaging, nutrition, gender specific procedures, and pediatric procedures/interaction. Prereq: Permission.

AHL 183 (8) C
Clinical II

The Clinical III competency based course upholds a professional environment within a simulated clinic setting while focusing on invasive procedures. Medication administration through variable routes including injection, intravenous therapy, medication calculation, phlebotomy, waived laboratory tests, specimen integrity, handling and transport, safe clinical practices and effective patient documentation are included. Prereq: Permission; Coreq: AHL 161.

AHL 189 (1) C
Emergency Preparedness

This competency-based course focuses on the skills, techniques and professionalism required for Medical Assistants relative to emergency preparedness and assisting with emergencies in an ambulatory care setting while working collaboratively with medical professionals and caring for patients.

AHL 190 (6) C
Clinical IV

Clinical IV focuses on all back office procedures and continues to provide students with opportunities to apply and further develop their acquired competencies within a simulated professional clinic setting. Students demonstrate their competency through prescribed scenarios focusing on anticipation of patient and/or provider needs, critical thinking, directives by healthcare providers, and working toward positive outcomes relative to the daily demands and expectations of a medical assistant.

AHL 191 (2) C**Ma Natl Exam PREP**

This course provides an opportunity for Medical Assistants in the process of program completion or who have completed a Medical Assistant program and have not pursued certification to prepare to sit for a national certification examination through the administering agency of their choice. Students will utilize knowledge they have acquired throughout a Medical Assistant program and/or work experience.

AHL 192 (5) C**Ma Practicum**

This course satisfies the requirement for an unpaid practicum/externship in clinical practice under direct supervision in an ambulatory care/clinic setting. Practicum opportunities are decided through a competitive interview process. The acceptance to a clinic is a part of the educational process of the Medical Assistant program and does not imply or guarantee employment at the practicum site. Prereq: Permission.

American Ethnic Studies**AME 102 (5) C****Indigenous People and the U.S.**

Discusses the role that Native knowledge plays in the contemporary world, paying particular attention to Indigenous cultures in the Pacific Northwest. Looks at contemporary Indigenous culture as a unique form of knowledge that may allow us to create tools for a better and more just world for everyone. Students may meet with local Indigenous intellectuals, leaders, and elders to discuss ideas that are presently circulating.

AME 150 (5) C | N**America's Ethnic History**

Intro to U.S. history as a multicultural phenomenon. Emphasizes the interaction of American Indian, African, European, Latino and Asian immigrants in the development of the U.S. Focuses on conflict and cooperation in the areas of economics, politics and culture.

AME 151 (5) C | N**Societies and Cultures of the United States**

Intro to contemporary issues in American ethnic and race relations. Emphasizes racism, prejudice, stereotypes and equity issues through an examination of Asian, African and Indigenous Americans. Focuses on diversity of interests and identities within each community.

AME 201 (5) C | S**Diversity and Social Justice**

Combines theoretical frameworks, practical issues and experiential activities to help students develop skills and identify plans of action in eradicating the multiple forms of social oppression. Use critical analysis as an investigative tool to examine racism, sexism, hetero-sexism, able-ism, class-ism, religious oppression and aspects of internalized oppression.

American Sign Language

See Languages & Literature, page 284.

Anthropology**ANTH& 100 (5) C | N | S****Survey of Anthropology**

Introduces the field of anthropology. Covers biological and cultural anthropology, linguistics, and archaeology. Survey of humans over time and space. Includes evolution, ethics, political structure, social structure, economics, and communication. Prereq: ENGL&101 eligibility.

ANTH& 106 (5) C**American Mosaic**

Examines American culture, implications and consequences through the anthropological lens. Includes race, ethnicity, class, religion, sex, gender and ability. Explores individual experiences and structural patterns. Provides an insightful look at ourselves from anthropological and sociological perspectives. Field trips. May be taken as SOC 102.

ANTH 113 (5) C**Africa**

A survey of cultures, languages and social diversities of Africa south of the Sahara. Examines Africa's role in the contemporary world.

ANTH 130 (5) C | N**World Cultures**

Exploration of global cultural variation and traditions in the modern context of international capitalism. Using ethnographic approaches informed by the ideas of cultural relativism and transculturation, considers both Western and non-western cultures as well as indigenous and industrialized cultures. Prereq: English 101 eligibility.

ANTH 135 (1-5) C**Introduction to Environmental Anthropology**

Intro to the relationship between cultures and environments. Explore how humans interact with, adapt to, extract resources from, and modify the environment. Looks at the dynamic between ?traditional? and ?modern? societies.

ANTH 190 (5) C**Anarchy and Anthropology**

Introduces basic anthropological insights into community, kinship, oppression and autonomy. Considers Homo sapiens' cultural evolution over the last 200,000 years with special attention to egalitarian societies. Topics covered include the idea of human nature, the origins of hierarchy, money and the state, and solidarity against institutional coercion in daily life. Assignments encourage creative and artistic expression. Prereq: Eligibility for ENGL 101.

ANTH 201 (5) C**Contemporary Issues in Anthropology**

Analysis of current research on a particular topic in cultural or physical anthropology. Topic varies by quarter; check with instructor for specific course content.

ANTH& 204 (5) C | N**Archaeology**

Introduction to the history, methods, and theories of archaeology. Trace and explain the principal lines of cultural evolution in the Old and New Worlds. Discuss the importance of cultural resource management and public understanding and involvement. Prereq: ENGL& 101 with a minimum grade of 2.0 (C)

ANTH& 205 (5) C**Biological Anthropology**

Intro to biological and cultural evolution of humans with evidence from fossil and contemporary populations. Examines physical and biological variations of humans past and present. Emphasis on developing a working vocabulary of anthropological terms.

ANTH& 206 (5) C | N | S**Cultural Anthropology**

Introduction to the study of human culture, including social organization, economics, political systems, religion, technology, art and language. Cultural perspective focuses on the interactions between large and small scale societies in an increasingly globalized world.

ANTH& 227 (5) S**Pacific Island Cultures**

Intro to cultures and peoples of the Pacific region known as Oceania, including origins of indigenous Pacific Islanders, the trajectory of cultural changes caused by Euro-American contact, the mass migration and formation of Pacific Islander communities and networks throughout the diaspora. Emphasizes contemporary Pacific Islander cultures and communities.

ANTH& 228 (5) C**Cultures of the Middle East**

Multidisciplinary intro to Middle Eastern cultures including social, economic, political and religious factors contributing to the region's diversity. Exploration of historical and contemporary forces and changing interpretations by both Westerners and Middle Easterners. Prereq: English 101 with a minimum grade of 2.0.

ANTH 250 (5) C**Applied Social and Cultural Change**

Explores social and cultural change historically and comparatively through an anthropological lens. Moves quickly from theory to practice to empower students to create effective and inspiring change-making actions. Change on an individual and structural level are addressed. Intrapersonal and interpersonal awareness are achieved through the practice of various life skills and humanization skills. Prereq: English 101 with a minimum grade of 2.0.

ANTH 270 (5) C**Food, Culture, and Politics**

Considers cultural & political dimensions of food from the Paleolithic to the present. Explores food & cultural identity, corporate control of the global food supply, movements toward popular food sovereignty, the Western Diet & human health, indigenous food traditions, the farmers' market movement, famine & food deserts, and political inequality & the food system. Eligible for SAGE (Sustainable Agriculture Education) Emphasis program. Prereq: Eligibility for ENGL 101.

ANTH 275 (5) C | N**Medical Anthropology**

Explores culture, society, medicine and health from a global perspective. Examines biomedical and cross-cultural perspectives of the human body, life, death, well-being and healing.

ANTH 298 (1-5) C | N**Special Topics in Anthropology**

Independent study or fieldwork in anthropology. Periodic meetings with instructor. Prereq: Permission.

ANTH 299 (1-5) C**Special Problems/Anthropology**

Small group setting to cover selected topics in anthropology. Prereq: Permission.

Apparel Design & Development**APPRL 096 (2) C****AD&D Skill Development 1**

For students preparing to enroll in the School of Apparel Design & Development who have little or no sewing or patternmaking experience. Introduction to sewing terms, commercial and production pattern development, layout and cutting, industrial sewing machine operation, and professional construction techniques for basic garments and samples. Prereq: Eligibility ENGL& 101.

APPRL 098 (2) C**AD&D Skill Development 2**

For students preparing to enroll in the School of Apparel Design & Development. Intermediate beginners update their sewing machine handling and patternmaking skills. More complex sewing techniques and sample garments are constructed using industrial sewing and pressing equipment. Includes pattern drafting and labeling for production. Prereq: APPRL 096 or permission through successful completion of a skills test and eligibility for ENGL& 101.

APPRL 099 (6) C**AD&D Skill Development Intensive**

An intensive course combining APPRL096, APPRL098, & APPRL100 (the prerequired courses to enroll in the Apparel Design & Development program). It is intended for students with little/no sewing experience. Students gain industrial-equipment skills for sewing and pressing, complete sewing techniques and sample garments, and cover pattern-development and proofing. Upon successful completion, students will be eligible to enroll into the 2-year AD&D program. Prerequisite: eligibility for ENGL&101.

APPRL 100 (2) C**AD&D Skill Development 3**

Required for enrollment in AD&D. For students with previous sewing and patternmaking experience. Enhance industrial equipment handling skills for sewing and pressing to complete more difficult sewing techniques and sample garments. Covers pattern development of a bodice sloper and proofing methods. This course is a required prerequisite for enrollment into AD&D. Prereq: APPRL 098 or permission through successful completion of a skill test and ENGL&101 eligibility.

APPRL 101 (4) C**Construction 1 - Professional Techniques**

Covers professional techniques and methods to construct samples and garments to professional industry standards. Emphasis on accuracy, use of industrial sewing and pressing equipment, and developing technical specification packages. Prereq: APPRL 100 and program entrance requirements.

APPRL 102 (4) C**Construction 2 - Professional Techniques**

Build on skills from APPRL 101 by producing samples and garments using intermediate construction techniques and meeting industry quality standards. Emphasis on industrial equipment use and proficiency, and enhanced specification package development. Prereq: APPRL 101.

APPRL 103 (4) C**Construction 3 - Professional Techniques**

Presents techniques and methods using factory processes to construct garments for manufacturing. Blends skills in pattern design for target markets and construction for mass production. Continuation of technical specification development and industrial equipment use. Prereq: APPRL 102.

APPRL 104 (2) C**Alterations and Fitting**

Covers professional ready-to-wear garment alteration techniques, evaluation methods, and industry fitting standards. Includes business management practices, record keeping, output efficiency and customer service. Prereq: APPRL 101 and 102.

APPRL 111 (4) C**Patternmaking 1 - Flat Pattern and Drafting**

Development of basic production patterns using flat pattern and drafting methods. Focus on fundamental patternmaking practices including cutting, labeling and approaches for pattern manipulations. Prereq: APPRL 100 and program entrance requirements.

APPRL 112 (4) C**Patternmaking 2 - Draping**

Pattern development using draping techniques to generate basic slopers. Combines draping with basic flat pattern manipulations to create patterns for garment designs. Prereq: APPRL 111.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN Watch Technology

NAME TO PREFIX
Watch Technology HIN

Common Course Numbering explanation is on page 202.

APPRL 113 (4) C
Patternmaking 3 - Design by Flat Patternmaking

Continues development of flat pattern and draping techniques from APPRL 111 and 112. Combines fitting methods, and use of production pattern blocks and pattern modifications to create more complicated garment designs. Prereq: APPRL 112.

APPRL 114 (2) C
Patternmaking 4 - Pattern Alteration for Fit

Focuses on evaluating and achieving good fit through fit analysis and pattern adjustment and alteration techniques for common body variations. Prereq: APPRL 102 & APPRL 112.

APPRL 130 (2) C
Apparel Manufacturing

Survey of the apparel manufacturing business cycle. Includes materials acquisition, production, scheduling, product costing, machine processes and industry standards. Prereq: APPRL 100 and program entrance requirements.

APPRL 131 (3) C
Business Practices in Fashion

Examines aspects of conducting business in the fashion profession including industry practices, job categories, professional development and business communications. Prereqs: APPRL 101, 111, 130 & 151.

APPRL 141 (2) C
Design 1 - Principles of Design

Covers the basic design principles of repetition, rhythm, emphasis, harmony, balance, scale and proportion as they relate to garment design. Prereq: APPRL 100 and program entrance requirements.

APPRL 142 (2) C

Design 2 - Fabric Science and Textiles

Analyze how fibers, yarns, fabric structure and finish affect fabric characteristics. Studies include textile history, independent research and visual presentation. Prereqs: APPRL 130 and APPRL 151.

APPRL 143 (2) C

Design 3 - Color and Palettes

Investigates color design trends and application in the apparel market. Explores hues, values and saturation and basic color theory. Prereqs: APPRL 142 and APPRL 152.

APPRL 151 (3) C

Computer Applications for Apparel Design 1

Develop Excel, Illustrator and Photoshop skills for use in the apparel design field. Includes specification development, technical drawing and image editing. Prereq: APPRL 100 and program entrance requirements.

APPRL 152 (3) C

Computer Applications for Apparel Design 2

Continues building computer skills, terminology and procedure. Gain proficiency in graphics programs commonly used in industry to produce technical drawings and visual presentations. Prereq: APPRL 151.

APPRL 197 (1-5) C

Work Experience in Apparel Design

Earn relevant work experience and practical hands-on skills through the completion of an internship in the apparel design and development field. Prereq: Permission.

APPRL 201 (4) C

Ready-To-Wear Construction

Construction methods with focus on ready-to-wear and tailored garments. Coordinates with APPRL 211 to execute pattern designs for specific target markets. Prereq: APPRL 103. Coreq: APPRL 211.

APPRL 202 (4) C

Active Sportswear Construction

An advanced course focused on industry methods and standards for constructing active, technical sportswear, outerwear and accessories. Projects are constructed from patterns designed in APPRL 212. Prereqs: APPRL 201 and 211. Coreq: APPRL 212.

APPRL 211 (4) C

Pattern Design for Ready-To-Wear

Presents advanced pattern design for ready-to-wear and tailored garments. Employs a variety of methods to produce patterns from blocks, measurements, fashion source material, and line drawings. Coordinates with APPRL 201 to construct pattern designs. Prereqs: APPRL 103 and 113.

APPRL 212 (4) C

Pattern Design for Active Sportswear

Patternmaking for active sportswear and outerwear. Develop patterns from samples and sketches to industry standards and for functionality. Pattern designs are constructed in APPRL 202. Prereq: APPRL 211.

APPRL 221 (4) C

Pattern Grading

Covers basic principles of grading garment designs for manufacturing. Produces scaled-up and scaled-down versions of patterns using the shift and grid methods of grading. Prereq: APPRL 103 and 113.

APPRL 222 (4) C

Computerized Pattern Grading

Explore apparel industry standards and guidelines for pattern sizing for more complex patterns. Intro to using computer-aided technology to size patterns. Prereq: APPRL 221.

APPRL 230 (4) C

Portfolio and Resume Development

Survey course of job search and interviewing strategies including production of a professional portfolio and resume targeted for the apparel design and development industry. Prereqs: APPRL 197, 202, 212, 222, 242.

APPRL 241 (4) C

Design 4 - Print and Pattern

Development of surface designs for fabrics and garment silhouettes. Focus on design methodology, textile pattern and print technology, Photoshop techniques and apparel industry practices. Prereqs: APPRL 143 and APPRL 152.

APPRL 242 (4) C

Design 5 - Line Design

Explore elements of designing a line of clothing to industry standards. Focus on development of boards for line presentations and design of a clothing line for production in APPRL 270. Prereq: APPRL 241.

APPRL 260 (3) C**Fashion History**

Survey of key clothing items from major historical periods. Gain tools for communicating clothing concepts and understand current fashion trends. Explore social influences and cultural ideals that impact fashion. Prereqs: APPRL 143, 151 & 152.

APPR 270 (8) C**Final Line Design and Development**

Capstone course to produce the line of clothing designed in APPRL 242. Includes pattern development, materials sourcing, garment construction and production of technical specifications. Collaboratively produce the annual fashion portfolio show where final collections and portfolios are on display to industry professionals and the public. Prereqs: APPRL 197, 202, 212, 222, & 242.

**Application Development
Bachelor of Applied Science****AD 300 (5) N****Component Software**

Covers object-oriented programming using Java with an emphasis on the creation and use of software components. Includes reusability, the model-view-controller (MVC) design pattern, linked lists, binary trees, recursion, and algorithmic analysis using Big-O notation.

AD 310 (5) N**Software Lifecycle**

Overview of tools, processes, and practical approaches that support software product lifecycle. Topics include: project life-cycle management: team roles, tasks, timelines; responding to customer needs and requirement changes, development paradigms: waterfall, spiral, agile, RAD (Rapid Application Development); documentation requirements; tools: source code management, unit testing, debugging. Prereq: Acceptance into the Application Development BAS.

AD 315 (5) N**Discrete Mathematics in Computer Programming**

This course provides hands-on application of the (abstract) discrete structures that constitute the backbone of computer science. Topics shall include: numerical representation and limitations for numerical methods, discretization, discrete probability, finite-state machines. Other topics may be included at instructor discretion. Topics shall be explored within the context of student-written application programs. Prereq: AD 300 or CSC 143; MATH& 151 with a 2.5 or better; or instructor permission.

AD 320 (5) N**Web Application Development**

Develop a database-driven web application incorporating MVC patterns. Covers state maintenance, CRUD and REST integration on both server and client sides. Learn to parse, cache and integrate API data achieved by third party providers into the application. Technologies can include Query, CURL, AJAX and parsing JSON & XML. Explore legal and ethical issues of web applications, including security, privacy, benefits and unintended consequences.

AD 325 (5) N**Data Structure & Algorithms**

Covers fundamental data structure and their algorithms and applications in problem solving by programming. Includes linked lists, stacks, queues, priority queues, binary and multi-way trees, directed graphs, hashing, internal and external sorting. Prereq: AD 300.

AD 330 (5) N**Professional Communication in IT**

Presents strategies for effective communication in professional settings, with emphasis on technology environment. Practice and apply communication styles in formal, informal, in-person and virtual situations and learn effective development team collaboration. Covers ethical and legal issues including copyright fair use and intellectual property.

AD 340 (5) N**Mobile Application Development**

Intermediate course in the fundamentals of mobile application development. Includes: program language & mobile platform design, building apps that respond to users in a useful/intuitive way, integration of data sources, location awareness, image/file management, and legal & ethical issues specific to the mobile environment. Prerequisites: AD 320 and acceptance into the AD-BAS program or instructor permission.

AD 350 (5) N**Database Technology**

Covers intermediate programming in an SQL relational database. Provides an introduction to non-relational databases as used in Cloud Computing and Big Data. The RDMS topics include views, models, stored procedures, triggers, indexing, JOINS and abstraction techniques, query construct efficiency. Introduction to noSQL databases: uses, terminology, indexing, storage, compute consumption, compression, and reliability. Prereq: Acceptance into the Application Development BAS.

AD 400 (5) N**Project Management in Software Development**

Comprehensive overview of current processes, practices and tools used to manage software development projects. Apply best practices for planning, organizing, scheduling, controlling and adapting strategies to specific project needs and constraints. Includes requirement identification and analysis, documentation, legal and licensing requirements. Emphasizes contractual agreements, licensing, resource acquisition and management, testing and deliverables, and customer support and management.

AD 410 (5) N**Web Application Practicum**

Work in teams to create a MVC based web application. Store and share code via software versioning system and use small team agile strategies. Write requirements documents, build the app in stages and integrate components into a larger project. Covers legal and ethical issues of app development and lifecycle, and working in a diverse and collaborative environment. Prereqs: AD 310 & 320.

AD 420 (5) N**Cloud Computing - Software As Service**

Covers fundamentals & strategies for moving & developing apps & data storage in the cloud. Students will analyze cloud based offerings & compare them for suitability to specific app & infrastructure needs. They will learn to deploy apps to the cloud, utilize cloud based services, develop cloud specific apps, and explore legal and ethical issues specific to the cloud computing environment. Prerequisites: AD 320, 325, & 350.

AD 430 (5) N**Mobile Application Practicum**

Students work in teams to build a mobile app for an external client. Students will interview users, prototype their apps, write app specs, & consult for product viability & legal issues. Teams will use a recognized development strategy, performing design reviews and quality assurance checks at intervals. Upon completion, teams will deploy their mobile apps. Prereq: AD 310, 320, & 340.

AD 440 (5) N**Cloud Computing Practicum**

Students will work in small teams to develop and deploy cloud-based services & apps for an external client: determining suitability, cost benefit analysis, ongoing maintenance needs in deploying an existing app to a cloud-based service, develop/implement a deployment plan to migrate an app to a cloud-based service, extend the apps capabilities to utilize cloud-specific offerings such as big data or cloud-based development platforms. Prereq: AD 310, 320, & 420.

AD 490 (5) N**Internship/Capstone Project AD-BAS**

In this course for the Application Development, Bachelor of Applied Science, students shall complete a capstone project or arrange and complete an internship, applying the skills learned in the classroom to the workplace. Students write a culminating paper, reflecting on their experience and integrating it with classroom learning. Prereq: Instructor permission.

**Applied Behavioral Science
Bachelor of Applied Science****ABS 206 (1-5) C****Writing in the Human Services**

Develops academic writing and research skills required for success in advanced studies in human services. Covers technical writing conventions and skills needed to develop reports and documents for the workplace. Prereqs: ENGL& 101 with a minimum grade of 2.0 and acceptance into the BAS Applied Behavioral Sciences program or permission.

ABS 310 (5) C**Professionalism and Ethical Practice**

Examines ethical principles in the field of human services, including client interactions, peer-to-peer interactions, working with various communities, and the impact of ethics/ethical decisions. Prerequisite: Permission.

ABS 320 (5) C**Applied Social Psychology**

Examines the application of social psychological concepts and systems theory in human service settings including prevention, policy analysis, groups, professional and client relationships, and multi-cultural competence. Prereq: PSYC& 100.

ABS 330 (5) C**Information Literacy and Program Assessment**

Intro to organization, retrieval and evaluation of electronic and print information: college library systems, networked information systems, traditional scholarly resources, and concepts of research. Examine specialized resources of various Social and Human Services disciplines.

ABS 335 (5) C**Human Services Practice**

Learn to apply knowledge, professional values, sociocultural dynamics and ethics to theory-based models of practice. Covers assessment, information literacy, planning, practice evaluation and termination.

ABS 340 (5) C**Applied Environmental Science**

Investigates the relationship between environment and the human condition. Explores human needs and experiences based on the health of their environment, specific challenges posed by degraded environments and unequal access to healthy environments. Focus on developing environmental literacy and familiarity with tools for promoting environmental justice. Local field trips may be required. Prereq: Enrollment in Applied Beh. Sciences BAS program, or Instructor's permission.

ABS 350 (5) C**Quantitative Principles in Research & Assessment**

Explores the quantitative organization of data central to scientific research and assessment design in applied behavioral sciences. Prereq: PSYC&100, PSYC 217, and MATH 098 (or MATH 088), each with a minimum 2.0 or higher.

ABS 360 (5) C**Public Policy Analysis**

Learn the art and science of providing problem-solving advice to government decision-makers, managers, and citizens in order to influence government processes. Understand theoretical frameworks, problem definition, development of alternative solutions, predicting impact of choices, policy evaluation and modification of policies through policy case studies. Prereq: SHS 103 or POLS 202 or Permission.

ABS 399 (1-5) C**Independent Study and Research**

Pursue academic and professional areas of interest and possible employment related to applied behavioral science.

ABS 410 (5) C**Economic-Political Systems: Public Implications**

Explores the nature and scope of political economy by examining its historical evolution. Conducts a comparative analysis of contemporary political and economic systems and analyzes how public service relates to political economy through taxation and finance.

ABS 415 (5) C**Cross-Cultural Competency in Human Services**

Develops an understanding of theories, research and applications pertaining to the process of cross-cultural competency. Students examine cultural assumptions, values, perceptual and cognitive orientations, cultural stereotypes, prejudice, ethnocentrism, non-verbal behaviors, language, and meaning systems in cross-cultural interactions between people from diverse cultural and ethnic groups.

ABS 420 (5) C**Multicultural and Artistic Expression**

Examine jazz as both a developing art form and as a social and cultural institution with clearly identifiable roots and traditions. Understand how practitioners have responded to pressing contemporary social circumstances and how jazz provides a model of democracy in action.

ABS 430 (5) C**Sociology of Families**

Examines the trends, issues, and debates regarding the social construction of families; and, how changes in families relate to social, economic, global and political changes in the larger social structure. Students develop critical thinking and analytic skills by drawing on empirical research, personal histories, current events, and public policy issues. Prereqs: SOC 101 with 2.0 or higher.

ABS 495 (5) C**Senior Capstone Project**

Students demonstrate their mastery of learning in the field of Applied Behavioral Science. Under the guidance and direction of instructors, they will evaluate their overall educational experience and individual professional direction by integrating experiential learning, coursework, knowledge, and skills, and demonstrating critical thinking, oral presentation, creativity, problem-solving, and writing commensurate with senior level work. Prereq: Completion of all prior program requirements.

ABS 497 (5) C**Advanced Field Placement I**

This is the first of two quarters of applied professional work in a community setting consistent with the student's area of interest. Meets requirements for supervised field practice required for licensure and professional accreditation in many professional specialties.

ABS 498 (5) C**Advanced Field Placement II**

Second quarter of applied professional work in a community setting consistent with the student's area of interest. Meets requirements for supervised field practice required for licensure and professional accreditation in many professional specialties.

ABS 499 (1-5) C**Independent Study and Research**

Pursue academic and professional areas of interest and possible employment related to applied behavioral science.

Arabic**ARAB 101 (5) C | S****Arabic 101**

Modern Standard Arabic (MSA) language within the cultural context of Arabic-speaking people. Provides students with elementary Arabic communication skills of listening, speaking, reading, and writing. No prior knowledge of Arabic required. Prereq: English 101 eligibility.

ARAB 102 (5) C | S**Arabic 102**

This course begins with a review of the material taught in Arabic I. An emphasis on speaking skills is continued in this level. Conversational situations include general topics from Arabic I, as well as speaking about family and friends, daily life activities, and various cultural topics such as Arabic names and titles, activities at home, and the Arab family structure. An increasing amount of time will be spent on the written language and grammar.

ARAB 103 (5) S**Arabic 103**

This course begins with a review of the material taught in Arabic II. Arabic III continues with a comprehensive and complex focus on Arabic speaking, reading, and writing skills. Students will be able to relay personal experiences using complex grammar and will gain a thorough understanding of Arabic culture.

Art**ART 091 (5) S****Introduction to Digital Photography**

This course is designed to help students become well rounded in the fundamentals of digital photography. Students will receive basic instruction, demonstration, and see samples of the desired outcomes. They will be allowed to go outside and shoot assignments based on what they are learning. A portfolio of student work will be created to share with the instructor and peers.

ART& 100 (5) C | N | S**Art Appreciation**

Historical backgrounds and design fundamentals that have affected art using slide lectures, reading and practical studio applications.

ART 101 (5) C | N | S**Design**

Studio series in the fundamentals of two-dimensional art with problems based on line, space, texture, shape and color theories. Includes practical applications of theories to design. Required for art majors.

ART 102 (5) C | N | S**Design**

Continuation of ART 101. Intro to three-dimensional space organization using the elements of design. Construction in sculptural formats. Required for art majors. Prereq: ART 101

ART 103 (5) C | S**Design**

Tutorial in individual problems in design. Prereq: Permission.

ART 105 (5) C**Survey of Modern Art**

Study of major art movements of the late nineteenth century to the present with a focus on the major artistic forms, artists, and styles emerging out of Europe and the United States. Consideration also is given to the impact and exchange of artistic traditions and practices outside of Europe and the United States. May be taken out of sequence. Prereq: ENGL& 101 (C)

ART 106 (5) N**Color Theory**

Introduction to the basic principles of color theory as it pertains to fine arts and design applications. Students will develop skills in mixing and paint application necessary to realize a project in color from concept to completion. This studio class includes demos, lectures, critique, and collaborative work. Students will develop original, creative designs that utilize color interactions and practical approaches to color design problems. Basic drawing experience encouraged.

ART 111 (5) C | N | S**Drawing**

Freshman level drawing. Study of line, value, space, perspective and composition through the use of a variety of drawing media.

ART 112 (5) C | N | S**Drawing**

Continuation of ART 111. Exploration in subject and media including drawing from the human figure. Focus on composition, expression, and creative conceptualization. Prereq: ART 111 or permission.

ART 113 (5) C | N | S**Drawing**

Continuation of ART 112. Further development of fine art drawing with an emphasis on expression and composition, including development of portfolio building or other project. Prereq: ART 112 or permission.

ART 114 (5) C | N | S**Introduction to Digital Photography I**

Intro to digital camera use, photography basics, photographic visualization, composition, lighting, and minimal editing. Students must provide their own digital camera with five or more mega-pixels, Auto, Auto-P, Aperture Priority, Shutter Priority, and full manual Exposure Modes. Prereq: Eligibility ENGL 096 or equivalent.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

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HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

ART 115 (5) N
Introduction to Digital Photography II

Continue with photography basics involving digital imaging, lighting, models, and presentation. Students need a current DSLR camera with full manual modes, tripod, lens tissue, thumb drive, card reader, compact flash or other memory card. Photo lights optional. Prereq: ART 114 or permission.

ART 121 (5) C | N
Introduction to Printmaking

Study and application of basic relief print media. Covers linocuts, woodcuts, multicolor prints and experimental monoprints. Intro to relief and intaglio techniques, with emphasis on small editions. Recommended: Some drawing background.

ART 122 (5) C | N
Introduction to Printmaking-Intermediate

Covers various aspects of printmaking, with an emphasis on intaglio printmaking processes. Intro to drypoint, engraving and etching with hard and soft grounds. Learn water and acid etching and the use of photosensitive emulsions on metal plates. Recommended: Some drawing background.

ART 123 (5) C | N
Continuing Printmaking: Monotype and Monoprint

Develop technical and conceptual skills to create the painterly print. Emphasis on sequential imagery, layered impressions, color use and inks, use of the press, plates and papers and evolution of personal imagery. Covers variation, using a matrix and altered monotypes. Recommended: Some drawing background.

ART 124 (5) N
Printmaking - Screenprint

Study and application of screenprinting media. Covers multiple techniques to create screens for Fine Art prints on paper. Introduces use of transparency in image. Instruction and focus on color mixing and interaction. Investigates multiple color print techniques and registration, with emphasis on monoprints and small editions.

ART 166 (5) N
Video Art I

Introduction to video art through use of digital video filming and editing. Explore digital video editing, sound integration, formatting, output and distribution strategies and options. Covers visualization, composition, effects, and transitions of digital video within a fine art context. Create, present and critique finished digital video works. Recommended: ART 114 and ART 210.

ART 170 (1-5) S
Photography As An Art Language

Traces the history and distinctive properties of photography. Includes camera, exposure, lighting, composition, black and white darkroom work and digital imaging.

ART 171 (5) C
American Indian Art & Aesthetics

Explores expressions of life by the Indigenous peoples of North America, specifically the peoples known as American Indian, Alaskan Native, and some Canadian First Nations. Introduces ways of thinking, storytelling, dance, art objects, film, and music that are expressions and aesthetic representations of Native North America (above 30° North parallel).

ART 201 (5) C | N | S
Painting

Beginning painting in oil or synthetic media using still life. Emphasis on basics: composition, value studies, color mixing, canvas preparation, styles and techniques. Recommended: Drawing background.

ART 202 (5) C | N | S
Painting

Further development of color and composition in oils or synthetic painting media. Individual instruction. Prereq: ART 201 or permission.

ART 203 (5) C | N | S
Painting

Further studies in color, composition and subject matter including portfolio building or other project. Individual instruction. Prereq: Art 202 or permission.

ART 204 (5) N
Mural Art

Explore the stages of mural art from brainstorming and budgeting to community input and creation, with particular emphasis on the craft of mural execution. Hands-on experience requires ability to work outdoors 3+ hours at a time. Prereq: ART 201 or permission.

ART 205 (5) C | S
Water Color Painting

Intro to water color painting. Covers basic wash techniques, color mixture, value contrast, composition and wet into wet. Recommended: Some drawing background.

ART 206 (5) S
Water Color Painting

Continuation of ART 205, based on a series of water color problems utilizing skills learned in the previous quarter. Further work with composition. Prereq: ART 205 or permission.

ART 207 (5) S
Water Color Painting

Individual water color projects in series. Prereq: ART 206 or permission.

ART 209 (5) S
Art On the Touchscreen Tablet

Explore the principles and elements of art – line, value, space, composition and color–through the use of the iPad. Create art on the iPad and explore visual literacy issues.

ART 210 (5) N | S
Digital & Graphic Art - Photoshop + Illustrator

First of 2 courses. Image design, creation and manipulation using vector-based and pixel-based programs. Combines fine art and technical aspects of digital composition for production of media formats including print and web-based. Previous drawing/design and basic computer skills strongly recommended.

ART 211 (5) N | S
Sculpture

Fundamentals of composition in the round, in clay and plaster, using basic techniques of carving, casting and building. Prereq: One quarter of drawing, design, or permission.

ART 212 (5) N | S
Sculpture

Fundamentals of relief composition in clay, plaster and wood using basic techniques of carving, casting and building. Prereq: ART 211 or permission.

ART 213 (5) N | S

Sculpture

Fundamentals of three-dimensional composition with emphasis on life studies. Basic materials used are clay, plaster, or wood. Prereq: ART 212 or permission.

ART 214 (5) N | S

Digital & Graphic Art - Intermediate

Continuation of ART 210. Further explore fine art and technical aspects of digital composition using vector graphics (such as Adobe Illustrator) and pixel-based (such as Adobe Photoshop) programs. Students will be encouraged to further develop their own visual language. Includes lectures, software demos, digital image making exercises, projects and readings. Prereq: ART 210.

ART 215 (5) N | S

Digital Art and Graphic Design - Advanced

Continuation of ART 214. Further explore fine art and technical aspects of digital composition using pixel and vector based software (such as Adobe Creative Suite). Students will be encouraged to further develop their own visual language. Includes lectures, software demos, digital image making exercises, projects and readings. Prereq: ART 214. Software is available on campus. Online students are responsible for obtaining their own software.

ART 221 (5) N | S

Ceramic Art

Beginning basic pottery design and construction. Emphasizes hand building coils and slabs, basic glazing and beginning pot throwing on the potter's wheel.

ART 222 (5) N | S

Ceramic Art

Develop throwing skills. Understand basic glaze composition and kiln operation. Continue studies in techniques of surface decoration. Prereq: ART 221 or permission.

ART 223 (5) N | S

Ceramic Art

Continuation of ART 222. Advanced work on the wheel. Emphasis on combining methods of construction. Learn basic glaze skills. Prereq: ART 222 or permission.

ART 231 (5) N

3d Computer Modeling & Realization

Intro to computer based 3D modeling. This medium provides a creative environment and imposes a new framework for creating in 3-dimensional space. Prereq: MATH 098.

ART 240 (5) N

Book Arts

Studio course in the art of book-making. Students will create narratives through visual story telling; learn tool handling and techniques in book construction; discuss historical and social contexts for the artist book; develop a personal expression through the medium of artist books. Methods of image-making will include, but are not limited to: painting, drawing, printmaking, digital art and collage.

ART 251 (5) C | N

Art History

Study of the major forms of visual expression including Paleolithic, Egyptian, Mesopotamian, Greek, Roman and Early Christian periods. Emphasis on European and Middle Eastern art (C, S).

ART 252 (5) C | N

Survey of Western Art: Medieval-Renaissance

Emphasis on the Medieval period through the Renaissance focusing on European and Islamic art. Continuation of ART 251 but can be taken out of sequence. Prerequisite: Eligibility for ENGL& 101.

ART 253 (5) C | N

Survey of Western Art: Renaissance-Present

Emphasis on the Italian Renaissance through the present day. Continuation of ART 252 but may be taken out of sequence. Prerequisite: Eligibility for ENGL& 101.

ART 254 (5) C

Survey of Northwest Coast Art

Surveys the visual culture of the Pacific Northwest Coast, beginning with indigenous arts in historical context through the present, with a focus on contemporary expressions and issues. Consideration will also be given to the exchange of artistic traditions and practices beyond the Northwest and the impact of colonialism, technological developments, and societal shifts. Prerequisite: Eligibility for ENGL&101.

ART 255 (5) C | N

Survey of Asian Art History

Survey of the visual arts of India, China, and Japan with a focus on major religions, artistic forms, techniques, and cultural traditions. Consideration will also be given to the impact of outside invaders on the arts and cultural exchange across space and time. Prerequisite: Eligibility for ENGL&101.

ART 256 (5) C

Art History: History of Photography

Examines the role photography has played reflecting and shaping culture from its emergence in the 19th century to the digital revolution currently underway. Emphasizes photography's role in the larger development of art history and what it means to photograph, to be photographed, and to view photographers as part of an audience. Students make a few photographs of their own along the way. Prereq: ENGL 101.

ART 257 (5) N

Non Western Art History: Art of Africa & Oceania

Survey major forms of art from Africa, Australia, and South Pacific Islands. Art will be examined through the lens of pre-colonization, colonization, and art of indigenous peoples post-colonization to present day. Includes the study of sculpture, architecture, painting, and personal adornment. May be taken out of sequence. Transfer class.

ART 258 (5) N

Design History: A Global Perspective

Introduction to the history of design with emphasis on the industrial age through contemporary design focusing on global design. Focus on colonialism and its effects on design, design practice across global regions, and contemporary design solutions in post-colonial regions. Transfer class.

ART 281 (5) N

Jewelry Design I

Basic jewelry design and construction with precious and/or semi-precious metals. Simple stone setting, tool usage, soldering, metal testing, properties and characteristics of metals and stone. Recommended: One quarter each of design and drawing.

ART 282 (5) N

Jewelry Design II

A continued exploration of metal fabrication and jewelry design, covering surface enrichment, advanced forming techniques, faceted stone setting and intro to enameling. Prereq: ART 281.

ART 283 (5) N

Introduction to Alloying and Jewelry Casting

Explore the alloying and casting processes of Jewelry Design. Learn lost wax casting and rubber molding processes. Prereq: ART 282 or permission.

ART 284 (5) N**Bench Techniques and Practices**

Covers advanced bench skills and production techniques which encourage creation of innovative pieces with personal statements. Emphasis on creating a body of work that is ready for exhibition. Prereq: ART 283.

ART 285 (5) N**Metal Techniques for Small Scale Sculpture**

Metalsmithing techniques for functional and sculptural objects. Learn the physical properties of metal and create objects that express personal images and creative thoughts in metal sculpture, hollowware and model making. Includes field trips to metal fabrication studios.

ART 290 (5) N**the Art Business**

Fundamentals of the business aspects of art, including designing and packaging the portfolio for A.F.A./C.F.A. degrees, photographing artwork, building a résumé, marketing, copyrights, contracts and other essential business practices. Recommended: At least two college-level art courses.

ART 298 (3) C**Directed Reading in Art**

Advanced film production involves scripting, budgeting and scheduling. Emphasis on information film production, interior and studio lighting for color, sync-sound recording and editing techniques.

ART 299 (1-5) C | N | S**Special Problems in Art**

Individual or seminar instruction. May be repeated to earn a maximum of 9 credits. Prereq: Second year art major, level of ability and permission.

Astronomy**ASTR& 100 (5) C | N | S****Survey of Astronomy**

Emphasis on astronomic concepts fundamental to an understanding of the solar system, stars, galaxies and origin and history of the universe.

ASTR 102 (5) N**Space and Space Travel**

Intro to space exploration, both robotic and human, and the engineering of space-faring vehicles to withstand space hazards. Prerequisite: Completion of MATH 098 (with a grade of 2.0 or higher) and placement into ENGL& 101.

ASTR 104 (5) C**Observational Astronomy**

Covers the celestial sphere and coordinates; Earth's orbital motion; time; moon, planets, stars, constellations and deep sky objects. Includes technology, processes and math used by astronomers: optics, telescopes, digital detectors, data reduction, observing techniques and data analysis. Minimum two nights observing required. Prereq: Recommend ASTR& 100 and MATH 102.

ASTR 201 (5) N | S**the Universe and the Origin of Life**

Modern views of atomic and molecular evolution from the big bang theory through the formation of the solar system and emergence of life on earth. Discuss extraterrestrial intelligent life and the ultimate fate of the cosmos. Recommended: AST 100 or some science background.

Auto Body Collision Repair**ABR 111 (4) S****Introduction to Automotive Collision Technology**

Covers the skills needed to become a good body shop employee, typical movement of a vehicle through a body shop and basic procedures for repairing a collision damaged vehicle. Identify and use general purpose hand tools and power tools used in a body shop.

ABR 112 (3) S**Safety and Environmental Practices**

Covers various environmental and other regulations in an automotive refinishing department. Locate hazardous warning information for products used in refinishing, select the proper personal protection equipment, inspect it and demonstrate proper use.

ABR 113 (8) S**Welding and Cutting**

Covers the differences between various metal joining processes, selection of the correct heat joining for various jobs, the advantages of using MIG welding, personal and shop safety, along with vehicle protection measures. Learn about welding wires, shielding gases, tuning the welder. Be able to visually inspect and destructively test the weld.

ABR 121 (4) S**Panel Replacement and Alignment**

Covers selection, understanding and use of panel replacement and alignment tools. Prereq: ABR 111, 112 and 113 or permission.

ABR 122 (3) S**Working with Trim and Hardware**

Covers the proper use and selection of tools and removing and installing of interior door trim panels, door locks and handles, deck lid lock cylinders and exterior trim. Install pinstripes and decals. Prereq: ABR 111, 112 and 113 or permission.

ABR 123 (4) S**Metal Straightening**

Covers the basic fundamentals of metal straightening and proper selection of metal straightening tools. Prereq: ABR 111, 112 and 113 or permission.

ABR 124 (4) S**Body Fillers**

Covers the correct mixing and application of body fillers to increase the quality of the repair. Prereq: ABR 111, 112 and 113 or permission.

ABR 131 (2) S**Understanding Automotive Finishes**

Identify the differences between a variety of automotive finish systems, including dry time, chemical make-up and plant and body shop application. Prereq: ABR 111, 112 and 113 or permission.

ABR 132 (6) S**Preparing the Surface for Refinishing**

Determine the condition of a vehicle's finish and plan the steps used in refinishing the vehicle. Prereq: ABR 111, 112 and 113 or permission.

ABR 133 (5) S**Preparing the Equipment, Paint & Refinishing Mat**

Setup and use the final preparation, spray environment and drying areas for refinishing. Understand paint mixing formulas using reference manuals; mix paint according to published formulas; and describe the various types of air supply equipment and setup. Use various types of spray guns, make all preliminary adjustments to the air system and spray gun, test the spray gun and make final adjustments in preparation for refinishing. Prereq: ABR 111, 112 and 113 or permission.

ABR 134 (1) S**Detailing**

Covers proper cleaning of the exterior and interior of the vehicle, removal of overspray, decals and pinstripes. Prereq: ABR 111, 112 and 113 or permission.

ABR 161 (5) S**Damage Analysis**

Covers how a vehicle absorbs the forces of a collision through crush zones, how damage travels from the point of impact through the body, and the identification of two types of damage conditions. Prereq: ABR 111, 112 and 113 or permission.

ABR 162 (3) S**Door Skin Repair and Replacement**

Covers proper alignment of door frames, the principles and techniques for removing and replacing a welded door skin, door intrusion beam removal, surface preparation and installation techniques. Prereq: ABR 111, 112 and 113 or permission.

ABR 163 (5) S**Quarter Panel Replacement**

Analyze quarter panel damage, determine whether sectioning or full panel replacement is required; learn the principles and techniques of removing a damaged quarter panel, surface preparation, alignment and installation. Prereq: ABR 111, 112 and 113 or permission.

ABR 164 (2) S**Moveable Glass and Hardware**

Remove and install moveable door glass, identify cause and correct air and water leak problems. Prereq: ABR 111, 112 and 113 or permission.

ABR 171 (7) S**Straightening Structural Parts**

Learn proper mounting and anchoring of the vehicle and various types of pulling equipment. Study H.S.S., cold and hot stress relief, pulling and straightening of front, rear end, side impact and roof damage. Prereq: ABR 111, 112 and 113 or permission.

ABR 172 (7) S**Full and Partial Panel Replacement**

Understand full or partial panel replacement, uses of various types of joints used in sectioning, repair or replacement of a complete rail section, rocker panel, A and B pillar, floor pan, truck floor and full body section. Prereq: ABR 111, 112 and 113 or permission.

ABR 173 (2) S**Restoring Corrosion Protection**

Covers safely working with chemicals, corrosion and its effect on vehicles and restoring corrosion protection to collision damaged areas. Plan effective and correct corrosion protection treatment to welded areas and exposed seams, interior seams, exposed surfaces, trim and accessories during repairs.

ABR 181 (6) S**Steering and Suspension**

Covers identifying and diagnosing tire and wheel steering, rack and pinion steering, power steering suspension, strut type and problems in steering and suspension systems.

ABR 182 (7) S**Electrical and Electronic Systems**

Learn to diagnose and repair electrical and mechanical systems problems.

ABR 183 (3) S**Mechanical Systems**

Focuses on repairing a vehicle involved in a collision, often removing mechanical parts, including suspension, steering, drive train and engine parts and servicing of mechanical parts. Some areas require collision repair technicians to be certified to perform mechanical repairs.

ABR 191 (4) S**Applying the Finish**

Prepare a surface for topcoat, apply primer-scaler, and apply single stage paint, base, clear-coat and tri-coat finishes. Prereq: ABR 131.

ABR 192 (3) S**Blending Color**

Prepare a vehicle for a blend, blend single-stage, blend base coat, clear coat or tri-coat finishing. Prereq: ABR 131.

ABR 193 (3) S**Solving Paint Application Problems**

Identify paint application problems caused by contamination, paint defects caused by spraying techniques and solve paint problems related to drying, curing of paint and those caused by improper preparation. Prereq: ABR 131.

ABR 194 (3) S**Finish Defects, Causes and Cures**

Covers identifying paint film defects, causes and corrective methods, surface defects and corrective methods of repair. Prereq: ABR 131.

ABR 197 (1-5) S**Industry Internship (Itec Based)**

Provides instructional link between classroom and on the job experience; reinforces and documents on-the-job learning experiences; and provides opportunities for faculty and student interaction.

ABR 199 (1-12) S**Auto Body Rebuilding and Refinishing**

Principles of correcting auto body and sheet metal damage. Includes a study of characteristics of metal, frame repair, welding and refinishing.

ABR 299 (1-12) S**Special Topics in Automotive Collision Repair**

A special topics course for an individual or group in Automotive Collision Repair.

Automotive Technology**AUT 100 (6) S****Introduction to Electricity**

This introductory course covers skills required by the Automotive Service Excellence Education Foundation (ASEEF) including electrical theory; testing series and parallel circuits using a multimeter; diagnosing electrical system problems using schematics and component locators; Testing battery, starting and charging systems on vehicles including safety procedures. MATH 110 is embedded in this course.

AUT 102 (4) S**Advanced Electrical Systems**

Covers understanding and using schematics. Includes battery, starting and charging system operation and testing.

AUT 104 (3) S**Automotive Electronics**

Contents include: safety, automotive lighting, gauges and warning devices, horns, windshield wipers and washers, defoggers, power accessories diagnosis and repair or replacement of the components. In addition the function and construction of each component.

AUT 106 (3) S**Basic Power Accessories**

Covers basic computer operation and applications on the vehicle, using scan tools to diagnose electronically controlled components and accessories. Prereq: MVM 100, MVM 102, AUT 100, Math 110. Coreqs: AUT 102, AUT 104.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN Watch Technology

NAME TO PREFIX
Watch Technology HIN

Common Course Numbering explanation is on page 202.

AUT 112 (3) S
Manual Transaxles and Clutches

Power flow and principles involving manual transaxles; troubleshooting and diagnosing manual transaxles noises, clutch issues and shifting problems, removal and reinstall manual transaxle in vehicle. In addition the function and construction of each component, as well as their diagnosis and service procedures will be covered.

AUT 114 (3) S
Manual Transmissions, Transfer Cases & Drive Axl

Covers basic principles involving manual transmissions, transfer cases and drive axles, including function and construction of each component, diagnosis and service procedures. Prereq: MVM 100, AUT 110, basic math skills, at least 9th grade reading level or permission.

AUT 116 (6) S
Air Conditioning and Heating

Basic principles involving air conditioning and heating systems; troubleshooting and diagnosing of air conditioning and heating systems; removal and reinstalling of air conditioning and heating components in vehicles. In addition, the function and construction of each component, as well as their diagnosis and service procedures will be covered. Instruction in safety, environmental awareness.

AUT 118 (4) S
Automatic Transmission Diagnosis and Service

Power flow and principles involving automatic transmissions. Diagnosing, servicing and adjusting automatic transmissions. Understanding electronic control systems. Locate repair external transmission leaks. Performing a proper road test for transmission problems. In addition, the function and construction of each component, as well as their diagnosis and service procedures will be covered.

AUT 120 (6) S
Advanced Automatic Transmission Service

This course covers bench tear down inspection and reassembly of the transmission. In addition it covers the function and construction of each component. We will also remove and reinstall automatic transmissions in vehicles.

AUT 122 (4) S
Steering and Suspension

Steering and suspension theory, diagnosis and repair or replace including but not limited to chassis design, wheel bearings, steering and suspension components function and construction.

AUT 124 (4) S
Tires and Wheel Alignment

Tire and wheel construction, materials, application, remove & install, balance, diagnosis and repair. Performing a 4 wheel alignment, understanding all the components on the vehicle and road conditions that can affect alignment. Repair or replacement of those components on the vehicle as well as how aftermarket components can affect ride and safety of the vehicle.

AUT 126 (3) S
Basic Brake Systems

This course covers all of the components of disc brake, drum brake and mixed systems. We cover how each component works both in theory and in reality in the shop. We teach how to service, diagnose and to repair or replace each of the components.

AUT 127 (4) S
Advanced Brake Systems

Covers operation, diagnosis and service of disc brakes, power brakes and Antilock braking System (ABS) brake components.

AUT 128 (4) S
Automotive Engine Diagnose / Remove and Replace

This course covers automotive gasoline engines operation, lubrication and cooling systems. It also covers removal and installation.

AUT 130 (8) S
Automotive Engine Rebuild

Covers engine disassembly, cleaning of engine parts, inspection and measuring of engine components, cylinder head rebuilding, overhauling engine blocks and reassembly of an automotive engine.

AUT 132 (3) S
Automotive Welding

Covers safety in welding and proficiency in oxy-acetylene welding, oxy-acetylene brazing, oxy-acetylene cutting and MIG welding. Learn which type of welding process is used when joining various types of metals in different situations. Prereq: MVM 100 and 102 or permission.

AUT 134 (3) S
Introduction to Drivability

Prepare for the automotive technician field, specifically the drivability and troubleshooting of a specific problem within basic engine fundamentals. Includes instruction in safety, environmental awareness, human relations and leadership. Prereq: AUT 100 and MVM 100.

AUT 138 (4) S
Advanced Drivability and Fuel Systems

This course will cover gasoline ignition and fuel systems. Included are distributor waste spark and coil on plug ignition systems also fuel pumps both electric and mechanical, fuel injection throttle body, port fuel sequential and gasoline direct injection systems.

AUT 140 (4) S
Engine Computers

Covers automotive engine computer, its multiple power and ground supplies and how these affect the running of the vehicle. Includes inputs and outputs of the vehicle, how each contributes to the running of the engine and how to diagnose each one. Prereq: MVM 100, AUT 100, 102, 104, 106, 136 and 138 or equivalent, or permission.

AUT 142 (6) S
Emission Controls and Diagnostic Test Equipment

Covers all emission-related items on the vehicle and the federally mandated OBD II system. Includes use and operation of super charges and turbo charges on cars.

AUT 197 (1-6) S
Internship Automotive Technology

This course will provide an instructional link between classroom experience and actual on-the-job experience to help students bridge the gap between work and learning; reinforce and document student learning experiences on the job; and provide opportunities for faculty and student interaction throughout the student's work experience.

AUT 299 (1-18) S
Special Topics: Automotive

Special topics for individual or group study. Prereq: Permission.

MVM 100 (3) S
Introduction to Automotive Technology I

This course focuses on skills required by the National Automotive Technicians Education Foundation (NATEF) including safety; nomenclature of components and parts; performing preventive maintenance procedures; tools and equipment; repair manuals; parts and time estimating guides; fasteners and equipment; and how they relate to the automotive industry. Prereqs: Placement into ENGL 105 and MATH 110. Coreqs: AUT 100, MVM 102, MATH 110.

MVM 101 (8) S
Introduction to Motor Vehicle Maint Technology I

This introductory course covers safety and Material Safety Data (MSD); tools and equipment; gathering vehicle maintenance information; repair orders, repair manuals, parts and time estimating guides; component identification; component theory and fasteners. Prereqs: Compass scores. Coreqs: HDM 171, MAT 110, BUS 159.

MVM 102 (6) S
Introduction to Automotive Technology II

This course builds on MVM 100 to meet Automotive Service Excellence Education Foundation (ASEEF) standards by covering vehicle inspection; lube, oil and filter; cooling system; belts and hoses; heating and air conditioning system; driveshaft; manual and automatic transmission service and using a scan tool to retrieve diagnostic trouble codes (DTC).

Aviation Maintenance Technology**AMT 104 (5) S**
Basic Mathematics Physics Weight and Balance

Covers the mathematical computations required in the AMT curriculum. Learn the scientific principles of the operation of aircraft, engines and maintenance equipment. Learn to calculate weight and balance for aircraft safety, for equipment changes, extreme loading check and addition of ballast. Prereq: Permission.

AMT 111 (17) S
Basic Science for Aviation

This course introduces students to aircraft terminology and nomenclature, basic physics, aircraft drawings, maintenance forms and records, Federal Aviation Regulations (FARs), materials and processes, the exercise of mechanics privileges, and shop safety practices as they pertain to every day shop problems.

AMT 112 (17) S
Basic Electricity for Aviation

This course introduces students to the basic concepts of electricity and magnetism. Methods of generating alternating and direct current are studied. Students will learn the proper methods of overhaul, inspection, installation and repair of aircraft electrical components. Safety precautions are also emphasized.

AMT 113 (1-17) S
Airframe Structure and Repair

This course introduces students to the use of wood, fabric, composites, fiberglass, plastic and metal as materials for aircraft structures. Upon completion of the projects in the course, students learn methods of inspection and repair of aircraft structures. Safety precautions are emphasized when using the various materials found in aircraft structures.

AMT 119 (5) S
Materials and Processes

Identify and select non-destructive testing methods including dye-penetrant, eddy current, ultrasound and magnetic particle inspections. Covers basic heat-treating process, aircraft hardware and materials. Includes inspection and checking of welds and performance of precision measurements. Prereq: Permission.

AMT 133 (17) S
Powerplant Theory and Maintenance

This course introduces students to powerplant theory and maintenance practices of the reciprocating engine and the gas turbine engine. Course topics include overhaul of each powerplant type, inspection technique, induction systems, cooling systems, exhaust, and turbocharging systems.

AMT 137 (4) S
Aircraft Nonmetallic Structures

Covers inspection and repair of all types of sheet metal and composite structures including transparent plastic enclosures and interiors. Prereq: Permission.

AMT 197 (15) S
Aviation Internship

Work experience.

AMT 199 (1-10) S
Special Projects

Topics could include inspection and repair of all types of sheet metal and composite structures. Prereq: Permission.

AMT 214 (17) S
Airframe Systems

This course Introduces students to the five basic airframe systems: hydraulic-pneumatic power, landing gear, ice and rain control, cabin environment, fuel systems and management. Students work on assigned projects in each of the areas.

AMT 215 (1-17) S
Advanced Airframe

This course Introduces students to aircraft inspection and record keeping procedures, including doors and interior furnishings, fire detection and extinguishing systems, aircraft instruments, aircraft electrical systems, and communication & navigation systems.

AMT 234 (17) S
Powerplant Systems and Components

This course Introduces students to aircraft engine fuel metering systems, ignition systems, lubricating systems, ice and rain control systems and indicating systems. Upon completion of the projects, students learn the correct procedures for inspecting, testing, overhauling, & troubleshooting powerplant systems & related components. Safety precautions are emphasized when using the various shop tools and equipment.

AMT 235 (17) S**Advanced Powerplant**

This course introduces students to aircraft propeller systems, fire detection and extinguishing systems, reciprocating and turbine engines, powerplant inspections troubleshooting. This is the final phase of powerplant technology and reviews are given for the final FAA exam with emphasis is placed on FAA regulations, airworthiness concepts, safety, personal and technical ethics.

AMT 295 (16) S**Airframe & Powerplant Master Class**

This intensive master class is for those with an approved 8610-2 FAA rating application. It provides a review of General, Airframe and Powerplant sections of the written, oral and practical FAA-licensing exams with special focus on those areas of civilian aviation not typically encountered during military service.

AMT 296 (2) S**Amt Professional Portfolio**

The student will complete an industry research project, develop a job search strategy, create an industry-relevant resume, complete an online job application, and participate in required workshops, and attend a job interview event. They will describe and provide documentation of successfully scheduling and attaining FAA AMT certification according to procedures described in relevant FAA CFRs. Instructor Permission.

AMT 298 (12) S**Special Topics - Aviation Maintenance**

Overview of various parts of the aircraft and their operation, including methods of corrosion detection, removal, treatment and correct painting techniques. Prereq: Permission.

AMT 299 (5) S**Special Topics: Maintenance for Aviation Profess**

Basic aircraft maintenance on a variety of aircraft systems and components by arrangement.

Avionics**AVIO& 203 (2) S****Avionics Communications**

Preparation for the FCC General Radiotelephone Operator License and Ship Radar Endorsement, utilizing Federal Communications Commission guidelines, fundamentals of communication and Key Topics.

Basic & Transitional Studies**BTS 040 (1-15) C****Basic & Transitional Studies: ABE Offsite**

Emphasizes reading comprehension, making inferences, recognizing fact and opinion, vocabulary development, basic sentence patterns, paragraphs, punctuation, capitalization, and correct word usage. Covers multi-paragraph essays. Prerequisite: BTS division placement test with appropriate score, or Instructor's permission.

Biology**BIOL& 100 (5) C | N | S****Survey of Biology**

Intro to biological principles and concepts: cell biology, application of biological knowledge to problems of society, and development of an awareness of science. Lab included. For non-science majors.

BIOL 103 (3) C**Nutrition for Food Service Professionals**

Identification of known nutrients for human health; demonstration of dietary quality guidelines; utilization of dietary guidelines in meal planning, including modification of existing recipes to meet nutritional recommendations.

BIOL 107 (5) C**Introduction to Comparative Animal Behavior**

An overview of current thinking and research in the science of animal behavior. Focuses on evolutionary principles and their influence on animal behavior. Discover how animals learn, how learning & instinct shape behavior, and how different strategies affect survival. Gain insight into human behavior from a new perspective and understand why and when sociality and apparent altruism can be advantageous. Prereq: Eligibility for MATH 084, 087, or 091. Completion of ENGL& 101 with 2.0 or higher.

BIOL 120 (5) C**Marine Biology**

Emphasis on natural history, ecology, distribution, habitat, adaptation, interrelationships of local species. Field trips and lab included.

BIOL 125 (5) N**Biology of the Pacific Northwest**

Discover fundamental principles of biology and ecology through readings, experiments and field trips. This online course fulfills the lab science requirement.

BIOL 128 (5) C | N | S**Survey of Human Anatomy & Physiology**

Focuses on the structure, function, and location of the body's organ systems, and how organ systems interact to maintain homeostasis in response to different physiological challenges, such as exercise, injury, and disease. Lab included.

BIOL 150 (5) S**the Biology and Evolution of Infectious Diseases**

Covers biology, epidemiology and evolution of infectious human diseases such as cholera, Ebola, HIV/AIDS, tuberculosis, malaria, influenza (including H1N1), smallpox and others. Emphasizes local and global environments of past and newly emerging diseases that impact human societies, including economic, social, cultural, historical, political and ethical aspects. Prereq: ENGL 096 or permission.

BIOL& 160 (5) C | N | S**General Biology W/ Lab**

This course is a one quarter intro to biology. Basic biological concepts will be introduced, with an emphasis on biological molecules, cell structures and processes, genetics, evolution, and a survey of biodiversity.

BIOL 161 (5) C**Human Genetics**

Introduction to human genetics and genomics. Topics include stem cells, Mendelian and multifactorial inheritance, DNA structure and function, genetic variation, cancer, genomic testing, genome modification, impacts of genetics, including bioethical issues. Prereq: ENGL& 101 with 2.0 or higher; and, eligibility for MATH 084, 087, or 091.

BIOL 197 (1-5) C**Work Experience-Biology**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply biology knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

BIOL& 211 (5) C | N | S**Majors Cellular Biology**

BIOL&211 is the first of a three-quarter introduction to biology sequence in preparation for advanced study in areas such as medicine, dentistry, cell biology, microbiology, or veterinary medicine. BIOL& 211 focuses on cellular biology, BIOL& 212 on the biological diversity in animals and BIOL& 213 on evolution, ecology and biological principles of prokaryotes, fungi, protists and plants. Lab included.

BIOL& 212 (5) C | N | S**Majors Animal**

A three-quarter intro to biology sequence in preparation for advanced study in areas such as medicine, dentistry, cell biology, microbiology, or veterinary medicine. BIOL& 211 focuses on cellular biology, BIOL& 212 on the biological diversity in animals and BIOL& 213 on evolution, ecology and biological principles of prokaryotes, fungi, protists and plants. Lab included. Prereq: ENGL& 101 and CHEM& 160 Continuation of series. Emphasis on the biological diversity of animals, general principles of animal physiology, growth and development. Prereq: BIOL& 211. One quarter college chemistry (pref. inorganic series) or permission (C).

BIOL& 213 (5) C | N | S**Majors Plant**

A three-quarter intro to biology sequence in preparation for advanced study in areas such as medicine, dentistry, cell biology, microbiology, or veterinary medicine. BIOL& 211 focuses on cellular biology, BIOL& 212 on the biological diversity in animals and BIOL& 213 on evolution, ecology and biological principles of prokaryotes, fungi, protists and plants. Lab included. Prereq: ENGL& 101 and CHEM& 160 Continuation of series with an emphasis on prokaryotes, fungi, algae, and plants including their diversity, anatomy and physiology. Includes evolutionary and ecological principles relevant to biological studies. Lab. Prereq: BIOL& 211 with 2.0 or better (N,C). BIOL& 212 with 2.0 or better (S)

BIOL& 241 (5) C | N | S
Human Anatomy and Physiology 1

Covers fundamental principles and establishes a basis for advanced study of anatomy and physiology and clinically-related subjects in the paramedical fields.

BIOL& 242 (5) C | N | S
Human Anatomy and Physiology 2

Covers fundamental principles and establishes a basis for advanced study of anatomy and physiology and clinically-related subjects in the paramedical fields. Continuation of BIOL& 241 with Lab.

BIOL& 260 (5) C | N | S**Microbiology**

Fundamentals of microbiology. Topics include bacterial cell biology, growth and growth control, metabolism, genetics, identification, viruses, human innate and adaptive immune systems, host-bacteria interactions, immunization, infectious disease epidemiology, and antibacterial drugs. Includes lab. Prereq: Two college-level BIOL and/or CHEM courses with 2.0 or higher; eligibility for MATH 088, 098 or 136 or instructor permission.

BIOL 290 (5) N**General Genetics**

Intro to genetics for science majors. Mendelian inheritance, linkage and recombination, extensions of Mendel, sex determination, multifactorial traits, gene structure and function, mutations and chromosome abnormalities, population genetics, the human genome, genetic technologies, current applications (including cloning, genetic testing, genetically-modified plants and animals, gene therapy and forensics) and related ethical issues. Prereq: 10 credits of college-level biology or permission.

BIOL 298 (1-5) C | N**Special Topics**

Seminar on selected topics or activities in the biological sciences. Prereq: Variable, dependent on topic.

BIOL 299 (1-5) C | N**Independent Study in Biology**

Independent study of approved topics in the biological sciences. This course is an agreement between the student(s) and a faculty adviser that will guide the student(s) through the course work. Prereq: Instructor's permission.

Botany**BOT 112 (5) C****the Plant Kingdom**

Intro to the anatomy, physiology and diversity of plants. Includes reproduction, evolution and ecology of these organisms. Lab. Prereq: Eligible for MATH 084 and ENGL& 101.

Business**BUS 100 (1-5) C****Fundamentals of Supervision**

Intro to first-line supervision, covering total responsibilities of a supervisor. Includes the function of management, human relations and motivation, effective communications, systems concepts and problem-solving.

BUS& 101 (5) C | N | S**Introduction to Business**

Survey of American business in a global context: business and economic terminology, forms of business ownership, management, accounting, finance, international marketing and foreign exchange rates. Also covers small businesses, business start-ups and franchising.

BUS 103 (3) C**Personnel/Human Resource Management**

Intro to organizational structure of the modern business office; recruitment and training; management of human resources; employee rights and ethical issues; legal responsibilities; and team-oriented collaboration for human relation dynamics.

BUS 104 (3) C | S**Keyboarding**

Intro to keyboarding for those with little or no experience. Includes alpha/numeric keyboarding and basic word processing for creation of business documents. May be taken for S/NC grade.

BUS 105 (4) N**Keyboarding**

Beginning keyboarding, taught on the computer. For students with no keyboarding experience. Emphasizes touch keyboarding with speed and accuracy on alphabetic and number keys. Intro to basic word processing concepts, letter and memo formatting. May be taken for S/NC.

BUS 106 (3) C | N | S**Keyboarding/Skillbuilding**

Development of speed and accuracy of letter, symbol and number keys through extensive drills and timings. May be taken for S/NC or decimal grade and may be repeated for credit. Prereq: Keyboarding of 25 net wpm).

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

BUS 112 (5) N
Multi-Cultural Issues in the American Workplace

Introto legal, racial and cultural aspects of the American workplace. Examines diversity, self-exploration as a basis for understanding others, historical overviews of ethnic influences on American business, workforce demographics and cross-cultural communication.

BUS 113 (3) C | S
Diversity Issues in Business

Intro to legal, gender, racial and cultural aspects of business. Examines diversity, self-exploration as a basis for understanding others, historical overviews of ethnic influences on American business, workforce demographics and cross-cultural communication.

BUS 114 (5) N
Introduction to Marketing

Intro to marketing concepts: respond to the wants and needs of the consumer with the right product, price, promotion, and distribution. Demonstrate value, quality, and service exceeding customer demands while maintain channel relationships and meet company goals and objectives. Learn various marketing methods. Prereq: Eligible for ENGL& 101 or completion of ENGL 097/098.

BUS 115 (2) N | S
Computational Skillbuilding

Intro to basic operation of touch addition, subtraction, multiplication and division on the electronic printing calculator. Use of memory register and applications to solve business math problems. Enrollment may be for S/NC audit or decimal grade.

BUS 116 (5) C | N | S
Business Math/Spreadsheets

Use business math applications to work with percentages, invoices, trade and cash discounts, markups and markdowns, payroll, depreciation and other business applications. Use Excel software to create spreadsheets. 2.0 or higher required for BIT Certificates and degrees (C) Prereq: Math 081 or MATH 084 placement (N); placement at MATH 081 level (C).

BUS 117 (2) N
Records Management

Gain an understanding of the components of correct document and information management. Learn the rules as established by the Association of Records Managers (ARMA) for correctly applying filing guidelines to alphabetic, numeric, geographic and subject filing systems.

BUS 118 (5) C | N
Project Management Introduction and Overview

This course is an overview of project management from a business perspective. Topics will include project authorization & planning as well as managing project resources, scheduling, budgeting and risk. Students will apply principles to their own project.

BUS 119 (3) N
Leadership and Management Skills

Learn to integrate people, projects and sponsors to complete tasks and deliverables on time. Covers effective leadership, leading vs. managing and styles of each. Includes responsibilities, team development and dynamics, personality types, influence without authority, conflict management, organizational and cultural influence on a project. Prereqs: BUS 169 and 236.

BUS 122 (3) C
the Entrepreneur Toolkit

Identify and learn entrepreneurial and small business skills. Develop an understanding of the difference between an employee and an entrepreneur/employer. Appropriate for students from any discipline that might lend itself to self-employment such as culinary, photography, and others.

BUS 123 (5) N
Word for Business

Create and edit business documents such as letters, memos, reports, basic tables and charts, electronic forms, outlines, mail merges and column text. Learn to share work for comments, revisions and merging and integrate other Office applications. Recommended: Familiarity with computer usage or successful completion of BUS 169; ability to key 25 words per minute or successful completion of BUS 105.

BUS 124 (5) N
Excel for Business

Learn Excel. Create worksheets; enter, calculate, manipulate, and analyze data; create charts and graphs. Learn to manage and organize data, to search and select data that meets particular criteria. Recommended: Familiarity with computer usage or BUS 169.

BUS 125 (5) N
Access for Business

Use Microsoft Access to design, create and edit tables, queries, forms and specialized reports. Manipulate data using specific criteria, queries and filters. Learn to import/export data among various applications software. Recommended: Familiarity with computer usage or BUS 169.

BUS 126 (2) N
PowerPoint for Business

Learn Microsoft PowerPoint to create visuals to accompany business and personal presentations. Create, change, customize and save PowerPoint files. Add and manipulate graphics and apply appropriate design elements to presentations.

BUS 129 (5) C
Small Business Accounting

Learn the "Language of Business": Accounting! This includes the terminology, definitions, principles and rules of accounting. Students will learn the entire "Accounting Cycle" by setting up an accounting system, and how to analyze, classify and enter transactions into the system. Students will know how to set up and 'run' a company's books in both manual and computerized accounting systems as well as create and interpret financial statements in accordance with GAAP rules. Prereq: MATH 081.

BUS 131 (5) C | N | S
Integrated Communications I

Review and refine basic English grammar, spelling, punctuation and word usage skills by composing effective basic business letters and memos. Intro to oral communication skills essential to successful giving/receiving of information and cultural aspects of the communication process. Prereq: Satisfactory English placement test score (N,C), ASSET: W&R=46, SLEP: combined=65.

BUS 132 (5) C
Integrated Communications II

Further develop communication skills integrating business English grammar, punctuation and word usage skills with composition of effective, complex business documents. Develop research, business report writing and documenting skills. Practice oral presentation techniques, handling of questions, problem-solving and conflict-resolution techniques. Complete meeting preparation tasks. Prereq: BUS 131 with 2.0 or higher.

BUS 140 (5) C | N | S
Customer Relations

Develops skills to identify and resolve customer complaints, handle difficult customers and utilize effective verbal and nonverbal communication methods. Learn appropriate professional use of various electronic media and contribute positively to the service culture of an organization. Examines future trends and changes in work environments.

BUS 151 (5) N
Introduction to Entrepreneurship

Overview of the entrepreneurial process, examination of the market-place, and discussion of successful business entry strategies. Will also cover need/market trend identification, product/service selection, initial concept validation, as well as developing and accessing sources of information and assistance.

BUS 152 (5) N
**Entrepreneurship Product/Service/
Pricing/Mktng**

Intro to product selection, channels of distribution, pricing, marketing and selling strategies. Write the product, pricing and marketing sections of a business plan. Prereq: BUS 151 and BUS 154.

BUS 153 (5) N
**Entrepreneurship Planning Business
Financials**

Intro to financial planning, financing and operations processes. Review forecasting assumptions, prepare financial needs projections, study new business financing and prepare plans for growth and contingencies. Complete the business plan. Prereq: BUS 152 or instructor's permission.

BUS 154 (5) N
Exploring Entrepreneurship

Overview of the entrepreneurial process. Develop a business plan using the student's own business idea. Learn skills and characteristics of successful entrepreneurs, techniques for evaluating business opportunities, planning tools, selling and marketing basics, financial analysis, record keeping, regulations of Washington State, and step by step procedures for starting a small business.

BUS 155 (3) C
Small Business Marketing

BUS 155 introduces principles and concepts of marketing. Marketing concepts increase the effectiveness and chance of success for many different efforts by getting the right message to the right people. Both online and offline approaches will be covered. Prereq: English 101 eligibility.

BUS 156 (5) N
Introduction to E-Business/Commerce

Overview of the principles of electronic commerce: the origin and growth of e-commerce; comparison with traditional commerce; the relationship of e-commerce to the Internet; electronic money; electronic contracts, legal issues, stock trading; catalogs, accounting, auditing and taxation, international aspects and e-marketing. Prereq: ENGL& 101 eligibility or completion of ENGL 097/098.

BUS 159 (5) S
**Introduction to Computing for
Technical Programs**

This course focuses on introducing students to keyboarding, word processing, spreadsheet applications, email, graphic presentations and performing Internet research. Students will also practice effective communication skills and become familiar with industry specific software. Prereqs: Compass scores. Coreqs: MVM 101, MAT 110, HDM 171.

BUS 164 (1-2) C | S
Career Development I

Learn the steps to research and identify job leads, to approach companies for job-shadow opportunities, and to practice effective informational and position interviews. Required capstone course for Office Assistant Certificate.

BUS 169 (5) N | S
Using Computers in Business

Learn basic word processing (Word), spreadsheet (Excel), database (Access), presentation graphics (PowerPoint) and email applications. Intro to Windows and file management. Prereq: BUS 104 or CTN 100 (S) and keyboarding skills.

BUS 170 (1-5) C | N | S
Information Technology I

Intro to Word, Excel, and Outlook. Create letters, business correspondence, reports and spreadsheets commonly used in a business setting. Prereq: Touch type 25 correct wpm.

BUS 171 (1-5) C | N
Information Technology II

Covers intermediate document creation and formatting features in Word. Create charts, tables and spreadsheets and incorporate them into business correspondence. Intro to PowerPoint and the use of Outlook contact lists. Prereq: BUS 170 or permission and touch type 35 correct wpm.

BUS 172 (1-5) C | N
Information Technology III

Use the MS Office Suite to integrate text, data, and charts in business-related projects. Learn database concepts through Access. Prereq: BUS 171 or permission and touch type 45 correct wpm.

BUS 175 (5) S
**Applied Business Statistics:
Decision-Making App**

Intro to concepts and techniques used extensively in public and private sector decision-making, including statistical techniques in accounting, finance, marketing, production and personnel management. Focuses on real data applications, active learning, quantitative privacy and statistical thinking, and using computer software. Prereq: BUS 110 or MATH 098 (S).

BUS 177 (5) S**Spreadsheets**

Learn and use Microsoft Excel to manipulate numbers, track sales and expenses, create budgets and charts to help make informed business decisions. Use calculations and pre-defined formulas to organize data, process statistical information and more. Prereq: BUS 169 or equivalent.

BUS 179 (5) S**Word Processing**

Covers comprehensive word processing using Microsoft Word. Includes basic skills and more advanced techniques such as tables, envelopes, templates and mail merge. Prereq: BUS 169 or 170 or equivalent.

BUS 182 (5) C | N | S**Information and Database Management**

Study the basic alphabetic, numeric, subject and geographic filing principles necessary to manage filing systems, as established by the Association of Records, Managers and Administrators (ARMA International). Includes computer practice using a database software simulation. Intro to Microsoft Access database features.

BUS 184 (5) C**Business Database Applications**

Covers the concepts of relational database design for solving typical business problems. Uses Microsoft Access and OpenOffice Base relational database software to implement the proposed business solutions. Prereq: BUS 170.

BUS 185 (5) C**Small Business Management**

Covers the skills necessary to start and successfully manage a small business, especially for entrepreneurs and those wanting to work for and/or improve an existing business. Includes business plan creation, marketing, copyrights/patents, prototyping, and cash flow.

BUS 186 (5) N**Sustainable Business**

Examines the relationships between business, social and economic development and the environment. Explores how emerging technologies are reshaping energy utilization and management for businesses and their communities. Prereq: BUS& 101 or permission.

BUS 197 (1-5) C | S**Work Experience-Business Occupations**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply business knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

BUS 200 (5) N | S**Law and Society**

Fundamental concepts, structure, and function of the American legal system. Emphasis on the role of law in society rather than on the rules of law. Includes sources of law, court systems, dispute resolution, constitutional law, torts, criminal law, contracts and legal reasoning.

BUS& 201 (5) C | N | S**Business Law**

Covers nature, development and operation of principles of business law relating to contracts, commercial paper, corporations, agency, partnerships and sales.

BUS 205 (5) N**Human Resource Management**

Analyzes basic functions of supervisory-level management with emphasis on skills needed to be an effective leader/manager of a diverse work force. Covers management functions of planning, organizing, directing, evaluating, and skill development in effective communication, motivation, problem-solving, managing conflict, and selecting employees.

BUS 210 (5) C | N | S**Business and Economic Statistics**

Studies statistical methods and their application to business and economic data.

BUS 214 (5) N**Retail Management**

Students will learn the specifics of managing retail establishments of many types. Topics covered will include basic supervision skills, types of retail establishments, retail organizational structures, customer databases, integrated systems and technology in retail, and typical retail manager functions such as scheduling, merchandising, ordering, customer service, training and hiring of employees.

BUS 215 (5) N**Introduction to International Trade Business**

Studies business operations, private enterprise and governmental relationships in a world environment, including investments, marketing, transportation, trade agreements, management, production decisions and financial analysis. Recommended: prior business experience.

BUS 216 (5) C | S**Professional Development**

Learn to develop positive mental attitudes and examine useful techniques for personal and professional success. Emphasizes various aspects of career development.

BUS 226 (5) N**Advertising & Sales Promotion**

This course presents elements of advertising and sales promotion. Students will gain an understanding of strategy, branding, lead generation, messaging, creative choices, selection of appropriate media ? traditional and digital, developing an integrated marketing communications plan, and tracking and analyzing campaigns. The class will also study the social, ethical, and economic aspects of advertising and promotion. REQUIRED: ENGL&101 or ENGL&235; Strongly RECOMMENDED: BUS 114.

BUS 227 (5) N**Digital Marketing**

Students learn the fundamentals of digital marketing, including search engine optimization (SEO), search engine marketing (SEM), display advertising, content creation, e-mail marketing, social media strategy, mobile marketing, and analytics/measurement. Students have opportunities to experiment with these methods and also learn the importance of building an integrated marketing strategy. Prerequisite: ENGL&101 or ENGL&235; Recommended: BUS 114 Intro to Marketing or marketing experience.

BUS 228 (5) N**Social Media Marketing**

Learn best practices for effective marketing with social media platforms to engage with customers, learn from them, and positively influence them toward a company or product brand or nonprofit. Avoid the risks associated with careless social media practices. Gain hands-on practice with developing and implementing a social media marketing plan.

BUS 229 (5) N
Project Management Tools Techniques and Control

Students will work collaboratively in a team environment to complete the planning of a project using the project management tools introduced in BUS118. Students will also learn how to define and sequence project tasks using Microsoft Project software. Additional topics include project team management, stakeholder analysis, and project initiation, and project quality.

BUS 230 (5) N | S
Business Communications

Develop effective business writing skills through preparation of letters, reports, memoranda and employment documents. Emphasizes intercultural aspects of communication. Prereq: BUS 131. Recommended: BUS 104 (S) or BUS 105 (N).

BUS 235 (5) S
Oral Communications in Business

Covers listening, speaking, nonverbal communication, effective business meetings, parliamentary procedures, telephone and interview techniques. Prereq: BUS 131 or ENGL& 101 with 2.0 or higher.

BUS 236 (5) N
Interpersonal Communications for the Workplace

Learn interpersonal communication styles and effective ways to adapt communication to meet business needs. Improve understanding of cultural diversity, non-verbal communication and individual influences on communication. Includes techniques for making informal and formal business presentations and preparations for employment interviews.

BUS 240 (5) C
Internet Law

Explores legal issues & topics directly related to the internet: copyright, trademark, & service mark rights; privacy; contractual issues surrounding work-products; web site development & licensing agreements; employment issues including discrimination & monitoring of employee e-mail; censorship; domain name registration; & defamation or CyberSlander. Provides an overview of the basics of constitutional law, contracts, torts, regulations, criminal law, & personal law as needed.

BUS 280 (5) N
Business Data Analytics

Using business software and statistical methods, business analytics focuses on developing awareness and understanding of business results and performance. Businesses need to make meaning of the incredible volume of data that they now manage. In this course, learn how to convert data into useful information for decision-making using Microsoft Excel. Also, explore the interaction of business data with business culture including the unintended consequences of misinformed decisions.

BUS 298 (1-5) N | S
Special Topics: Business

Prereq: Permission.

BUS 299 (1-5) C
Special Topics/Business

Individual or group study projects on topics in the field of business. Prereq: Permission.

Business Computer Technology**BCT 111 (1-5) C**
Computer Literacy and Application Fundamentals

Introduction to computer use, concepts, terminology, word processing, presentation and database software. Practical experience in business skills relative to the use of applications, the Internet, email, scheduling, contact management, directory and file management and database software. Prereq: typing 20 wpm for 5 minutes at 98% accuracy.

Business Office Skills**BOS 103 (2) C**
Keyboarding

Development of touch keyboarding skills. Emphasis on proper technique, strategies, practice drills, and timed exercises to improve speed and accuracy. Prereq: Permission.

Business Skills**SSW 094 (1-8) S**
Taking the First Step

An introduction to the workplace, including the basic standards, tools, and expectations. Students will identify and reduce barriers to success and will learn basic critical thinking and problem solving skills. This course is competency based. Each student will be assessed in written and oral communication, math proficiency, and computer literacy. The student will develop skills in each area through individual and group work.

SSW 095 (1-8) S
You and the Workplace

Students examine own personal values, traits, and skills as they relate to the workplace. This course focuses on self-esteem, its effects on one's career, maintenance, and success in one's chosen work. This course is competency based. Each student will be assessed in written and oral communication, math proficiency, and computer literacy. The student will develop skills in each area through individual and group work.

SSW 096 (1-8) S
Contemporary Issues in Business

An introduction to business basics, contemporary issues, and tools needed to be successful in the career of choice. This course will help each student identify career choice and the skills needed. Also, decision making, personal life organization, team work, and planning for the future will be discussed. This course is competency based. Each student will be assessed in written and oral communication, math proficiency, and computer literacy. The student will develop skills in each area through individual and group work.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN Watch Technology

NAME TO PREFIX
Watch Technology HIN

Common Course Numbering explanation is on page 202.

Business Technology Management

BTM 098 (3) C Computing Essentials

Presents common concepts and principles for effective use of current technologies. Covers basic technology vocabulary, general uses and functions of computers, mobile devices, software applications and the Internet. Designed for students with little or no experience using computers and/or the Internet for academic and professional purposes. Prereq: Placement into ENGL 092/ESL 093 or equivalent and basic keyboarding skills (United States keyboard).

BTM 100 (2) C Orientation and Career Exploration

Provides the skills and knowledge necessary to develop and pursue a career plan. Includes identification of personal strengths, values, and interests, and evaluation of careers compatible with personal preferences. Provides key career resources, practice in career search skills, and career and education strategies to reach goals.

BTM 101 (2) C Word

Introduces key concepts and software to develop and create business documents. Topics include document design, creation, formatting, layout, output, graphics, tables, citations, and sharing documents. Prereq none. BTM 098 or BTM 111 recommended.

BTM 102 (2) C Excel

Introduces key concepts to develop and analyze business spreadsheets. Topics include formulas, formatting, functions, charts, and working with multiple workbooks. Prereq: Recommended BTM 111.

BTM 103 (2) C MS PowerPoint

Create, collaborate, and effectively present your ideas with the leading presentation software. Create, edit, and add dynamic multimedia effects to engage business and related audiences.

BTM 104 (2) C Photoshop

Introduces Photoshop using the array of tools for editing digital photos, scanned photographs, and creating photo-realistic images. Prereq: Recommended BTM 111.

BTM 106 (3) C Keyboarding

Keyboarding using Word for students with little or no typing experience. Includes alpha/numeric keyboard and word processing of correspondence documents. May be taken for S/NC grade.

BTM 107 (3) C Speedbuilding

Development of keyboarding speed and accuracy through hands-on and timed exercises. May be taken for S/NC or decimal grade. PREREQ: Recommended Keyboarding speed of 25 net wpm.

BTM 108 (3) C Applied Business Math I

Discusses whole numbers, fractions, decimals, percentages, and applied case studies using these operations to solve everyday business math problems. Prereq: Eligibility Math 081.

BTM 109 (5) C Business Communications I

Review and refine basic English grammar, spelling, punctuation and word usage skills to effectively compose basic business documents. Prereq: Eligibility ENGL 097 or equivalent.

BTM 111 (5) C Business Applications I

This course is part of the new Business Technology Management (BTM) Program in the BITCA Division. BTM is built on core foundation courses and stackable pathways to prepare students with the technology and business skills needed for in-demand careers. The Program comprises short-term certificates and optional industry certifications, leading to a two-year degree in one of several career pathways and a transfer degree option.

BTM 112 (5) C Business Applications II -Data Analysis W/Excel

Explores the use of Excel data analysis tools to transform data from many sources into effective business intelligence reporting solutions for any organization. Emphasis on introducing advanced query editing, pivot table creation, and interactive summary visualizations. Prerequisite: BTM 111 with 2.0 or higher, or Instructor's permission based on equivalent experience.

BTM 113 (5) C Business Applications III

Introduces students to advanced MS Office applications skills along with cloud-based, client-side computing. Students learn content management sites to manage their work and participate in team projects. Prereq: BTM 111 and BTM 112, each with a 2.0 or higher.

BTM 118 (5) C Applied Business Math II

Covers applied business statistics, invoices, trade and cash discounts, markups and markdowns, payroll, depreciation, compound interest and solving equations. Includes use of spreadsheet software to analyze business data. Prereq: BTM 108 with a minimum grade of 2.0.

BTM 119 (5) C Business Communications II

Further develops business English grammar, punctuation, and word usage skills to compose effective, complex business documents. Develops research, business report writing, and documenting skills. Includes practice of techniques and strategies for effective oral presentations. Covers planning, facilitating, and documenting business meetings. Prereq: BTM 109 with a minimum course grade of 2.0.

BTM 120 (5) C Customer Relations Management

Develops skills to identify and resolve customer complaints, handle difficult customers, utilize effective verbal and nonverbal communication methods, and use customer relationship management systems. Covers appropriate professional use of various electronic media. Provides skills to contribute positively to the service culture of an organization. Examines future trends and changes in global work environments. Prereq: Eligibility ENGL 097 or equivalent.

BTM 122 (5) C
Professional Development

Course designed to enhance positive attitude, professional and personal comportment, collaborative techniques, and comprehensive presentation skills to achieve personal and professional success in global interactions.

BTM 197 (1-5) C
Work Experience: Business Technology Management

Integrates educational studies with supervised internship work experience. Provides individualized opportunities to apply Business Technology Management knowledge and skills in the workplace. Includes setting of work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Instructor's permission. Co-requisite: Must be employed, interning, or volunteering in a position approved by program faculty or the Cooperative Education.

BTM 217 (5) C
Web Design and Development

Introduces website design and development using Hypertext Markup Language (HTML) along with Cascading Style Sheet (CSS). Focuses on designing and developing webpages with hand-coded HTML elements in conjunction with managing website file structure and project. Includes common webpage design formats and functions with a focus on User Experience and User Interface (UX/UI) design. PREREQ: BTM 111 recommended.

BTM 218 (4) C
Web Design with Dreamweaver

Introduces Adobe Dreamweaver, a software program for webpage and website development. Includes creation of simple webpages as well as dynamic and comprehensive websites. Covers a range of Web design concepts and webpage elements such as HTML, CSS, and JavaScript. Almost no hand-coding is involved. Prereq: BTM 111 recommended.

BTM 225 (5) C
Marketing Fundamentals

Introduces principles and concepts of marketing. Marketing concepts increase the effectiveness and chance of success for many different efforts by getting the right message to the right people. Both online and offline approaches will be covered.

BTM 226 (3) C
Small Business Startup

Introduces steps to starting a small business. Learn to select the most appropriate form of business ownership, register a business name, and access and complete required local, state, and federal legal documents. Study trademarks, copyrights, and patents. Examine ways to finance a business. Present start-up proposals to community business professionals for review. Prereq: Instructor's permission.

BTM 227 (3) C
the Entrepreneur Toolkit

Introduces entrepreneurial and small business principles and skills. Explores entrepreneur opportunities and interests. Includes development of a small business, entrepreneur venture plan.

BTM 228 (5) C
Small Business Management

Covers the skills necessary to successfully start, improve, and manage a small business, including business plan creation, marketing, copyrights/patents, prototyping, and cash flow.

BTM 231 (5) C
Applied Accounting I

Introduces the "Language of Business:" Accounting! Terminology, principles and rules of accounting. Focuses on the entire Accounting Cycle through setting up both a manual and computerized accounting system and analyzing, classifying and entering transactions into the system. Includes creation and interpretation of financial statements in accordance with GAAP rules. Completion of the three-course series provides preparation for the certified bookkeeper exam. Prereq: Math 081 with 2.0 or higher.

BTM 232 (5) C
Applied Accounting II

Covers complex business situations in a small business and corporate setting, focusing on plant and equipment, depreciation, short- and long-term liabilities, formation of partnerships and corporations, cash flows, financial statements and ratios in accordance with Generally Accepted Accounting Principles (GAAP). Completion of the three-course series provides preparation for the certified bookkeeper exam. Prereq: BTM 231 with minimum grade of 2.0.

BTM 236 (5) C
Supervision Management

Introduction to first-line supervision management, covering total responsibilities of a supervisor. Includes the function of management, human relations and motivation, effective communications, systems concepts and problem-solving.

BTM 237 (5) C
Human Resource Management

Introduction to organizational structure of the modern business office; recruitment and training; management of human resources; employee rights and ethical issues; legal responsibilities; and team-oriented collaboration for human relation dynamics.

BTM 240 (5) C
Applied Database Design

Introduces the concepts and application of designing and building relational database models in solving business database problems. This will include using basic Structured Query Language (SQL) and database software to build database applications. Prereq: BTM 111 minimum grade of 2.0 recommended or instructor permission.

BTM 245 (5) C
Business Process Management

Examines the creation, improvement, automation, and mapping of a set of procedures (e.g., a business process) to improve an organization's internal & external activities or workflows so that it may more efficiently deliver the wants of its clients.

BTM 250 (5) C
Records Information Management

Examination of manual and digital record management systems currently used in industry. Introduction and application of the following filing/management systems: Alphabetic (as established by ARMA International), geographic, numeric, and subject. Access 2016 will be used to design, create, maintain, update, and integrate an electronic filing system. Prereq: BTM 211 is recommended.

BTM 260 (5) C
Project Management

Overview of project management from a business and IT perspective, including project estimation, feasibility, planning, risk management, contingency planning, scheduling, control and Agile project methodology. Examine and evaluate project planning techniques, budget estimation, resource allocations, critical path dependencies, risk management, contingency planning, implementation, and evaluation; and, complete a project. Prereq: BTM 111 with a 2.0 or higher; or, Instructor's permission.

BTM 265 (5) C
Operations Management

Administer business practices to manage an organization's internal resources to maximize efficiencies in the production and delivery of an organization's goods and services. Functions include analyzing all aspects of an organization's operations to create strategies that improve operational productivity. Prereq: Eligibility for ENGL 096. BTM 111 or equivalent recommended.

BTM 275 (5) C
Computer User Support

Introduces students to the fundamentals of help desk operations. Emphasizes the basic components of a successful help desk, provides students with working knowledge of software to process and track calls, and presents hands-on experience with problem analysis. Prereq: BTM 111 with a 2.0 or higher, or instructor's permission.

BTM 278 (5) C
Organizational Behavior

Focuses on a variety of factors that influence organizational behavior, including: the structure; policies and procedures; management effectiveness; and interactions of individual groups and workplace environments. The impact human behavior has on job performance, communication, motivation, and leadership will be used to study how they affect organizational identity, design, innovation, change, and many other roles that shape organizations. Prereq: Eligibility for ENGL 096.

BTM 299 (1-5) C
Independent Study

An independent study course for Business Technology Management students who need to fulfill degree requirements under the approval and supervision of faculty. Prereq: Permission.

Career Bridge**CAB 101 (6) S**
Career Bridge

An introductory course using a systematic approach to help individuals understand themselves relating to occupational interests and goals. Includes testing interests and skills. Focuses on real-world examples and group exercises to help students develop good strategies for achieving success in the workplace and in life. The course will also address behaviors and attitudes necessary to be an effective student and employee. Course offered through Worker Retraining Program. Instructor Permission.

Certified Medical Assistant**CMA 101 (5) C | N**
Introduction to Medical Assisting

A history and overview of medical practices and the healthcare team, certification and professional organizations. Effective communication related to communication in healthcare is addressed; includes cultural perspectives on illness. This course introduces the student to legal and ethical concepts related to ambulatory healthcare. Emphasizes critical thinking, HIV/AIDS education, and emergency preparedness.

CMA 102 (4) C | N
Fundamentals of Administrative Medical Assisting

Provides students with opportunities to acquire knowledge of the medical front office focusing on skills and techniques required for the clinical and administrative functions of a medical assistant in an ambulatory care setting. Covers the office environment as well as computer medical application, telephone techniques, professional correspondence, and medical records management relative to electronic health records. Prereq: Instructor's permission.

CMA 103 (8) C | N
Fundamentals of Clinical Medical Assisting

Students learn medical assisting theory and how to apply it to medical assisting clinical practice. Clinical practice will include, but not be limited to, vital signs, equipment sterilization, diagnostic procedures, and role responsibilities when assisting physicians with their work. Medical device knowledge will include wheelchairs, crutches, nebulizers, and audiometry. Communication, documentation, and patient education topics are also discussed. Prereq: Instructor's permission.

CMA 104 (5) C | N
Billing and Coding Procedures

Covers insurance & the electronic billing processes, financial accounting aspects of medical practices, and health insurance & numeric/alphanumeric codes utilized in healthcare for the purpose of maintaining accurate medical records & ensuring efficient claims processes. Provides students with opportunities to apply their knowledge within a simulated medical office setting. Emphasizes various types of health insurance, billing, & bookkeeping. Prereq: Instructor's permission.

CMA 105 (8) C | N
Phlebotomy and Laboratory Procedures

Provides students with a professional environment within a simulated clinic setting focused on invasive procedures. Students are introduced to phlebotomy, CLIA waived tests theories, procedures and values, specimen handling and transport, safe clinical practices, and effective medical record documentation and practical application of skills as related to the medical assistant in a healthcare provider environment. Prereq: Instructor's permission.

CMA 106 (7) C | N
Administrative and Clinical Practice/Review

This course will be a full quarter of review of all administrative and clinical procedures. Students will practice as if they were in an actual medical clinic. This course will be mostly hands-on with minimal lecture.

CMA 107 (8) C | N
Medication Administration & Pharmacology

The student will learn theory and practical procedures in calculating medication dosages and administering medications. Theory includes legal and ethical factors, the medication order or prescription, dosages, drug labels, calculating dosages, the seven rights of drug administration, and various routes to deliver medications. These routes include practice in oral medications, various parenteral routes – injections intradermal, subcutaneously and intramuscularly.

CMA 108 (12) C | N
Medical Assisting Practicum

Students will create their resume and cover letter and participate in mock interviews, acquire study skills for the national CMA exam, then participate in an unpaid practicum (externship) of 180 hours in a medical clinic. Students will also apply for CMA exam, MA-C WA State License and graduation.

Chemistry**CHEM& 110 (5) C | N**
Chemical Concepts W-Lab

Stresses a humanistic approach to chemistry and de-emphasizes mathematical problem-solving. Reveals chemical principles, facts and theories through practical applications, computer graphic illustrations and experiments. Includes lab.

CHEM& 121 (5) C | N | S
Introduction to Chemistry

Introduction to Chemistry (CHEM&121) is intended for non ? science and allied health majors. Completion of CHEM& 121, and either CHEM& 131 or CHEM& 122, fulfills the chemistry requirement for many health science majors (e.g. nursing, dental hygiene, etc). This lab science course covers the fundamentals of chemistry, including: measurements, atomic structure, types of reactions, thermodynamics, stoichiometry, equilibrium, kinetics, and acid base chemistry.

CHEM& 122 (5) C
Introduction to Organic Chemistry

Continuation of organic chemistry and intro to biochemistry. Lab included. Prereq: CHEM& 121.

CHEM& 131 (5) N | S
Intro to Organic Chemistry and Biochemistry

Covers the structure, properties and reactions of various organic compounds, including hydrocarbons, alcohols, aldehydes, ketones, carboxylic acids and amines. Examines complex compounds found in living systems: carbohydrates, lipids, proteins, and nucleic acids. Lab focuses on analysis and separation techniques. Prereq: CHEM& 121 with 2.0 or higher.

CHEM& 139 (5) C | N | S
General Chemistry PREP

Lecture. Includes chemical mathematics, basic atomic structure, chemical bonding, chemical equation balancing, mole concept and chemical stoichiometry. Prereq: MATH 098.

CHEM& 161 (6) C | N | S
General Chemistry with Lab I

For science majors. A three-quarter sequence introducing basic concepts of chemistry: structure and bonding, chemical reactivity, physical measurement, stoichiometry, structure of matter, gas laws, intermolecular forces, solutions, chemical kinetics, equilibrium, acid/base, thermodynamics, redox and electrochemistry. Satisfies the general chemistry requirement for science and engineering majors, pre-Med, pre-Pharmacy, pre-Veterinary, etc. Lab included.

CHEM& 162 (6) C | N | S
General Chemistry with Lab II

For science majors. Second of three-quarter sequence introducing basic chemistry concepts: structure, bonding, chemical reactivity, physical measurement, stoichiometry, structure of matter, gas laws, intermolecular forces, solutions, chemical kinetics, equilibrium, acid/base, thermodynamics, redox and electrochemistry. Satisfies the general chemistry requirement for science and engineering majors, pre-Med, pre-Pharmacy, pre-Veterinary, etc. Lab included.

CHEM& 163 (6) C | N | S
General Chemistry with Lab III

For science majors. Covers chemistry principles, structure of matter, atomic and molecular theory, the elements, quantitative relationships, nuclear chemistry, aqueous solutions, kinetics, chemical thermodynamics, oxidation and reduction, electro-chemistry, periodicity, equilibrium systems, qualitative analysis and organic chemistry. Fulfills the QSR requirement for A.A. degree. Prereq: CHEM& 162.

CHEM 197 (1-5) C
COOP Work Exp

Work experience.

CHEM& 241 (4) C | N
Organic Chemistry I

The first course in a three-quarter sequence that includes introduction to organic chemistry, chemistry of carbon compounds and what makes them unique from other branches of chemistry. It covers structure and bonding, functional groups, nomenclature and stereoisomers, preparation, synthesis and reactions of various types of organic molecules, including alkanes, alkenes, alkynes, and alkyl halides.

CHEM& 242 (4) C | N
Organic Chemistry II

The second course in a three-quarter sequence that is the continuation of the chemistry of carbon compounds. This course covers alkane, alkene, alcohol and aromatic functional groups and their nomenclature, structure, and reactivity. There is also the continuation of study of arrow pushing mechanisms. Modern instrumentation such as FTIR, NMR and Mass spectroscopy are introduced.

CHEM& 243 (4) C | N
Organic Chemistry III

The third course in a three-quarter sequence of organic chemistry, the chemistry of carbon compounds. This course focuses on carbonyl compounds and their structure, bonding, nomenclature and reactivity. Carbohydrates and proteins are also introduced.

CHEM& 251 (4) C | N
Organic Chemistry Lab I

Preparation of representative compounds. Prereq: CHEM& 241 or concurrent enrollment.

CHEM& 252 (4) C | N
Organic Chemistry Lab II

Preparations and qualitative organic analysis. Prereq: CHEM& 242 or concurrent enrollment and CHEM& 251.

CHEM 255 (3) N
Biochemistry I

First of two courses. Survey of basic principles of biochemistry and molecular biology, emphasizing chemical events in living systems in terms of metabolism and structure-function relationships of biologically important molecules. For chemistry, biochemistry, medicine, dentistry, pharmacy or medical technology majors.

CHEM 256 (3) N
Biochemistry II

Second of two courses. Survey of basic principles of biochemistry and molecular biology. Covers chemical events in living systems in terms of metabolism and structure-function relationships of biologically important molecules. For chemistry, biochemistry, medicine, dentistry, pharmacy, or medical technology majors. Prereq: CHEM 255 with 2.0 or better.

CHEM& 261 (6) S
Organic Chemistry with Lab I

The first course in a three-quarter sequence includes molecular structure and bonding; acid-base chemistry; nomenclature, reactions and synthesis of hydrocarbons; stereochemistry, and an introduction to reaction mechanisms. This sequence satisfies the organic chemistry requirements for science and engineering majors and for various programs such as pre-medical, pre-dental, pre-pharmacy and other pre-technical disciplines. Format includes laboratory work. Prereq: CHEM&163 with a 2.0 or higher.

CHEM& 262 (6) S
Organic Chemistry with Lab II

The second of a three-course series in organic chemistry includes structures, reactions, mechanisms and preparation of molecules containing specific functional groups, as well as spectroscopic analysis. This sequence satisfies the organic chemistry requirements for science and engineering majors and for various programs such as pre-medical, pre-dental, pre-pharmacy and other pre-technical disciplines. Format includes laboratory work. Prereq: CHEM&261 with a 2.0 or higher.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

CHEM& 263 (6) S
Organic Chemistry with Lab III

The third of a three-course series in organic chemistry includes further study in the synthesis, reactivity and properties of a variety of functional groups including carbonyls, as well as biologically relevant molecules. This sequence satisfies organic chemistry requirements for science and engineering majors and for programs such as pre-medical, pre-dental, pre-pharmacy and other pre-technical disciplines. Format includes laboratory work. Prereq: CHEM&262 with a 2.0 or higher.

CHEM 298 (1-5) C
Special Topics

Seminar of selected topics and/or activity in the chemical sciences. Prereq: Variable, dependent on topic.

CHEM 299 (1-5) C | N
Special Topics in Chemistry

Independent study of approved topics in the chemical sciences. Prereq: CHEM& 163 and permission.

Chinese

See Languages & Literature, page 284.

Civics – Career Link

CIV 060 (5) S
Civ - Career Link

This course will prepare students to be an engaged citizen as they learn about the way government operates, the fundamental documents that the United States is founded on, and current government issues.

Communication

CMST& 101 (5) C | N | S
Introduction to Communication

Intro to communication as a transactional process, with attention to personal, cultural, group and public communication. Covers verbal and nonverbal messages, listening, self-concept and perception. Prereq: Placement into ENGL& 101.

CMST& 102 (5) C | N
Introduction to Mass Media

History and impact of the mass media from hieroglyphics through print, advertising, radio, TV, movies and the Internet. Critically read media texts and analyze the effects on individuals and cultures. Prereq: ENGL& 101 placement.

CMST 115 (5) N
Overcoming Communication Anxiety

For individuals who have apprehension or nervousness about giving presentations and working with others. Apply emerging social and scientific research on self-esteem, assertiveness and cross-cultural awareness to their own communication perceptions, expectations and proficiencies. Recommended for domestic as well as immigrant and international students. Prereq: Placement into ENGL 095/096 or higher; or permission.

CMST 145 (5) N
Gender and Family Communication

Theoretical and practical perspectives on the complex, lifelong relationships among and between females and males. Similarities and differences in gender and culturally based communication and behavior in a variety of contexts and situations, particularly within the family. Prereq: Placement into ENGL& 101.

CMST 155 (5) S
Argumentation and Public Debate

Concepts and strategies of rhetorical persuasion, integrated with procedures and practice in generating, presenting and arguing ideas and issues within a public forum. Emphasizes audience research, thorough preparation and the development of appropriate agendas, information and policies for eventual group and/or public dialogue and decision-making. Prereq: Placement into ENGL& 101.

CMST 175 (5) N
Oral Interpretation

Interpretation as an artistic process of studying literature and other texts through individual and group performance with an audience. Analyze and perform various texts in their aesthetic, intellectual and emotional entirety. Prereq: Placement into ENGL& 101.

CMST 185 (1-5) N
Organizational Communication

Identification, practice and evaluation of communication styles and skills to achieve individual and organizational goals within corporate and non-profit cultures and settings. Practical professional orientation. Prereq: Placement into ENGL& 101.

CMST 195 (5) N
Media Management and Operations

Explores accepted theories, alternative perspectives and actual practices of organizational communication, administration and decision-making within media institutions. Covers internal and external participants, problems, solutions and choice opportunities shaping corporate and non-profit behavior, performance and change. Prereq: Placement into ENGL& 101.

CMST 205 (5) C | N | S
Multicultural Communication

Study concepts of culture and the opportunities and challenges of multicultural communication in domestic settings. Focuses on the importance of culture in all human interaction; the variables which affect intercultural communication, including ethnicity, gender and multicultural identities; and the influences of American culture around the world. Prereq: ENGL& 101.

CMST& 210 (5) C | N | S
Interpersonal Communication

Covers principles and processes of human communication, including observations and applications, personal and cultural contexts, nonverbal and verbal interactions, multiple intelligence, perception, models and definitions.

CMST 215 (1-5) N
International Communication and Relations

Psychological and social dynamics of human interaction at the international level. Includes a variety of local and global issues, with attention to interpersonal ethics, political philosophies, economic policies and communication systems. Prereq: ENGL& 101.

CMST& 220 (5) C | N | S
Public Speaking

Covers the process of getting started with confidence; topic selection and research; and preparation and delivery of informative, persuasive, special occasion and other forms of presentations. Prereq: Placement into ENGL& 101.

CMST& 230 (1-5) C | N | S
Small Group Communication

Experience in and analysis of communication within groups, emphasizing the value of interdependent thoughts and efforts, active listening and empathizing, cooperative roles and tasks, power and conflict management, and collaborative decision-making and problem-solving. Prereq: Placement into ENGL& 101.

CMST 235 (5) N
Media Research Marketing and Sales

Overview of the needs, opportunities and methods for measuring phenomena in human and media communication, specifically applied to integrated marketing and sales promotion. Includes objectives, designs and processes of inquiry; variables and measures in communication; measuring instruments and problems in sampling; and statistical analyses of data. Prereq: MATH& 146 or BUS 210 and ENGL& 101.

CMST 240 (5) C
Introduction to Health Communication

Introduction to Health Communication examines the psychological and persuasive appeals aimed at promoting behavioral change with the design and implementation of a health education campaign. Students develop a health education campaign integrating theories of behavioral change, persuasion, cultural competence, health literacy, social marketing, and mediated messages. Prereq: ENGL& 101 with a minimum GPA of 2.0.

CMST 245 (5) N | S
Media Communication and Criticism

Contemporary perspectives on the transformation of human interaction through media-based communication. Evaluates the content of modern criticism within the context of the cultural and economic marketplace of ideas and values. Prereq: ENGL& 101.

CMST 255 (1-5) N
Writing for Organizations and the Media

Basics of writing effectively for organizations, print and electronic media. Communication strategies, formats and media used by individuals within organizations to convey messages to internal and external audiences. Create individual writing portfolios. Prereq: ENGL& 101.

CMST 265 (5) N
Media Relations and Ethics

Covers current trends in and ethical issues about, the generation, maintenance and dissemination of effective communications which define and promote corporate and non-profit media organizations. Study their relationships with internal cultures and external communities, including investors, shareholders, clients, analysts, government organizations, other media and consumers. Prereq: ENGL& 101, ENGL& 102 or BUS 131, CMN 195.

CMST 275 (5) C | N | S
Online Communication

Survey of communication issues and applications emerging from the ongoing development and use of digitized media. Focus on functioning effectively within the frontier environment of cyberspace. Write and prepare material for digital formats. Prereq: ENGL& 101 and 102; or permission; access to the Internet; and basic email and word processing skills.

CMST 285 (5) N
Current Topics in Communication

Timely, multidisciplinary approaches to interpersonal, group, organizational, intercultural and media communication. Prereq: ENGL& 101 and 102; or permission.

CMST 295 (1-5) C | N
Studies and Works in Communication

Analytical study or creative work in Communication. Prereq: ENGL& 101 and 102, an approved learning contract/proposal and permission.

CMST 299 (1-5) C
Special Problems in Speech
Special projects in Communication.**Community Health Education****CHED 301 (5) C**
Principles of Community Health

Introduces students to terms, concepts, theories, methods and resources which are related to community and public health issues and designed to improve the health of populations in the United States. Focuses on the role of healthcare workers in various community health settings and organized activities. Emphasis on principals that meet the national standard of practice for all health education specialists.

CHED 304 (5) C
Principles of Higher Education in Allied Health

This course reviews adult learning theory, emphasizing practical skills for successful post-secondary teachers and trainers in allied health disciplines. Topics include development of course outlines and syllabi, learning objectives, teaching methods, experiential and non-experiential learning, clinical skills development strategies, professional presentation skills and assessment.

CHED 310 (5) C
Health Communication

Examines health disparities, social determinants, interpersonal and cultural competence, health literacy, and the planning and implementation of a health promotion campaign to educate target populations.

CHED 311 (5) C
Social Determinants of Health

Examines the conditions of our local environment, applying narrative, photo-journals from our own lives and from fiction to the theory of social determinants (i.e., the social and economic environments that we live in that raise the risk of disease for some groups and individuals and reduce it for others). Understanding social determinants gives us a context for understanding health and disease in communities. Prereq: Acceptance into CHED program.

CHED 312 (5) C
Health Behavioral Change Theoretical Foundations

Introduces theories from the social and behavioral science field to understand health related behaviors and guide development of interventions designed to prevent, reduce, or eliminate health problems. Presents and explores the ecological approach that examines the interplay of three influences: intrapersonal, interpersonal, and community.

CHED 322 (5) C
Program Planning and Evaluation

Provides a foundation in Community Public Health. Covers the establishment of measurable outcomes, the creation of monitoring of programs, and the final evaluation at completion of programs. Studies the theories of program planning and methods of community participation. Examines the importance of community engagement, stakeholder buy-in, and sensitivity to the needs and voices of diverse groups in the community, particularly of those marginalized and vulnerable.

**CHED 341 (5) C
Community Health Needs Assessment & Improvement**

Focuses on public and community health needs by identifying the strategic planning process used to manage and improve the health of the population in a targeted area. Covers the planning and evaluation of improvement methods while considering social determinants of health, as well as health inequities, social justice, and global health initiatives. Prereqs: Completion of all required BAS core classes with a 2.0 or higher in each, or concurrent enrollment in the last remaining BAS core class.

**CHED 476 (1) C
Community Health and Education Capstone I**

The 1st of 3 successive capstone courses in Community Health & Education. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g, education, systems improvement, etc). The 3 qtr. project concludes with a final paper & a presentation. Prereq: All BAS core classes with 2.0 or higher; or concurrent enrollment in any remaining BAS core classes.

**CHED 477 (1) C
Community Health and Education Capstone II**

The 2nd of 3 successive capstone courses in Community Health & Education. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g, education, systems improvement, etc). The 3 qtr. project concludes with a final paper & a presentation. Prereq: Completion of CHED 476.

**CHED 478 (3) C
Community Health and Education Capstone III**

The last of 3 successive capstone courses in Community Health & Education. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g, education, systems improvement, etc). The 3 quarter experience concludes with a final paper & a presentation. Prerequisite: Successful completion of CHED477.

**CHED 479 (5) C
Community Health and Education Capstone**

The capstone course is an integrative project for students to demonstrate synthesis of coursework in an application relevant to education, health promotion, community health, training, program planning, evaluation, needs assessment, policy, operations, and communications using a comprehensive and practical framework. Students may work with healthcare organizations to address or resolve issues. Students present capstone project as part of the requirement.

Community Service, Cooperative Ed.**CMS 197 (1-3) C
Community Service/Volunteer**

Provides students with an opportunity to serve their community by engaging in meaningful volunteer service with diverse agencies and populations while enhancing career and personal goals. This course includes reflection and supervision/evaluation by the site supervisor. Prerequisite: Instructor's permission. Co-requisite: Must be volunteering in a non-profit or not-for-profit organization; public/private school, college, or university; hospital; or government agency.

**CMS 198 (1-3) C
Community Service/Volunteer**

Provides students with an intermediate-level learning opportunity to serve their community by engaging in meaningful volunteer service with diverse agencies and populations while enhancing career and personal goals. This course includes reflection and supervision/evaluation by the site supervisor. Prereq: Instructor's permission. Co-requisite: Must be volunteering in a non-profit or not-for-profit organization, public/private school, college, university, hospital, or government agency.

**CMS 199 (1-3) C
Community Service/Volunteer**

Provides students with an advanced learning opportunity to serve their community by engaging in meaningful volunteer service with diverse agencies and populations while enhancing career and personal goals. This course includes reflection and supervision/evaluation by the site supervisor. Prerequisite: Instructor's permission. Co-requisite: Must be volunteering in a non-profit or not-for-profit organization; public/private school, college, or university; hospital; or government agency.

Computer Applications**ICT 103 (2) S
Computer Applications I**

Intro to popular applications software. Hands-on experience with a word processor, spreadsheet, database manager and MS-DOS.

Computer Science**CSC 100 (5) S
Beginning Computers**

Covers basic computer terminology; characteristics of hardware and software; capabilities, limitations and problems associated with computers; intro to email and the Internet.

**CSC 110 (5) C | N | S
Introduction to Computer Programming**

An overview of computer program design and problem solving with a focus on problem analysis, program development, testing and debugging. Students will use functions, control structures, and data structures to develop a variety of increasingly complex programs to solve scientific and technical problems. Students will learn to document and test their solutions. Programming language may vary.

**CSC 111 (5) N
Computers for Math and Science**

Introduces skills, concepts, and capabilities necessary to effectively use information technology. Includes operation of computers and networks. Learn contemporary applications such as spreadsheet, database, and presentation software. Build your own website with images, links, multimedia, and some simple programs.

**CSC 142 (5) C | N | S
Computer Programming I**

General principles of modern programming, including how to design, implement, document, test and debug computer programs, using the Java programming language. Topics include objects, messages, expressions, statements, methods, classes, conditionals, iteration, arrays, and collections. Prereq: MATH& 141 with a 2.0 or higher and CSC 110 with a 2.0 or higher. Computer fee. Transfer class.

CSC 143 (5) C | N | S
Computer Programming II

Advanced concepts of modern programming that continue the ideas introduced in CSC 142. Topics include classes and interfaces, inheritance, graphics, exceptions, stream I/O, recursion, analysis of algorithms, and some dynamic structures (lists, stacks, trees). Uses the Java programming language. Prerequisite: CSC 142.

CSC 299 (1-5) C | N
Independent Study

Independent study of approved topics in computer science. Prereq: Permission.

Computer Technology**CTN 101 (5) S**
Introduction to Computing Technology

Learn the common hardware components of computing systems, including the technical knowledge to make decisions about hardware selection, configuration, and upgrading for software optimization. Covers basic network topologies and management schema. Prereq: CSC 100 or concurrent enrollment.

CTN 120 (5) S
Databases I

Study of database concepts and applications using recent version of Microsoft Access. Includes practical experience setting up related database systems and developing tables, queries, forms and reports. Prereq: CSC 100.

CTN 121 (5) S
Database II

Advanced topics in MS Access: Create macros, switchboard, action queries, front-end Access/back-end SQL. Intro to SQL: create databases, SQL queries and tables from script, use views, more join types. Includes SQL server: back-up techniques, security, user rights and permissions. Prereq: CTN 120 with 2.0 or higher.

CTN 131 (5) S
Introduction to Computer Programming

Intro to computer programming using Microsoft Studio and/or other languages to explore elementary programming techniques. Use various control structures, and modular program design and structural concepts. Prereq: CSC 100 (2.0 or higher) or permission.

CTN 142 (5) S
Operating Systems II

Study the implementation and administration of the most recent Microsoft Windows operating system to help prepare for the Microsoft certification exams. Focus on general operating systems? architectural concepts including file, memory, I/O, and process management methods. Learn Unix and Windows operating systems? intrinsic structure and functionality. Prereq: CTN 101 (2.0 or higher) or permission.

CTN 143 (5) S
Operating Systems III

Intro to the Linux operating system including features and distributions, the X Window System, user commands, installation, administration, basic networking and shells. Helps prepare the student for the CompTIA Linux+ certification exam. Prereq: CTN 142 with 2.0 or higher.

CTN 160 (5) S
Web Production I

Intro to Internet media development using HTML 5, tables, forms and CSS3. Learn how to deploy and test sites on a web browser. A final project is to build a website. Prereq: CSC 100 or permission.

CTN 161 (5) S
Web Production II

Web development using streamlined development tools and responsive web design. Integrate graphics and complex code to produce professional quality websites. Tools used meet current industry standards. Prereq: CTN 160 (2.0 or higher) or permission.

CTN 170 (5) S
PC Hardware I

Covers computer hardware repair and service training toward A+ certification prep. Focus on peripherals, software and hardware designs. Covers work habits, customer interaction, reference materials, and basic linear troubleshooting. Includes choices, installation, configuration and economic guidelines for repair or replacement decisions. Prereq: CSC 100, CTN 101 with 2.0 or higher or equivalent.

CTN 171 (5) S
PC Hardware II

Preparation for the CompTIA A+ certification for hardware and software technologies. Develops knowledge and hands-on competencies in core hardware and operating system technologies including installation, configuration, diagnosing and preventive maintenance. Emphasizes customer interaction techniques and systematic approaches to troubleshooting. Prereq: CTN 170 with 2.0 or higher.

CTN 197 (1-15) S
Computing Internship

Provides practical work experience and employment contacts by integrating academic studies with actual on-the-job training. Orientation to Internships required prior to registration. Prereq: Permission.

CTN 224 (5) S
Web Server Configuration and Management

Focuses on building, maintaining, and optimizing web servers. Topics include security, user management, and authentication and access tracking. Prereq: CTN 101 and 160; CTN 270.

CTN 270 (5) S
Local Area Networks I

Intro to networking concepts, terminology and technologies including history, OSI reference model, standards, common protocols, data translation techniques, data transmission processes and network structures. Includes error handling, communication hardware and popular network operation systems. Prereq: CSC 100. Recommended: CTN 101.

CTN 274 (5) S
Local Area Networks III

Covers advanced topics in computer networking, including remotely installing operating systems, implementing network security, setting up directory services such as Active Directory, designing and implementing policies, setting up and implementing print services and configuring distributed file systems. Prereq: CTN 270 with 2.0 or higher.

CTN 276 (5) S
Virtualization and the Cloud I

Learn how Cloud computing and virtualization technologies work. Covers differences between Cloud computing and virtualization, the technologies, TCO and continuing costs, and decision guidelines. Discuss and use Xen, Hyper-V, VMware and application level virtualization technologies. Prereq: CTN 142, 274 & 282 with 2.0 or higher.

CTN 277 (5) S
Network Security I

Intro to the concepts and practices used to guard organizational data and computer systems. Select and deploy practical and effective solutions used to identify, assess and prevent external network threats. Covers Microsoft and Linux operating systems for server security, firewall security and remote access solutions. Prereq: CTN 270.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

CTN 278 (3) S
Wireless Communication I

Intro to wireless communication and WLAN use, design, installation, security and troubleshooting. Studies the 802.11 standards including WLANs, Bluetooth and cellular technology concepts. Learn how and why wireless communication works and how to select and setup the correct wireless devices for the best network solution. Prereq: CTN 270 or equivalent.

CTN 281 (5) S
Security+ Certification

Prepares students for the latest CompTIA Security+ Certification Exam. Focus is on security risks, vulnerabilities and solution concepts including Infrastructure, access control, cryptography, physical, network and operating system security strategies, assessments and auditing. Uses the most recent distributed operating systems. Prereq: CTN 277 with 2.0 or higher.

CTN 282 (5) S
CISCO I

Intro to networking official CCNA 5.0 ?CCNA Routing and Switching?. First of four-course Cisco training program which prepares the student for the Certified Cisco Network Associate certification exam. Includes building simple LANs, performing basic configurations for routers and switches, and implementing IP addressing schemes. Prereq: CTN 270 with 2.0 or higher.

CTN 284 (5) S
CISCO III

CCNA 5.0 ?CCNA Routing and Switching: Switched Networks?. Third of four-course Cisco training program. Covers the architecture, components, and operations of a converged switched network, Layer 2 switching protocols and concepts with the primary focus on VLANs concepts, configuration, security and communication. Intro to WLANs, hierarchical design model and switch configuration. Troubleshoot with Virtual LANs, VTP, and inter-VLAN routing in a converged network. Prereq: CTN 283 and pass Cisco 2 final.

CTN 285 (5) S
CISCO IV

CCNA 5.0 ?Connectivity Networks?. Fourth of four-course Cisco training program. Study of WAN technologies and network services required by converged applications in a complex network. Includes selection criteria of network devices and WAN technologies; configuration and troubleshooting; resolving common issues with data link protocols, and implementation skills for IPSec and virtual private network operations in a complex network. Prereq: CTN 284 and pass the Cisco 3 final.

CTN 286 (5) S
Virtualization and the Cloud 2

Learn advanced management methods for virtualization technologies such as VMware ESXi, XenServer. Install, configure, manage, and troubleshoot virtualization server products and guest operating systems. Gain practical experience with High Availability, VM migration, virtualized networking, SAN configuration and data security concepts. Prereq: CTN 276 with 2.0 or higher or work experience equivalent or instructor permission.

CTN 287 (5) S
Cloud Computing

Build a cloud server using Microsoft products (Hyper-V, SharePoint, and Azure) to understand the interactions of each and the advantages, the complexities, security issues, disadvantages and seamless appearance from the users? view of the Cloud. Prereq: CTN 276 with 2.0 or higher or work experience equivalent.

CTN 295 (5) S
Research and Customer Service

Learn effective customer service. Includes support desk techniques, infrastructure and research methods to solve technical problems efficiently. Emphasizes customer interaction and soft skills. Accomplish, document, evaluate, and present research to the customer. Study help desk techniques and infrastructure. Prereq: CSC 100 or equivalent. Recommended: at least one hardware, operating system, programming or networking class with 2.0 or higher.

CTN 298 (1-10) S
Special Topics - Computing Technology

Special topics in individual or group study in the Computing Technology field. Prereq: Permission.

Cooperative Work Experience

CWE 101 (1-2) N
Portfolio, Job Search and Interviewing

Learn to develop the internship or job you want. Develop the tools and resources necessary for the internship, job search, and/or transferring to a four-year school. Prereq: ENGL 095/096 or higher or placement into ENGL 097/098 strongly recommended.

CWE 102 (2) N
Job Shadow

Provides an opportunity to observe the practical side of the student's chosen field of study. Learn expected behavior, culture, and dynamics of the workplace. Shadow professionals in the field, conduct information interviews, and assess career choices. Prereq: CWE 101 strongly recommended.

CWE 110 (1-3) N
Internship

Apply classroom theory and skills to the workplace. Develop and document learning objectives, complete a work performance evaluation with their supervisor, and write a capstone paper. Campus sessions and online discussions enrich individual internship experiences. Prereq: CWE 101 strongly recommended.

CWE 197 (1-5) C | N
Work Experience-Cooperative Education

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

CWE 198 (1-5) C**Work Experience-Cooperative Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

CWE 199 (1-5) C**Work Experience-Cooperative Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

CWE 494 (1) N**International Business Internship Preparation**

The International Business B.A.S. curriculum includes a major internship component. This course is designed to assist the distance learning IB students in preparing to find and secure appropriate internship positions. Students will develop tools which include knowledge of resources, searching for opportunities, writing targeted resumes, creating professional online profiles and practicing interviewing skills. Prereq: enrollment in International Business B.A.S. program.

CWE 495 (1-9) N**Baccalaureate Internship**

In this online variable credit course for the Bachelor of Applied Science (BAS), students arrange and complete an internship, applying theory and skills learned in the classroom to the workplace. Students write a culminating paper, reflecting on their experience and integrating it with classroom learning. Students may take internship course up to 2 times after completing the first two quarters of the program to fulfill the 8/9 credit requirement. Prereq: CWE 494 or instructor permission.

Core Employment Readiness**COR 120 (3) C****Comm and Prof**

Focuses on the methods and practices of developing and maintaining helpful and effective professional relationships with patients, clients, and coworkers. Prereq: PSG 110 with a 2.0 or higher; or, Instructor, Director, or Dean's permission.

COR 131 (3) C**Employment Skills**

Offers instruction in developing oral and written communication skills needed for success in the employment and career search process. Focuses on developing resumes, writing cover letters, creating career portfolios, conducting employment searches, preparing for interviews, making public presentations, and developing business communication and etiquette skills. Prereq: Permission.

Corporate & Customized Training**CCT 100 (1-8) S****Computer Skills**

Customized course instruction in the area of basic computer and software usage with varying curriculum dependent on client's request/needs. Example topics may include using computer controls, the Microsoft Office Suite, advanced software usage, or other software training specific to the clients needs.

CCT 102 (1-8) S**Manufacturing**

Customized course instruction in the area of manufacturing with varying curriculum dependent on client's request/needs.

CCT 104 (1-8) S**Communications**

Customized course instruction in the area of workplace communications with varying curriculum dependent on client's request/needs.

CTN 283 (5) S**CISCO II**

CCNA 5.0 ?CCNA Routing and Switching: Routing Protocols?. Second of four-course Cisco training program which prepares the student for the Certified Cisco Network Associate certification exam. Includes Routing Concepts, Static and Dynamic routing, EIGRP, OSPF. Uses IPv4 and IP v6. Prereq: CTN 282 and pass the CCNA 1 final.

Culinary Arts**CUL 101 (6) C****Food Theory I**

Foundational class for Seattle Culinary Academy introducing the foodservice industry from a culinary perspective. Includes kitchen operations, cooking techniques, food reactions to heat, and food categories. Prereq: Permission.

CUL 102 (5) C**Food Theory II**

Continued introduction to professional cooking, particularly theory relating to quantity food production. Includes trade terminology, heavy equipment (relating to quantity food production), tool identification, mise en place, salads, meats, fish, poultry, vegetables, starches, sandwiches, butchering, garnishes and presentation. Prereq: Successful completion of 1st quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

CUL 103 (4) C**Food Theory III**

Covers professional restaurant cooking and international cuisines. Explores European, Asian and US cooking, culture, and eating traditions. Includes menu writing, recipe development, flavor building and plate presentation and the study of a variety specific techniques: soufflé, consommé, pasta, fish butchery, gumbo, Chinese dumplings & antipasto. Prereq: Successful completion of 2nd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

CUL 104 (6) C**Food Theory IV**

Emphasizes international fine-dining cooking theory. Focus on classical and contemporary Northwest, Middle Eastern, Mexican, Spanish, French and Pan Asian cuisines. Includes menu writing, vegetarian cuisine, advanced sauces, ingredient identification, advanced cooking methods, advanced plate presentation, fine dining kitchen organization, whole animal fabrication, and charcuterie. Prereq: Successful completion of 3rd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

CUL 106 (2) C**Introduction to Culinary Arts: Theory**

Introduction to the theory of culinary arts covering the various methods of moist and dry heat cooking as well as product knowledge and identification, knife skills, and foundational cooking techniques. Prereq: Permission.

CUL 111 (6) C**Introduction to Professional Cooking: Practicum**

A hands-on introduction to the fundamentals of professional cooking. Includes kitchen safety operations, knife skills, basic food cooking and stock preparation, teamwork, leadership, general housekeeping, sanitation, clean up, and inventory. Prereq: Permission.

CUL 112 (8) C**Quantity Cooking: Practicum**

Preparation of international quantity cooking meals. Includes mise en place, item marketing, equipment operation and preparation of meals from the Italian, Asian, Middle Eastern, Mexican, Creole, Indian, French and American traditions. Prereq: Successful completion of 1st quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

CUL 113 (8) C**Restaurant Cooking: Practicum**

Prepare meals for on-campus casual American restaurant. Work all kitchen stations. Use traditional and contemporary culinary techniques to produce a culturally diverse selection of soups, salads and casual entrees. Practice fabrication of various meats, seafood and vegetables and various wet and dry cooking methods. Includes concepts of mise en place, collaboration and seasonality. Develop skills in organization, speed, plate presentation and evaluation of finished product.

CUL 114 (8) C**International Cooking: Practicum**

Provides hands-on training in cooking and preparing meals for fine dining. Gain experience in classical and contemporary Northwest and international cuisines. Skill focus will be placed on plate presentation, accuracy, good working habits, palate development, care for ingredients, safety, professionalism, and organization. Students work collaboratively to present dishes in a full service restaurant. Menus utilize seasonal, sustainable and non GMO ingredients.

CUL 116 (1) C**Introduction to Culinary Arts: Practicum**

Covers fundamentals of culinary arts. Rotate into a different kitchen each day and prepare a variety of dishes in each area. Includes various types of moist and dry heat cooking methods and preparation methods for breakfast items, poultry or rabbit, fish, soups, stocks, sauces, vegetables and side dishes, salads and dressings. Prereq: Admission to program.

CUL 120 (1) C**Introduction to Wine**

Covers the fundamentals of grape growing and winemaking, including table, sparkling and fortified wines. Includes sensory evaluation of classic grape varieties and their growing regions with emphasis on Washington state wines. Learn strategies for food and wine pairing. BAK 103 or CUL 104 with a minimum GPA of 2.0.

CUL 151 (1) C**Sustainable Food Systems Practices I**

Introductory course exploring the current ecological, economical and political issues relating to the food system. Raises awareness of issues of the food system from producer to consumer, exploring agriculture, fisheries, dairy, meat and poultry production, water and waste. Includes trade, health and social justice issues within the food system. Prereq: Admission into Culinary Arts Program.

CUL 152 (1) C**Sustainable Food Systems Practices II**

Continuation of CUL 151. Introductory course exploring the current ecological, economical and political issues relating to the food system. Raises awareness of issues of the food system from producer to consumer, exploring agriculture, fisheries, dairy, meat and poultry production, water and waste. Includes trade, health and social justice issues within the global food economy. Successful completion of 2nd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

CUL 153 (1) C**Sustainable Food Systems Practices III**

Explore the issues relating to a sustainable food system: globalization, food politics, food security and social justice. Examine climate change as it relates to the food system, water and waste issues, heritage foods, and practical application of ideas in the kitchen. Learn how to navigate and purchase from the local producer market. Prereq: Permission.

CUL 205 (1) C**Advanced Culinary Theory**

Students refine the practical skills for managing and running kitchens, dining rooms and other areas of the food service industry. The technical background of designing menus and menu items for specific target populations with an emphasis on high end and specialty dining will be explored through cooking demonstrations, product sampling and lectures. Prereq: Successful completion of 4th quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

CUL 215 (5) C**Advanced Culinary Practices**

Culminate culinary experience in 4 capstone projects. Create and serve own menus in private dining room; create meals with nutrition focus; practice advanced technique; and build culinary competition skills. Lead others while practicing professionalism and commitment to producing quality food. Prereq: CUL 114.

CUL 251 (4) C**Buffet Catering & Garde Manger: Theory**

Basic cooking methods covering garde mange applications such as charcuterie, forcemeats, curing and smoking, and hors d'oeuvres. Learn to design a show platter and relate to buffet catering & garde manger principles, and understand the relationship of theory to the menus and recipes in the practicum show platter. Learn about produce farming, sustainability, and seed to plate food production while visiting Skagit Valley Farm.

CUL 255 (8) C**Buffet Cater/Garde Manger:Practicum**

Prepare foods for a buffet setting including salads, sandwiches, street food, hot entrées, and desserts. Produce a variety of charcuterie items. Implement recipes and cooking methods presented in class. Work on a show platter for buffet presentation. When applicable, utilize weekly harvests from the Skagit Valley Farm to execute seed-to-plate philosophy in menus and recipes. Prereq: CUL 112 or permission.

CUL 291 (5) C**Sca Travel I - Spain Culinary Immersion**

Intensive international culinary immersion program. Travel and learn history, language, culture, traditional and modern cuisine of a specific country through Seattle Culinary Academy's international partners. Enhance cultural knowledge and language skills via research and travel to historic sites, cultural events, food producers and exhibits. Practice skills learned in a professional kitchen abroad. Prereq: Permission.

CUL 299 (1-5) C**Independent Projects/Culinary Arts**

Permission required.

FSD 100 (3) S**Health and Sanitation**

Intro survey for food service students. Covers sanitation guidelines as suggested by the National Restaurant Association's 'servSafe?' program and Fundamentals of Hazard Analysis of Critical Control Point (HACCP) management. Online fees apply.

FSD 101 (1) S**Orientation to Culinary Arts**

Two-week module introducing the culinary kitchen lab areas. Includes equipment operation, safety and sanitation. Practice beginning knife skills.

FSD 160 (5) S**Culinary Fundamentals**

Introduction to culinary fundamentals. Covers theories and techniques of classical cooking, stocks and sauces. Explores pantry techniques including sandwiches, salads, and dressings. Prereq: Enrollment in Culinary Arts or permission.

FSD 165 (15) S**Fundamentals of Classical Techniques**

Focuses on fundamental concepts, skills and techniques in basic cookery. Special emphasis is given to the study of ingredients, cooking theories to include Sauté, braise, grilling and poaching. Introduction to cold and basic salads, vegetable cookery, starch cookery, preparation of stocks, soups, and thickening agents. Fundamental meat and poultry production, lectures and demonstrations include organizational skills in the kitchen, work coordination and knife cuts. Concurrent enrollment FSD 100.

FSD 170 (5) S**Theory 2 - Advanced Culinary Fundamentals**

Covers intermediate culinary fundamentals including stocks and sauces, soups, meat and poultry cookery and meat, poultry and game identification. Prereq: FSD 160 with 2.0 or higher or permission.

FSD 175 (15) S**Advanced Classical Techniques**

Advanced knife skills are emphasized focusing on efficiency and consistency. Large batch protein cookery is introduced, with an emphasis on par production. Advanced soup and sauce making. Storeroom management, inventory, ordering and product issuing, with an emphasis on daily costs. Introduction to customer service is introduced with a counter service focus. Prerequisite: FSD 100 and FSD 165 with 2.0 or higher or instructor permission.

FSD 180 (5) S**Garde Manger and Menu Development**

Examines organization, equipment, and techniques of the "cold kitchen" including hors d'oeuvres and charcuterie items. Prepares future leaders by examining the role menu planning plays within operations. Examines contemporary plating styles. Prereq: FSD 170 with 2.0 or higher or permission. Corequisite: Concurrent enrollment in FSD 185.

FSD 185 (15) S**Restaurant Production 1**

Proficiency in short order and ala carte cooking, emphasis on technique, speed, consistency. Protein butchery is covered. Advanced customer service is introduced. Simple pastries and plated desserts along with quick and yeast risen breads. Advanced garde manger topics covered. Small plate preparations: canapés and amuse bouche. Into to food costing, inventory control are covered with an emphasis on plate costing and menu mix. Prerequisite FSD 175 with 2.0 or higher or instructor permission.

FSD 190 (5) S**Cost Controls**

Examines the manager's role in cost control and the relationship between operational standards and controlling costs. Prereq: FSD180 with 2.0 or higher or permission. Corequisite: Concurrent enrollment in FSD 195.

FSD 195 (15) S**Restaurant Production 2**

Advanced ala carte cooking in the Alhadeff Grill, menu planning, concept development, food costing are covered emphasizing local, seasonal sustainable ingredients. Management theory is introduced; employee hiring, training and retention and communication are included as well as team building. Interviewing skills and looking for the right job are also covered. Advanced butchery and artisanal breads are covered. FSD 185 with 2.0 or higher or instructor permission.

FSD 197 (1-5) S**Internship in Culinary Arts**

Individual internship in the culinary, restaurant, banquet and other food-related industries. Prereq: Permission.

FSD 200 (5) S**Theory 5 - Management Techniques**

Covers human resource management concepts and techniques related to the supervisor, sous chef and restaurant manager, including diversity, communication and standard operating procedures. Also examines menu and restaurant design. Prereq: FSD 190 with 2.0 or higher or permission.

FSD 205 (15) S**Leadership Practicum**

Practicum in functioning as kitchen supervisor/front of house supervisor/Sous Chef, practicing teamwork and leadership and skills while overseeing all kitchen and front of house production. Emphasizes daily assignments, production sheets, menu planning and product utilization. Includes capstone projects for Black Box Practical and banquet style luncheon. Prerequisite: FSD 195 with 2.0 or higher or instructor permission.

FSD 215 (15) S**Banquets and Catering**

Final course in Banquet & Catering Track includes advanced garde manger, baking concepts and Sous Chef position training, supervising, and coordination for the Pantry and Prep stations. Capstone practicum involves the planning and execution of a formal banquet or buffet. Prereq: FSD 195 with 2.0 or higher or permission.

FSD 299 (1-15) S**Special Topics in Culinary Arts**

Independent study on an individual basis in the Culinary industry. Prereq: Permission.

Dental Assisting**DAST 110 (1) C****Introduction to Dental Assisting**

Designed to help students develop a foundation for a life-time of study skills combined with strategies for optimizing their effectiveness in the classroom setting. In addition, this course will cover the history of dentistry and the components of the dental healthcare team.

DAST 111 (6) C**Foundations of Dental Assisting**

Students are introduced to dental biosciences with emphasis on the head, neck, and oral health sciences. The course includes dental terminology, as well as OSHA and other regulatory agency standards impacting dental practice.

DAST 112 (4) C**Pre - Clinical Chairside Assisting**

Designed to introduce the student to clinical and laboratory settings while applying infection control and universal precautions according to OSHA and other regulatory agencies' standards. Students will apply knowledge of dental sciences and employ preventive dentistry as well as demonstrate safe handling of sharps according to OSHA and other regulatory agencies' standards.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN Watch Technology
NAME TO PREFIX
Watch Technology HIN

Common Course Numbering explanation is on page 202.

DAST 113 (1) C
Dental Practice Management

Designed to introduce dental software programs that support aspects of office procedures.

DAST 114 (2) C
Preventive Dentistry

The study of dental disease prevention, nutritional impact on oral diseases, and community dental health.

Dental Hygiene

DHY 200 (2) C
Fundamentals of Dental Hygiene IV

Fourth in a series focusing on the scientific principles underlying the assessment, planning and implementation of clinical procedures. Emphasizes biochemistry of food, nutritional counseling in dental hygiene practice and personal, professional and community issues related to HIV/AIDS.

DHY 201 (8) C
Clinical Dental Hygiene IV

Fourth in a series of supervised clinical experiences with patient care involving the assessment, planning and implementation of clinical procedures.

DHY 203 (2) C
Ethics and Jurisprudence

Focuses on the ethical, legal and regulatory issues facing a dental hygienist in a private dental office, community agency or independent practice. Through simulated cases, consider professional traits, theories of moral development, ethical dilemmas and principles, the Washington State Dental Practice Act, the hygienist-patient relationship and risk management in dental hygiene practice.

DHY 208 (2) C
Periodontology II

Deepen study of periodontal diseases, including prevention, cause, prevalence, recognition, patient education, advanced treatment planning and appropriate treatment. Apply prevention and treatment techniques to patients with moderate to severe disease.

DHY 215 (2) C
Selective Populations

Study the specific care modifications required to effectively deliver oral health services to patients with special mental, emotional and physical challenges or medical problems such as salivary dysfunctions, neurological impairments, immune system dysfunctions, cancer treatments and surgery.

DHY 220 (3) C
Fundamentals of Dental Hygiene V

Fifth in a series focusing on the scientific principles underlying the assessment, planning and implementation of clinical procedures. Emphasizes higher level concepts needed for successful board certification and national examinations.

DHY 221 (8) C
Clinical Dental Hygiene V

Fifth in a series of supervised clinical experiences with patient care involving the assessment, planning and implementation of clinical procedures. Provide care to a broader range of clients in clinic. Emphasizes refining and integrating previously learned concepts and skills into an effective pattern of comprehensive case management. Demonstrate clinical judgment and decision-making based on scientific evidence and treatment outcomes.

DHY 222 (1) C
Community Dental Health I

First of three courses in public and community health approaches to the prevention and management of dental and oral health needs. Emphasizes identification of community dental health programs with experience in schools, nursing homes, community centers and hospitals.

DHY 223 (2) C
Community Dental Health II

Study community dental health program planning and development focusing on prevention of dental disease and practice through learning projects. Develop a community outreach program and execute it.

DHY 224 (2) C
Community Dental Health III

Covers community dental health program planning and development focusing on prevention of disease. Integrates concepts and techniques regarding the selection and delivery of oral health services and education to underserved populations. Emphasizes program implementation and evaluation.

DHY 230 (3) C
Fundamentals of Dental Hygiene VI

Explores the scientific principles underlying the clinical practice of dental hygiene. Develop high-level skills to enhance patient assessment, management and treatment.

DHY 231 (8) C
Clinical Dental Hygiene VI

Sixth in a series of supervised clinical experiences with patient care involving the assessment, planning and implementation of clinical procedures.

DHY 233 (2) C
Restorative Practice and Materials III

Third laboratory course in restorative dental practice and materials focusing on correct placement of dental restorations on mannequins in the laboratory and patients in the clinic. Develop manipulative and carving skills in placement of amalgam and composite restorations as allowed by Washington law.

DHY 234 (2) C
Restorative Practice and Materials IV

Fourth laboratory course in restorative dental practice and materials focusing on correct placement of dental restorations on mannequins and patients. Develop manipulative and carving skills in placement of amalgam and composite restorations as allowed by Washington state law.

DHY 235 (2) C
Restorative Practice and Materials V

Fifth laboratory course in restorative dental practice and materials focusing on correct placement of dental restorations on mannequins and patients. Develop manipulative and carving skills in placement of amalgam and composite restorations as allowed by Washington state law.

DHY 236 (2) C
Restorative Practice and Materials VI

Final laboratory course in restorative dental practice and materials focusing on correct placement of dental restorations on mannequins and patients. Develop manipulative and carving skills in placement of amalgam and composite restorations as allowed by Washington state law.

DHY 238 (1) C**Professional Issues**

Covers the practice of dental hygiene including résumé development, interviewing techniques, patient scheduling systems, employment contracts, dental staff relations, understanding the business aspects of a dental practice, and development of a personal philosophy of practice.

DHY 240 (2) C**Fundamentals of Dental Hygiene VII**

Focuses on the scientific principles underlying clinical practice dental hygiene. Focuses on inter-professional relations, team-building, sharing new knowledge and the responsibilities of a practicing dental hygienist for professional development and lifelong learning.

DHY 241 (8) C**Clinical Dental Hygiene VII**

Seventh in a series of supervised clinical experiences with patient care involving the assessment, planning and implementation of clinical procedures in dental hygiene.

DHY 245 (1-5) C**Applied Practice in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

DHY 246 (1-5) C**Applied Practice in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

DHY 247 (1-5) C**Applied Practicum in Dental Hygiene**

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

DHY 250 (2) C**Oral Biology**

Study of oral histology including developmental origins and microscopic organization of selected oral and facial structures. Includes embryonic development of the face and palate, and common craniofacial malformations. Examines the formation, eruption and histological organization of the teeth and their supporting tissues as well as the oral mucosa and salivary glands.

DHY 251 (3) C**Human Pathophysiology**

Study of human pathophysiology includes the etiology, predisposing factors, mechanisms of disease, and characteristics of the disease process in each body system. Emphasizes specific disease entities most commonly seen in the clinical dental hygiene setting or that may influence an individual's dental care.

DHY 252 (3) C**Fundamentals of Dental Hygiene I**

Examines the theory and scientific principles underlying the clinical practice of dental hygiene. Emphasis on oral screening, infection control, and professionalism.

DHY 253 (3) C**Clinical Dental Hygiene I**

Apply the theory and scientific principles underlying dental hygiene practice. Covers professionalism, clinical preparation of the examining area, safety, patient privacy, documentation, and screening techniques.

DHY 254 (2) C**Health Promotion**

Intro to dental health education, patient education, health promotion, and the process of health-related behavioral change. Emphasizes assessment of educational needs, client-provider interaction, communication skills, cultural competence in healthcare delivery, and motivation to change.

DHY 255 (2) C**Dental Radiology I**

Principles of oral radiology imaging stressing the physics of x-ray production and biologic effects of ionizing radiation. Includes radiation safety and protection, dental radiographic examination, and radiographic interpretation of anatomical structures of the head and oral cavity.

DHY 256 (2) C**Dental Radiology I Practice**

Intro to dental x-ray equipment, processes and techniques. Emphasizes patient and operator safety, evaluation of technique and imaging quality, darkroom and digital operations, beginning level proficiency in exposing and analyzing intra-oral dental radiographs.

DHY 257 (2) C**Head and Neck Anatomy**

Didactic sessions teaching anatomy and function of the head and neck. Course draws on concepts taught in general anatomy and physiology classes. Students are introduced to the location, characteristics and function of all anatomical structures, including all hard and soft tissues and all components of the circulatory system and cranial nerves. Prereq: Permission.

DHY 258 (2) C**Dental Anatomy & Morphology (Didactic)**

Intro to nomenclature, anatomy, morphology and functions of the primary and permanent dentition. Focuses on healthy, normal end of the health/disease continuum and provides foundation for further dental science, clinical and restorative dental hygiene practice.

DHY 259 (1) C**Dental Anatomy & Morphology (Lab)**

Apply the theory and scientific principles of specific anatomical characteristics to lab drawings and wax carving. Intro to fine hand-skills and basic instrumentation used for hygiene and restorative procedures.

DHY 260 (1) C**Emergency Management**

Introduced to the role of the dental team in the identification and treatment of medical emergencies, including prevention, patient assessment, stress reduction protocol, safe use of emergency drugs and equipment. Participate in class simulations of emergency treatment for common medical emergencies in the dental office.

DHY 261 (2) C**Preventive Dentistry**

Intro to primary prevention methods within the scope of dental hygiene practice. Emphasizes the relationship between oral disease processes and oral health preventive measures, home-care education of the patient, and methods of preventive care implemented by dental hygienists.

DHY 300 (4) C**Clinical Dental Hygiene II**

Apply the theory and scientific principles underlying dental hygiene practice. Intro to assessment of gingival and oral soft tissues, selected instrumentation, and periodontal and dental charting.

DHY 301 (4) C**Clinical Dental Hygiene III**

Apply the theory and scientific principles underlying dental hygiene practice. Intro to patient management, treatment planning, and dental hygiene treatment techniques.

DHY 302 (8) C
Clinical Dental Hygiene IV

Apply the scientific principles underlying the assessment, planning and implementation of clinical procedures. Emphasizes biochemistry of food, nutritional counseling in dental hygiene practice and personal, professional and community issues related to HIV/AIDS.

DHY 303 (3) C
Fundamentals of Dental Hygiene II

Examines the theory and scientific principles underlying the clinical practice of dental hygiene with emphasis on integration of screening information to formulate goals for planning dental hygiene treatment needs.

DHY 304 (2) C
Fundamentals of Dental Hygiene III

Examines the theory and scientific principles underlying the clinical practice of dental hygiene with emphasis on principles of instrumentation, dental hygiene diagnosis, and professional development activities.

DHY 305 (2) C
Fundamentals of Dental Hygiene IV

Focuses on the fundamental scientific principles underlying the assessment, planning and implementation of nutrition in dental hygiene. Emphasizes biochemistry of nutrients, nutritional counseling in dental hygiene practice, and personal, professional, and community issues. Prereq: Permission.

DHY 306 (2) C
Restorative Practice & Materials I (Didactic)

This is the first of two didactic courses focusing on the physical, chemical, mechanical and biological properties of dental materials used in both direct and indirect restorative procedures. Prereq: Successful completion of previous quarter's BAS in Allied Health Dental Hygiene courses with a minimum grade of 2.5 in each course or permission.

DHY 307 (1) C
Restorative Practice & Materials I (Lab)

Covers clinical restorative dentistry focusing on the chemical, physical, mechanical properties of commonly used dental materials and their uses, manipulation and application. Learn to handle and manipulate different types of restorative filling materials into prepared cavities.

DHY 308 (2) C
Restorative Practice & Materials Theory II

This is the second and final didactic course focusing on the physical, mechanical, chemical and biological properties of dental materials commonly used in direct and indirect restorative procedures, and basic knowledge in materials used in preventive, periodontics, restorative and other specialty fields in dentistry. Prereq: Permission.

DHY 309 (1) C
Restorative Practice & Materials II

This is the second lab course focusing on the physical, mechanical, chemical and biological properties of dental materials commonly used in direct and indirect restorative procedures, and basic knowledge in materials used in preventive, periodontics, restorative and other specialty fields in dentistry. Prereq: Permission.

DHY 310 (2) C
Advanced Restorative Practice I

Covers restorative dental practice and materials, focusing on correct placement of dental restorations on mannequins and in the clinic on patients. Practice and develop manipulative and carving skills in the placement of amalgam and composite restorations as allowed by Washington State law.

DHY 311 (2) C
Pain Control Anesthesia

Curriculum under development at time of printing.

DHY 312 (2) C
Pain Control Anesthesia Practice

Curriculum under development at time of printing.

DHY 313 (3) C
Periodontology I

Examines periodontal structures of the mouth from health to disease including clinical and histological aspects of periodontal disease. Includes various classifications of periodontal diseases, and disease progression as it relates to microbiology, etiology, and host response. Learn techniques of periodontal therapy using adjunctive chemotherapeutic agents and oral hygiene aids. Prereq: Instructor's permission.

DHY 314 (2) C
Dental Radiology II

Study of dental radiology including the principles and application of a full range of intra-oral, extra-oral, digital and film radiographic examinations, advanced interpretation for diagnosis of dental anatomy, trauma, lesions, caries and pathology.

DHY 315 (1) C
Dental Radiology II Practice

Learn application of basic radiographic examination techniques for dental patients stressing adaptation of techniques, consideration of presenting problems, variations of normal, supplemental radiographic procedures, analysis of outcomes, and advanced interpretation of diagnostic information.

DHY 318 (2) C
Oral Pathology

Study lesions, pathologies, and abnormal conditions of the head, neck and oral cavity of significance in the clinical practice of dental hygiene

DHY 323 (3) C
Pharmacology

Study the general pharmacological and therapeutic actions of drugs with emphasis on those used in dentistry. Includes nomenclature, dosage, routes of administration, drug interactions, drug effects on the oral cavity, indications, contraindications, factors in patient treatment planning and legal factors involved in dispensing.

DHY 382 (1-8) C
Applied Practicum in Dental Hygiene

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

DHY 384 (1-8) C
Applied Practicum in Dental Hygiene

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

DHY 391 (1) C
Community Dental Health I

Introduction to public dental health. Presents strategies to improve oral health outcomes through evidence-based research techniques, planning, and implementation of public health program models. Provides a foundation for a group community oral health project. Emphasis on community needs assessment and choosing a target population. Prereq: Completion of BAS in Dental Hygiene previous quarter's courses with a minimum grade of 2.5 in each course or permission.

DHY 400 (8) C**Advanced Practicum in Dental Hygiene I**

Supervised clinical experiences with patient care involving the assessment, planning, implementation, and evaluation of clinical procedures in dental hygiene. Prereq and Coreq: Enrollment into the dental hygiene program.

DHY 401 (8) C**Advanced Practicum in Dental Hygiene II**

Supervised clinical experiences with patient care involving the assessment, planning, implementation, and evaluation of clinical procedures in dental hygiene. Prereq and Coreq: Enrollment into the dental hygiene program.

DHY 402 (8) C**Advanced Practicum in Dental Hygiene III**

Supervised clinical experiences with patient care involving the assessment, planning, implementation, and evaluation of clinical procedures in dental hygiene. Prereq and Coreq: Enrollment into the dental hygiene program.

DHY 404 (3) C**Principles of Dental Hygiene Practice I**

This course focuses on the scientific principles underlying the assessment, planning and implementation of clinical procedures in dental hygiene. This course emphasizes higher level concepts needed for successful board certification and national examinations. Course pre- and co-requisite: enrollment into the dental hygiene program.

DHY 405 (2) C**Principles of Dental Hygiene Practice II**

This course focuses on the scientific principles underlying the assessment, planning and implementation of clinical procedures in dental hygiene. This course emphasizes higher level concepts needed for successful board certification and national examinations. Course pre- and co-requisite: enrollment into the dental hygiene program.

DHY 406 (1) C**Principles of Dental Hygiene Practice III**

This course focuses on the scientific principles underlying the assessment, planning and implementation of clinical procedures in dental hygiene. This course emphasizes higher level concepts needed for successful board certification and national examinations. Course pre- and co-requisite: enrollment into the dental hygiene program.

DHY 407 (1) C**Strategies of Capstone Project**

This course is an introduction to a culminating educational experience whereby students have the opportunity to demonstrate mastery of learning in the field of dental hygiene. The course integrates experiential learning, coursework knowledge, clinical application, self-analysis along with strategies for completion and presentation of a Capstone project. Prereq and Coreq: Enrollment into the dental hygiene.

DHY 408 (1) C**Capstone**

This course concludes the culminating educational experience whereby students have the opportunity to demonstrate mastery of learning in the field of dental hygiene. The course integrates experiential learning, program coursework knowledge, clinical application, self-analysis allowing the student to integrate and evaluate their overall educational experience. Prereq and Coreq: Enrollment into the dental hygiene.

DHY 409 (2) C**Ethics and Jurisprudence**

Focuses on the ethical, legal and regulatory issues facing the dental hygienist practicing in a private dental office, in a community agency, or in independent practice. Examines professional traits, theories of moral development, ethical principles, the state dental practice act, the relationship with patients and employers, and risk management.

DHY 410 (2) C**Advanced Restorative Practice II**

Focuses on correct placement of dental restorations on mannequins and in the clinic on patients. Students practice and develop manipulative and carving skills in the placement of amalgam and composite restorations as allowed by Washington State law.

DHY 411 (2) C**Advanced Restorative Practice III**

Focuses on correct placement of dental restorations on mannequins and in the clinic on patients. Students practice and develop manipulative and carving skills in the placement of amalgam and composite restorations as allowed by Washington State law.

DHY 412 (2) C**Advanced Restorative Practice IV**

Focuses on correct placement of dental restorations on mannequins and in the clinic on patients. Students practice and develop manipulative and carving skills in the placement of amalgam and composite restorations as allowed by Washington State law.

DHY 413 (2) C**Periodontology II**

Study of advanced periodontal diseases, including cause, recognition, prevention, and treatment planning. In addition, this course covers periodontal surgery and implant care. Reviews periodontal concepts through case studies. Prereq: Enrollment in the dental hygiene program.

DHY 414 (1) C**Selective Populations**

Introduction to etiologies, signs and symptoms, prognoses, medications, and oral healthcare strategies to optimize oral health outcomes for patients with selective medical conditions. Prereq: Successful completion of previous quarter's BAS in Allied Health Dental Hygiene courses with a minimum grade of 2.5 in each course or permission.

DHY 415 (1) C**Selective Populations Practice**

This course consists of various laboratory externships through existing community organization affiliate agreements which provide supervised student experiences. Students will adapt the Dental Hygiene Process of Care for medically compromised high-risk patients to optimize oral health outcomes and provide caregiver oral health education as appropriate. Enrollment into the dental hygiene program: course pre- and co-requisite.

DHY 416 (1) C**Professional Issues**

This course will explore issues encountered in a variety of dental hygiene employment settings including resume preparation, interview success techniques, malpractice insurance, employment contract negotiation, conduct and professional licensure, fundamentals of dental practice business concepts, employment team concepts, personal practice philosophy development, and the creation of a personal professional development plan. Prereq: Enrollment into the dental hygiene program.

DHY 419 (2) C**Community Dental Health II**

This course is the study of public and community health methodologies in oral disease prevention and program development. Students will establish contact with populations to develop presentations targeted to a specific demographic as a community health program or project. Students will learn the basics of research including data collection, dental indices application, biostatistics utilization, and program evaluation. Prereq and Coreq: Enrollment into the dental hygiene program.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN **Watch Technology**

NAME TO PREFIX

Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

DHY 420 (1) C
Community Dental Health III

This course is the advanced study of public and community health methodologies in oral disease prevention and program development. Students will present an oral health program to target populations addressing a specific need and demonstrate research methodologies including data collection, dental indices application, biostatistics utilization, and program evaluation. Prereq and Coreq: Enrollment into the dental hygiene.

DHY 482 (1-8) C
Applied Practicum in Dental Hygiene

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

DHY 483 (1-8) C
Applied Practicum in Dental Hygiene

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

DHY 484 (1-8) C
Applied Practicum in Dental Hygiene

Applied practice in dental hygiene to meet the individual needs of students who require additional practice and reinforcement of techniques and skills in dental hygiene.

Diesel and Heavy Equipment

HDM 100 (8) S
Preventive Maintenance and Inspection

This course focuses on skills required by the National Automotive Technicians Education Foundation (NATEF) including safety procedures compliant with OSHA regulations, hand tools, power tools, measuring tools, and equipment used in the repair of both trucks and equipment in the heavy duty diesel mechanic industry. Inspection and maintenance are also a major part of this course. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110. Coreq: HDM 105.

HDM 101 (3) S
Introduction to Heavy Duty

Covers the basics of hand tools, power tools, safety, measuring instruments, repair orders, lubrication and some of the specialized tools used in the heavy-duty industry.

HDM 102 (6) S
Electrical-Electronics, Basic

Covers safety procedures when working with electricity and fundamental electrical theory. Includes types of circuits, Ohm's law, use of common test equipment and reading wiring diagrams. Prereq: HDM 101 or permission.

HDM 104 (6) S
Batteries, Generators and Alternators

Diagnose and repair charging systems commonly used in heavy-duty truck and equipment maintenance. Prereq: HDM 102.

HDM 106 (5) S
Cranking and Lighting Systems

Covers theory, operation and repair of starter motors commonly used in the industry, including control devices and wiring used with these motors. Covers troubleshooting and the use of common test equipment. Includes knowledge of truck equipment lighting systems and the hardware to control them. Prereq: HDM 102.

HDM 107 (9) S
Hydraulics and Pneumatics

Covers theory, basic operation principles, design, function, testing and repair of selected types of hydraulic and air pumps, motors, hoses and accessories used on mobile equipment, as well as application and repair of pressure, flow and directional control valves and actuators. Prereq: HDM 101 or permission.

HDM 108 (8) S
Heavy Duty Diesel Welding

This course focuses on skills required by the National Automotive Technicians Education Foundation (NATEF) including safety in welding, oxy-acetylene welding, oxy-acetylene brazing, oxy-acetylene cutting, arc welding as well as MIG welding. Identify the type of welding process to be used when joining various types of metals in different situations. Prereqs: MVM 101, BUS 159, MAT 110. Coreq: HDM 100.

HDM 110 (8) S
Introduction to Electrical

This course introduces students to skills necessary for the National Automotive Technicians Education Foundation (NATEF) certification including electrical theory, diagnosing electrical system problems, removal, repair and installation of electrical components from vehicles. The function and construction of each component, diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 115.

HDM 113 (6) S
Basic Welding & Cutting-Diesel & Equipment Tech

Intro to SMAC (shielded metal arc welding), oxyacetylene and carbon arc skills involved in the repair and maintenance of heavy-duty trucks and construction equipment. Perform several pertinent tasks and projects contained in an industry-approved competency-based learning module. Prior knowledge of hand and basic power tools is helpful. Prereq: Enrollment in program or permission.

HDM 115 (8) S
Advanced Electrical

Building on the introductory course, students will focus independently on electrical theory, data scan tools, and diagnosing electrical and electronic system problems including truck accessories necessary for NATEF certification. The function and construction of each component, and diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 110.

HDM 120 (8) S**Tires, Alignment, Steering and Suspension**

This course will cover diagnostic theory, systems problems and evaluations, removal, repair and installation of tires, alignment, steering and suspension components of heavy duty diesel vehicles to meet NATEF certification. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 125.

HDM 123 (12) S**Diesel Engine Repair and Performance**

Study and perform diagnosis, repair, tune-up and servicing procedures on current diesel engines used in the heavy-duty truck and equipment industry. Disassemble, clean and inspect engines and components, installing replacement parts as needed. Prereq: HDM 101 or permission.

HDM 124 (5) S**Preventive Maintenance**

Learn preventive maintenance practices commonly found in the trucking and equipment industry. Includes inspection and determination of failures along with the necessary repairs. Covers proper handling and disposal of hazardous material. Prereq: HDM 101 or permission.

HDM 125 (8) S**Hydraulic and Air Brakes**

Contents of this course include: diagnostic theory; systems problems and evaluation, removal, repair and installation of hydraulic, air brake and ABS components from vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 120.

HDM 127 (8) S**Drive Train**

Covers diagnosis and repair of Drive Train components, including mechanical clutches, flywheels, standard transmissions, torque converters and automatic/power shift transmissions. Learn to troubleshoot, diagnose, disassemble and reassemble transmissions common to the industry; and to check universal joints, drivelines, differential assemblies and final drive units. Prereq: HDM 101 or permission.

HDM 128 (4) S**Basic Gasoline Engines**

Study the basic operation of gas engines, diagnosing their condition by disassembling various types of current model engines. Prereq: HDM 101.

HDM 130 (8) S**Hydraulics & Pneumatics**

This course will focus on theory, systems problems and evaluation, reading and reviewing diagrams, and removal, repair and installation of hydraulic and pneumatic components of heavy duty diesel vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 135.

HDM 135 (8) S**Drive Train**

Contents include: Theory, diagnosing system problems and evaluation, and removal, repair and installation of heavy duty diesel drive train components from vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 130.

HDM 138 (15) S**Steering, Suspension and Brakes**

Study components and systems relating to truck or equipment running gear. Covers theory, operation, diagnosis and repair of wheels, tires, brakes, steering and suspension systems. Prereq: HDM 101 or permission.

HDM 140 (8) S**Heating, Ventilation and Air Conditioning**

This course focuses on theory, diagnosing system problems and evaluation, and removal, repair and installation of heating, ventilation and air conditioning (HVAC) components from vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 145.

HDM 145 (8) S**Gasoline Engines**

This course focuses on theory, diagnosing system problems and evaluation, and removal, repair and installation of gasoline engine components from vehicles to meet ASE standards. The function and construction of each component, and diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 140.

HDM 150 (8) S**Diesel Engine Diagnos/Remove and Replace**

Contents of this course include: Diesel engine theory, diagnosing system problems and evaluation, and removal and installation of a diesel engine from a vehicles to meet NATEF certification. The function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 155.

HDM 155 (8) S**Diesel Engine Rebuild**

This course covers advanced theory, diagnosing systems problems and evaluation, and the rebuilding of a diesel engine to meet NATEF certification. The advanced function and construction of each component, and their diagnosis and service procedures will be covered. Prereqs: MVM 101, BUS 159, HDM 171, MAT 110 with a 2.0 or higher or by instructor permission. Coreq: HDM 150.

HDM 171 (2) S**Lift Truck Operator**

Learn current regulations and practical fork lift operation in order to obtain a lift truck operator's safety certification card. Prereq: HDM 101 or permission.

HDM 191 (4) S**Advanced Gasoline Engines**

Theory and operation of fuel and ignition systems used on industrial gas engines commonly found in the heavy-duty industry. Covers common types of ignition and carburetion systems. Prereq: HDM 128 or permission.

HDM 193 (6) S**Heating, Ventilation and Air Conditioning**

Study the operation, system diagnosis and repair of heating, ventilation and air conditioning systems related to trucks and equipment. Covers retrofit of R-12 systems to R-134a refrigerant. Prereq: HDM 101 or permission.

HDM 197 (1-7) S**Internship - Heavy Duty Diesel**

Gain experience and practice with mechanical repair procedures and skills performed regularly on the job site. Tasks, skills content, format and projects vary depending on the job site. Prereq: Permission.

HDM 198 (1-10) S**Special Topics - Heavy Duty Mechanical Repair**

Study selected procedures and skill tasks for truck and heavy equipment technicians. Course content, format and projects vary. Prereq: Permission.

HDM 201 (6) S
Shop Practices

Apply the knowledge and tasks learned in prior mechanical skills units, including repair and service work on a variety of heavy-duty trucks and equipment. Repair procedures and shop policies will simulate work site situations. Students electing to work within the industry will complete a minimum of 66 supervised hours in trade-related employment. Prereq: Permission.

HDM 298 (1-10) S
Advanced Special Topics - Heavy Duty Mech Repair

Advanced study of selected procedures and skill tasks for truck and heavy equipment technicians. Course content, format and projects vary. Prereq: Prior work site experience and permission.

Drama**DRMA& 101 (5) C | N**
Introduction to Theatre

Intro to theatrical experience through play analysis, acting, directing, critique, stage and costume design, with emphasis on theatre as a performance art.

DRMA 105 (5) C | N
Introduction to World Theater

Intro to theatrical practices from different cultures. Analyze scripts, videotapes and live performances through theoretical, cultural, and historical readings. Examine how the performance or script reflects on the culture that produced it. Relate current theatrical practices to the larger global society. Prereq: ENGL& 101 eligibility.

DRMA 108 (1-5) C
Rehearsal and Performance

Participation in rehearsal and performance process culminating in performance. Audition or instructor permission.

DRMA 120 (5) S
Introduction to Acting

Builds a foundation of theory and application with the broad use of improvisational techniques and movement for the actor.

DRMA 121 (5) C | N
Acting

Theory and practice of acting fundamentals. Exercises in voice, movement, observation, imagination and script analysis. Culminates in scene study, production and performance process. Recommended: DRMA& 101 or DRMA 120.

DRMA 122 (5) C
Acting

Continuation of DRMA 121 with emphasis on characterization and further scene study. May culminate in public performances. Prereq: DRMA 121.

DRMA 123 (5) C
Acting

Continuation of DRMA 122 with further emphasis on scene study, critical analysis and scoring scripts. May culminate in public performances. Prereq: DRMA 122.

DRMA 131 (5) C
Introduction to Technical Theater

Intro to the technical aspects of theatre: lights, sets, props and sound. Learn how these areas are created and managed and how each impacts a production. Work on the technical aspects of mainstage productions.

DRMA 170 (2) N
Theater Appreciation - Musical Theater

This course will introduce students to theater practices in order to make them more informed audience members. Through the lens of costume and makeup design, students will analyze the creation, collaboration, and communication of musical theater. Using Aristotle's theater taxonomy, students will use their knowledge of costume and makeup design to assess theatrical communication in live musical theater performances. Prereq: Placement into ENGL 097/098 or higher.

DRMA 171 (2) N
Theater Appreciation - Classical Theater

This course will introduce students to theater practices in order to make them more informed audience members. Through the lens of dramatic structure students will analyze the creation, collaboration, and communication of classical theater. Using Aristotle's theater taxonomy, students will use their knowledge of dramatic structure to assess theatrical communication in live classical theater performances. Prereq: Placement into ENGL 097/098 or higher.

DRMA 172 (2) N
Theater Appreciation - Realistic Theater

This course will introduce students to theater practices in order to make them more informed audience members. Through the lenses of directing and acting, students will analyze the creation, collaboration, and communication of realistic theater. Using Aristotle's theater taxonomy, students will use their knowledge of directing and acting to assess theatrical communication in live realistic theater performances. Prereq: Placement into ENGL 097/098 or higher.

DRMA 173 (2) N
Theater Appreciation - Comedy

This course will introduce students to theater practices in order to make them more informed audience members. Through the lens of set and prop design, students will analyze the creation, collaboration, and communication of comic theater. Using Aristotle's theater taxonomy, students will use their knowledge of set and prop design to assess theatrical communication in live comic theater performances. Prereq: Placement into ENGL 097/098 or higher.

DRMA 204 (5) C
Introduction to Concert Dance - Jazz I

Intro to the world of concert Jazz dance. Includes basic concepts and principles of Jazz technique, muscle strengthening and flexibility exercises, building vocabulary of connective movements and skills for basic auditioning and memorizing choreography.

DRMA 205 (5) C
Introduction to Concert Dance - Jazz II

Continuation of DRMA 204.

DRMA 206 (5) C
Introduction to Concert Dance - Jazz II

Continuation of DRMA 205.

DRMA 284 (5) C
Playwriting I

Develop writing skills for one-act plays by exploring dramatic structure, character development and the author's stylistic voice. Learn the roles of director, dramaturge, actor and other theatrical artists in the writing process. Includes critical analysis of published plays, readings and critiques of student work. Prereq: ENGL& 101 placement or permission.

DRMA 298 (1-5) C
Individual Projects in Theater

Individual projects in set design, lighting, costuming, directing, house management and acting, as determined by advanced drama students and the drama faculty. Prereq: Advanced standing, permission.

Early Childhood & Family Studies

CFS 101 (2) C M.E.R.I.T. Seminar

A series of workshops and classes designed to support The Managed Education and Registry Information Tool known as MERIT, Washington State's system for professionals in the field of early care and education and school-age professionals. Meets the initial 20-hour State Training & Registry System (STARS) training requirement. (This course was previously numbered CFS 299.)

CFS 110 (3) C Developmentally Appropriate Activities Environment

Intro to working with children and families in designing welcoming, safe, healthy, and supportive learning environments. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 120 (3) C Physical & Intellectual Development

Examines physical, cognitive, creative and linguistic developmental needs and stages of children from birth through pre-adolescence. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 130 (3) C Social/Emotional Development

Covers the social, emotional, self-esteem and identity development of children from birth through pre-adolescence. Explores methods and strategies for creating a holistic approach to supporting development. Addresses guidance and behavior management. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 180 (3) C Guiding Behavior & Social Dev School Age and Ad

Covers the social, emotional, self-esteem and the identity development from childhood to adolescence. Explores methods and strategies for creating a holistic approach to supporting development. Addresses guidance and behavior management. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 215 (3) C Math and Science with Young Children

Explores the many ways young children integrate math and science concepts into their daily lives and how to support their classroom learning. Emphasis on promoting cognitive development, basic concepts of math and science taught during the early years, ways for supporting those groups typically underrepresented in the STEM fields. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 225 (3) C Assessment & Programming

Covers approaches for assessing of the individual child, the family, an agency, and community, and developing programming for utilizing strengths and meeting needs. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 228 (3) C Childhood/Adolescent Sexuality & Education

Explores biological sexual development and culturally specific responses to myths and misinformation common among children, youth and families. Covers strategies for incorporating accurate, culturally-sensitive information with families, children and youth. Explores issues of sexual-identity development including gender roles, sexuality, stereotypes and the impact of the media. Examines responses to teen-pregnancy and sexual abuse. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 245 (3) C Partnerships with Diverse Families

Focuses on understanding family structures and developing conceptual frameworks and strategies that support all members of the school and service community. Particular emphasis is on issues and approaches for working with family in urban environments. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 252 (3) C Violence Prevention

Examines the nature of violence in our community, including institutionalized violence, media violence, domestic violence, bullying, and gangs. Covers impact of prevention programs, strategies and methods for community-building and empowerment. Prereq: Eligible for ENGL& 101 and MATH 084.

CFS 263 (3) C Children with Disabilities

Focuses on the social, emotional, physical, legal, historical and environmental issues which may affect children and youth with disabilities and their families. Explores strategies for supporting an inclusive learning environment for children, youth, and families. Prereq: Eligible for ENGL& 101 & MATH 084.

CFS 270 (1-3) C Child and Family Health

Explores the impacts of typical family stresses including health care, wellness, safety, childcare, nutrition. Focuses on ways for building strong communities. Prereq: Eligible for ENGL& 101 & MATH 084.

CFS 280 (3) C Methods Cultural Relv/Anti-Bias:Child & Families

Specific strategies for working with all families and creating holistic, inclusive learning communities. Includes awareness and strategies for addressing bias. Prereq: HUM 105 and Eligible for ENGL& 101 and MATH 084.

CFS 284 (3) C Literacy Development for Children & Families

Understanding and practical strategies for literacy development, home -to-school connection and supporting English language learners. Prereq: Eligible for ENGL& 101 and MATH 084.

ECE 305 (3) N Early Childhood Education Approaches and History

This course examines changes in early care and education over time; including social, political and societal trends. Current local, state, national and global trends will be compared and critiqued. Using a historical approach, students will analyze key influences in the field and reflect upon the diversity embedded in this field. Students will observe and differentiate between models of early care and education, and develop a personal teaching philosophy.

ECE 310 (5) N Cognition and General Knowledge

This course focuses on using learning theory and key concepts of cognition development in young children to design math/science curriculum. Students will describe how learning occurs for young children and critique learning theory. They will learn to apply learning theory to their instruction and design developmentally appropriate strategies to teach math and science content based on the understanding of cognition.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN **Watch Technology**

NAME TO PREFIX

Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

ECE 315 (5) N
Language, Literacy and Communication

Examines methods of communication for children aged 0-8 years. Covers the development of communication skills and foundations of language and literacy. Using developmentally appropriate practice, students design and implement strategies to promote development of language, literacy and communication skills in an early learning setting. Includes analysis of approaches to instruction, development of curriculum and assessment of communication abilities.

ECE 320 (3) N
Creative Expression

Students will promote creativity in an early learning setting using music, art, movement, and imaginative play to support development across developmental domains (physical, cognitive, social-emotional). Students will examine different approaches to creativity, design curriculum incorporating creativity and demonstrate developmentally appropriate practices supporting creativity in the classroom.

ECE 350 (4) N
Practicum: Interactions

Covers developmentally appropriate instructional interactions with children in early learning settings (ages birth-8 years). Introduces best practices in teacher-child interactions. Observations in a minimum of two programs serving different age groups are required.

ECE 355 (5) N
Anti-Bias Education

Explore equity issues in early childhood education and reflect on biases present in ourselves, communities of practice and the systems in which our children live. Includes study of embedded bias and its impact on identity development and strategies to counter structural bias.

ECE 405 (3) N
Partnership and Collaboration in ECE

Examines the impact of family and community on child development. Using the ecological theory, students will integrate family and community into an early learning program and demonstrate culturally responsive interactions with others. Explores the demographics of our communities and design and implementation strategies for partnership and collaboration with family and community organizations that support child development.

ECE 410 (4) N
Inclusive Early Childhood Education

Examines models of inclusion in early learning settings across age groups. Covers the process for early identification of children with special needs and the development of strategies for providing appropriate education to a variety of learners (including children with disabilities, dual language learners, and children undergoing adverse childhood experiences). Compliance with state law and policy is included.

ECE 415 (3) N
Children and Media

Examines appropriate use of media and technology in early learning settings. Explores various perspectives on using electronic media (computers, tablets, television, etc.) in early childhood programs using current research and recommendations. Policies on classroom use of media/instructional technology and strategies for communication of policies to families are included.

ECE 420 (5) N
Social and Emotional Foundations Early Learning

Explores the dimensions of social and emotional development in children birth-8 and the relationship between social and emotional development and behavior. Students develop and apply strategies to support positive social and emotional development and demonstrate competency in teaching practice that promote positive behavior in early learning settings.

ECE 430 (3) N
Linguistically Diverse Learners

Focuses on the language, literacy and communication skills of children who are dual language learners, ages birth through 8. Assessment and instruction strategies applied to early learning settings. Emphasis is placed on identifying, strengthening and building upon the family and community connections of young children who are dual language learners.

ECE 450 (5) N
Child Development and Assessment

Examines child development holistically and across physical, cognitive social and emotional domains. Includes the importance of play in child development. Covers planning and preparing an effective system of ongoing assessment to support child development and the appropriate use of screening and assessment tools.

ECE 480 (5) N
Leadership and Professional Community

Examine the professionalization of the early care and education field. We will identify professional organizations and examine how they support children, families and early care and education professionals. We will look at national, state and local standard development and implementation. This course addresses the importance of advocacy for vulnerable populations and explores opportunities for professional development in a variety of formats. Students will contribute to the ECE field.

ECE 490 (5) N
Capstone

The culminating course in the Early Childhood Education BAS. Students will use an inquiry approach to research a specific area for improvement, and design and implement significant change in an educational setting. Students will reflect upon previous coursework, research and teaching practice to produce a culminating document that will include a revised teaching philosophy.

ECED& 105 (5) C | N
Introduction to Early Childhood Education

Explore the foundations of early childhood education. Examine theories defining the field, issues and trends, best practices, and program models. Observe children, professionals, and programs in action. Students are required to work or volunteer directly with children.

ECED& 107 (5) C | N
Health, Safety, and Nutrition

Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, learn about responsibilities for mandated reporting, and learn about available community resources. This course requires students to work or volunteer directly with children outside of class time.

ECED& 120 (2) C | N
Practicum: Nurturing Relationships

In an early learning setting, students will engage in establishing nurturing, supportive relationships with all children and professional peers. Focus on children's health & safety, promoting growth & development, and creating a culturally responsive environment. This course requires students to spend time in an early learning setting outside of class.

ECED 121 (4) C
Practicum: Nurturing Relationships II

This is the second of three field practicum classes. Apply best practices for engaging in nurturing relationships with children in an early learning setting. Focus on keeping children healthy and safe while promoting growth and development. Prerequisite: ECED 120.

ECED 122 (4) C
Practicum: Nurturing Relationships III

This is the third of three field practicum classes. Apply best practices for engaging in nurturing relationships with children in an early learning setting. Focus on keeping children healthy and safe while promoting growth and development. Prerequisite: ECED 121.

ECED& 132 (3) C | N
Infants and Toddlers

Examine the unique developmental needs of infants & toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally retentive care. Work/volunteer directly with children outside of class time.

ECED& 134 (3) C | N
Family Child Care

Learn how to manage a family child care program. Topics include: licensing requirements, record-keeping, relationship building, communication strategies, guiding behavior, and promoting growth and development. Students must spend time in an early learning setting outside of class.

ECED& 139 (3) C | N
Administration

Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available fo Washington State licensing and National Association for the Education of Young Children (NAEYC) standard compliance.

ECED& 160 (5) C | N
Curriculum Development

Investigate learning theory, program planning, tools and methods for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills and growth in children birth through age 8 utilizing developmentally appropriate and culturally responsive practice.

ECED& 170 (3) C | N
Environments-Young Child

This class focuses on the adult's role in designing, evaluating, and improving indoor and outdoor environments that ensure quality learning and nurturing experiences, and optimize the development of young children. This course requires the student to directly work/volunteer with children.

ECED& 180 (3) C | N
Language and Literacy Development

Teaching strategies for language acquisition and literacy skill development are examined at each developmental stage (birth-age 8) through the four interrelated areas of speaking, listening, writing, and reading. This course requires the student to directly work/volunteer with children.

ECED& 190 (3) C | N
Observing and Assessment

Collect and record observation and assessment data in order to plan for and support the child, the family, the group, and the community. Practice reflection techniques, summarizing conclusions, and communicating findings.

ECED 250 (5) N
Infant/Toddler Mental Health

This course examines the dynamics of infant and toddler mental health development including attachment, trauma, toxic stress and lasting impacts of childhood experiences. Students will identify protective and risk factors for mental health in children from prenatal- 3 years of age. We will compare screening, assessment, and collaborative treatment strategies.

Early Childhood Education**CCE 145 (1-4) N**
Music and Creative Expression

Stimulates both beginning and experienced early childhood teachers to provide a wide variety of musical activities for children's active participation in movement and music making. Develop ease in supporting and leading musical activities while learning a method for selecting and planning a fun, creative and skill-developing music education program for preschool children and older toddlers.

CCE 195 (3) N
Art for Young Children

Provides the experience of art to children 3 to 8 years old. Explores self-expression in painting, drawing, clay and collage. Conduct a series of art classes for children to practice relating in ways that facilitate the children's self-expression in these fundamental media.

CCE 200 (3) N
Children and Nature

Discover the joys of connecting young children with nature. Nature influences social skills, enhances learning, fuels imagination, instills a reverence for the environment and helps children with sensory integration deficit.

CCE 240 (3) N
Multicultural Dialogues in Early Childhood Educ

Examines the concept of multiculturalism and how it relates to the ECE classroom. Through dialogues, readings and projects, students assess their beliefs, teaching environment and style in order to identify changes and promote respect for differences that accompany children and families.

CCE 261 (1-6) N
Readings in Early Childhood Education

Individualized program of study relating to specific problem or content area under faculty supervision. Credits based on work accomplished. Prereq: Permission.

Economics**ECON 100 (5) C | N**
Survey of Economics

Examines basic principles of economics, determination of national prosperity, income distribution, the role of government, price determination, allocation of resources, economic systems and market behavior.

ECON 101 (5) N**Introduction to Economics in the World of Work**

Intro to economics. Covers how the process of work, job creation and compensation are affected by changing conditions, markets and institutional constraints.

ECON& 201 (5) C | N | S**Micro Economics**

Covers the concepts of production, consumption and distribution with emphasis on price determination, production costs and market structures. Application of economic reasoning to public issues and business.

ECON& 202 (5) C | N | S**Macro Economics**

Intro to the macroeconomic measures in the economy: GDP, unemployment and inflation. Examines monetary and fiscal policies and their effects on the interest rate and inflation. Covers economic growth and business cycles.

Education**EDUC& 115 (5) C | N****Child Development**

Build foundation for explaining how children develop in all domains, conception through early adolescence. Explore various developmental theories, methods for documenting growth, and impact of brain development. Topics and issues addressed: stress, trauma, culture, race, gender identity, socioeconomic status, family status, language, and health.

EDUC& 130 (3) C | N**Guiding Behavior**

Examine the principles and theories promoting social competence in young children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences. Work/volunteer directly with children.

EDUC& 136 (3) C | N**School-Age Care**

Develop skills to provide developmentally appropriate and culturally relevant activities and care, such as preparing the environment, implementing curriculum, building relationships, guiding academic/social skill development, and developing community outreach. Work/volunteer directly with children outside of class.

EDUC& 150 (3) C | N**Child Family and Community**

Develop understanding about the family and community contexts in which a child develops. Explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication. This course requires the student to directly work/volunteer with children outside of class time.

EDUC 197, 198, 199 (1-5) C**Work Experience-Education**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply education knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

EDUC 200 (1-5) C | N**Peer Tutoring**

Tutor training and/or experience. Focus on tutoring techniques and problems in any setting. For more information contact Division offices in Humanities, Math & Science, Allied Health, Business, or Education on your campus.

EDUC& 203 (3) N**Exceptional Child**

Emphasizes diversity and a value-based approach to human exceptionality and disability using a lifespan view. An historical perspective covers current trends and practices in early intervention, special and general education and life-long supports for individuals with disabilities and their families.

EDUC& 205 (5) C**Introduction to Education with Field Experience**

Intro to K-12 education. Explores the complexity and dynamics of today's K-12 education environment. Includes suggestions for all-inclusive teaching methods geared toward the increasingly diverse multi-ethnic, multi-cultural and multi-lingual student population. Covers the new federal education bill, as well as the state of Washington student learning goals including the Essential Academic Learning Requirements (EALRS) for student learning.

EDUC 210 (5) C**Introduction to Bilingual ED:Strategies & Method**

Fundamental principles in the education of second language learners. Examines their unique academic needs and defines effective bilingual education strategies to address these needs, including the effects of culture on language development and content-area instruction.

EDUC 211 (5) C**Introduction to Bilingual ED:History & Theory**

Focuses on historical, legislative and socio-political background, including arguments for and against bilingual education. Includes a survey of research in bilingual education program design and an overview of the organization and structure of bilingual programs.

EDUC 219 (5) N**Practicum: Instructional Interactions**

This is the second practicum course in the early childhood education program. In an early learning setting, students will apply developmentally appropriate practices to engage in supportive relationships and instructional interactions with children. Focus on positive interactions that promote child outcomes across early learning domains. Requires the student to directly work/volunteer with children. Prerequisites: ECED& 105, ECED& 107, and ECED& 120.

EDUC 222 (5) N**Math and Science Methods in ECE**

Explores the development of math and science concepts in young children. Methods for supporting key foundational skills in math, science and cognition will be researched and applied to early learning settings. Culturally and developmentally appropriate assessment techniques will be discussed and practiced. Focus on promoting positive math and science identities, particularly for traditionally underrepresented groups in STEM fields.

EDUC 234 (3) N**Relationship Based Peer Mentoring in ECE**

This course examines the foundations of relationship based peer mentoring in early care and education settings. Students will discuss and apply best practices in relationship based adult learning, communication, cultural responsiveness, reflective practice, ethics and professionalism.

EDUC 271 (5) C**ESL Reading/Language Arts**

Learn methods of assessment, placement and instruction of ESL students in reading and language arts. Focuses on instructional techniques for the literacy level and age of the ESL student and on integration of reading and language arts.

EDUC 272 (5) C**Integrating ESL in the Mainstream Classroom**

Specifically for the teacher with bilingual and monolingual students in the same classroom. Overview of current theories of language acquisition with a focus on practical instructional strategies. Covers a wide repertoire of strategies drawn from bilingual, ESL and mainstream methodologies.

EDUC 291 (1-10) C**Using the World As A Classroom**

Provides a unique opportunity to earn credit for various travel/study experiences in an international setting.

Electrical Engineering**EEL 152 (1-9) S****Puget Sound Electrical JATC-3rd Year Apprentice**

Covers aspects of the electrical industry in theory, pipe bending motor control, N.E.C., electronics, transformers, safety, first aid, and wiring methods. Prereq: indentured in the Seattle Construction Electrician apprenticeship program. EEL 152A: 6 credits; EEL 152B: 6 credits; EEL 152C: 3.5 credits.

EEL 153 (1-9) S**Puget Sound Electrical JATC-4th Year Apprentice**

Covers aspects of the electrical industry in theory, pipe bending motor control, N.E.C., electronics, transformers, safety, first aid, and wiring methods. Prereq: indentured in the Seattle Construction Electrician apprenticeship program. EEL 153A: 6 credits; EEL 153B: 6 credits; EEL 153C: 3.5 credits.

EEL 154 (1-10) S**Puget Sound Electrical Apprentice - 5th Year**

To cover aspects of the electrical industry in theory, pipe bending motor control, N.E.C., electronics, transformers, safety, first aid, and wiring methods.

EEL 201 (5) N**Energy Generation, Conversion and Sustainability**

This Industrial Power and Control Technology course covers the principles of electrical machines (AC and DC rotating equipment, including wind turbine technology) used in electrical generation and conversion to mechanical energy. The course reviews fundamentals of electricity, magnetism, transformers, and single-phase circuits; three-phase circuits are introduced. Prerequisites: EET 109 or MATH&141 or equivalent, and EET 160 or 162.

EEL 202 (5) N**Industrial Motor Controls and Drives**

This Industrial Power and Control Technology course covers electromagnetic and electronic control and drive devices and circuits used for starting, accelerating, stopping, reversing, and protecting industrial AC and DC motors. Prerequisites: EET 109 or MATH&141 or equivalent, and EET 161.

EEL 203 (5) N**Programmable Logic Controllers**

This course describes the fundamentals of programmable logic controller (PLC) systems, including how PLCs work and providing practical information and skills about installing, programming, and troubleshooting PLC systems.

Electronics**EET 105 (2) N****Introduction to Technology**

Survey of the field of electronics and technology occupations. Learn the standards, practices and skills necessary for employment in electronic-related occupations.

EET 106 (1) N**Introduction to Soldering**

Develop competent soldering skills in removing and replacing components without causing damage to either the component or the printed circuit boards. Learn techniques to select the proper solder, soldering aids, tools and other associated test equipment.

EET 107 (5) N**Introduction to Aviation Electronics**

Intro and overview of avionics instrumentation and wiring.

EET 108 (5) N**Introduction to Fiber Optics**

Intro to fiber optics theory and maintenance as applied to information technology, aerospace, broadband and generic use. Use industry standard diagnostic test equipment, safety, routing, installation, cleaning, measurement, and inspection processes in lab. Prepare for Fiber Optic Association Certification (FOA).

EET 109 (5) N**Mathematical Applications for Circuit Analysis**

Overview of basic mathematical applications for electronic circuit analysis. Includes fundamental concepts of operations with numbers, the metric system, fundamental algebraic concepts, graphing, exponential and logarithmic functions, right angle triangles, basic trig functions, vectors and complex numbers. Prerequisite: MAT 081 or equivalent.

EET 112 (5) N**Fundamentals of Fluid Power & Alternative Energy**

Introduction to fluid power systems used in industry and to photovoltaic systems. Covers fundamentals of hydraulic and pneumatic systems including fluid power components and schematics. Includes electrical/electronic control of fluid power systems and demonstrates several electro-hydraulic servo-systems. Prereq. EET 109 or MATH&141 or higher.

EET 114 (5) N**Applied Physics**

Physics for students in a vocational technical field. Covers the basic laws of physics as applied to mechanics, matter and heat, wave motion and sound, electricity, magnetism, and light. Includes physics concepts applied to industrial-technical fields. Prerequisite: EET 109 or MATH&141..

EET 131 (5) N**IT Essentials I - A+ Certification**

First of two courses that address the knowledge required for the current Comptia A+ Certification test. Emphasizes fundamentals of installing, maintaining and configuring computer hardware, operating systems, networks and security. Lab fee.

EET 132 (5) N**IT Essentials A+ Certification Advanced**

Second of two courses that address the knowledge required for the current Comptia A+ Certification test, including installing, maintaining and configuring computer hardware, operating systems, networks and security. Lab fee.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

EET 135 (5) N
Introduction to Broadband

Introduction to broadband cable technologies, theory and skills required for technicians working in the broadband industry, including HDTV, high speed internet and telephony. Training is adapted from the Society of Cable and Telecommunications Engineers (SCTE) with input from local cable providers. Prerequisites: EET 131, EET 160 or EET 161 or instructor permission.

EET 137 (5) N
Introduction to Robotics

Intro to foundational concepts in building and programming robots. Build, program and configure a robot using various electronic devices to enable a wide variety of robotic activity.

EET 138 (5) N
Industrial Robotics

An introduction to industrial robotics, including the application, programming, troubleshooting, and servicing of state-of-the-art industrial robots and associated sensors, end effectors, and systems. Prerequisite: EET 137 or instructor permission.

EET 160 (5) N
Introduction to Electricity and Electronics

This course provides a survey of electricity and electronics fundamentals through theory presentations and hands-on laboratory experiments. It is intended for students pursuing the mechatronics degree (offered in conjunction with Shoreline Community College) or certificate options, as well as those interested in what electricity and electronics are about. EET 160 also is valuable as a refresher course for those with related previous knowledge who wish to return to the field.

EET 161 (5) N
D.C. Principles of Electronics

Covers physics as applied to electricity and magnetism, electrical and electronic terms and units. Intro to electronic measuring devices, electrical circuits, magnets, magnetism, meter movements and DC circuit analysis. Prereq: High school algebra.

EET 162 (5) N
A.C. Principles of Electronics

Second course in a series designed for an in-depth study of electronics. Covers the sinusoidal waveform, its generation and measurement, and basic AC topics including frequency, inductance, capacitance, reactance, resonance, filters, transformers. Computer models, as well as labs with the oscilloscope, are used throughout. Prerequisite: EET 161 and EET 109 or MATH& 141 or instructor permission to take EET 109 or Math& 141 concurrently during the same quarter.

EET 163 (5) N
Solid State Electronics

Analysis of characteristics of analog semiconductor devices and their applications in common electronic circuits. Course begins with construction of simple power supplies and moves to more complex amplifier circuits. Construction and measurement of devices and circuit parameters verify math analysis of circuits explored. Prerequisites: EET 162 or instructor permission.

EET 165 (5) N
Analog Circuits and Devices

Continued analysis of characteristics of analog semiconductor devices and their applications in common electronic circuits. Explanation and analysis of field-effect transistors (FETs), thyristors, and operational amplifiers, their nomenclature and identification, characteristics, parameters and basic circuit applications. Explanation and analysis of special-purpose diodes (particularly the zener) and their applications.

EET 166 (5) N
Analog Circuits and Devices II

Further study of common analog devices, circuits and subsystems in the fields of communication and industrial controls. Prereq: EET 165 or equivalent.

EET 170 (5) N
Digital Electronics & Plcs I

Fundamentals of digital electronics and interface circuits. Course covers number systems, logic gates, Boolean algebra and logic simplification (including DeMorgan's theorems and Karnaugh maps), encoders and decoders, multiplexers and demultiplexers, and an introduction to programmable logic controllers (PLCs). Prerequisite: EET 161 or instructor permission.

EET 171 (5) N
Digital Electronics & Plcs II

Fundamentals of digital electronics and interface circuits, continued. Course covers flip-flops, shift registers, counters and state machines, multivibrators (including the 555 timer IC), programmable logic, data storage and memory, analog-to-digital and digital-to-analog conversion and interfacing applications, introduction to microprocessors and programmable logic controllers (PLCs). Prerequisite: EET 170 or instructor permission.

EET 201 (5) N
Energy Generation, Conversion and Sustainability

This Industrial Power and Control Technology course covers the principles of electrical machines (AC and DC rotating equipment, including wind turbine technology) used in electrical generation and conversion to mechanical energy. The course reviews fundamentals of electricity, magnetism, transformers, and single-phase circuits; three-phase circuits are introduced. Prerequisites: EET 109 or MATH&141 or equivalent, and EET 162.

EET 202 (5) N
Industrial Motor Controls and Drives

This Industrial Power and Control Technology course covers electromagnetic and electronic control and drive devices and circuits used for starting, accelerating, stopping, reversing, and protecting industrial AC and DC motors. Prerequisites: EET 109 or MATH&141 or equivalent, and EET 161.

EET 203 (5) N
Programmable Logic Controllers

This course describes the fundamentals of programmable logic controller (PLC) systems, including how PLCs work and providing practical information and skills about installing, programming, and troubleshooting PLC systems.

EET 219 (3) N**Metrology and Measurement Science**

This course provides an introduction to the foundational knowledge and skills required for the Certified Calibration Technician Certification administered by the American Society for Quality (ASQ). The ASQ has additional requirements for work experience that candidates must fulfill before they are eligible to take the exam; check with the ASQ for more information. Prereqs: EET 114 and EET 162 or instructor permission.

EET 285 (3) N**Electronics Tech Project**

Team project course serving as a capstone experience in the electronics technology and related specialty programs. Plan, design, implement, and present an electronics-oriented project of suitable complexity. Prereq: EET 171 and 166

EET 286 (5) N**Biomedical Equipment I**

This course covers the devices, circuits, and concepts specific to the healthcare environment, including theory and operation of equipment used for patient care. Emphasis is given to patient-connected equipment, including monitors for cardiovascular, respiratory, and neurological parameters; thermometry; and electrical safety. Lab exercises emphasize maintenance, troubleshooting, repair, and calibration of such equipment. Prerequisites: EET 163, AMA 117, CHEM 121, and AMA 119 or BIOL 128.

EET 287 (5) N**Biomedical Equipment II**

This course continues the study of medical technology begun in EET 286, with a focus on equipment specific to the surgical setting, medical video, medication pumps, medical lasers; an overview of various imaging modalities; and technology used in the clinical laboratory. Lab exercises emphasize maintenance, troubleshooting, repair, and calibration of such equipment. Prerequisite: EET 286 with a grade of 2.5 or higher.

EET 291 (1-6) N**Electronics Internship**

On-the-job training for electronics students who would like to improve or enhance their electronics skills before actively seeking a job. Students intending to complete the Mechatronics degree at North Seattle College or Shoreline Community college must complete 330 hours of job-related work experience (6 credits). Prerequisite: Successful completion of at least 40 credits of electronics and associated technical coursework.

EET 297 (4) N**Biomedical Technician Externship**

Placement in a clinical engineering department or equipment manufacturer for >220 hours of mentored work experience, to integrate the theory and practice learned in EET 286 and 287. Prereq: EET 287 with 2.5 or higher.

EET 298 (1-5) N**Special Topics-Electronic Technology**

Selected topics in electronics technology. Prereq: Permission.

Emergency Department Tech**EDT 101 (4) N****Emergency Department Technician Fundamentals**

Provides the theoretical background needed for emergency department technicians to provide basic patient care and assist with the various procedures common to the emergency department.

EDT 102 (2) N**Emergency Department Tech Phlebotomy Basics**

This course will provide the students a basic understanding of the theory and practical procedures for blood collection by Emergency Department Technicians (EDT). This covers basic responsibilities, procedures, and diagnostics testing. Medical asepsis/hand washing, anatomy and physiology, medical terminology, patient reception, patient rights, consent, assessment, patient interaction and specimen custody are also included in this course. Prereq: Instructor permission.

EDT 103 (4) N**Emergency Department Technician Lab Skills**

Provides the students with the skills and techniques used by emergency department technicians on a daily basis.

EDT 104 (3) N**Emergency Department Tech Advanced Phlebotomy**

This course will provide students with advanced phlebotomy training and skills and techniques used by Emergency Department Technicians (EDT) in an Emergency Department Care setting. Basic responsibilities, procedures, and diagnostics testing will be included.

EDT 105 (4) N**Emergency Department Technician Skills II**

This course will provide students with the advanced skills and techniques used by Emergency Department Technicians (EDT) in an Emergency Department (ED) or Urgent Care setting.

EDT 106 (3) N**Emergency Department Technician Practicum**

This course will give students the opportunity to learn theory and apply practice skills acquired in the program by participating in clinical practice in an Emergency Department (ED) or Urgent Care setting as an EDT. While working in the clinical environment, students will be supervised by a site preceptor or a staff member of the ED.

Employment Training**WET 100 (1) C | N | S****Employment and Education Preparation**

This course covers a variety of job-hunting and educational planning techniques: how to identify personal skills and focus a job search, where and how to look for jobs, resume writing, cover letters, job applications, interviewing techniques, portfolio preparation, preparing and submitting the FAFSA, a survey of the resources and services provided by the college, educational interests and styles, barriers to education, and educational goal setting.

WET 102 (1) S**Roadmap to Success**

This course introduces work habits and skills development, along with workshop practice on resumes, interviewing, financial literacy, and goal setting.

WET 105 (1-10) C | S**Education and Career Exploration**

Provides effective strategies and skill building to make informed academic and career decisions. Students explore education programs and careers compatible with skills, interests, values, and goals. Career resources are explored, evaluated, and implemented in the development of an education and work plan and portfolio. Prereq: ENGL 092 or ESL 093 with a minimum GPA of 2.0.

WET 150 (1-12) S**Computer/Employment Training**

140 contact hours of computer training, employment readiness, study skills, skill and interest assessment for dislocated workers.

Engineering**ENGR 110 (2) C | N | S****Engineering Orientation**

Covers fields of engineering, career options and general information.

ENGR& 111 (4) S**Engineering Graphics I**

Covers principles of orthographic projection, freehand sketching, pictorials, lettering, scales and use of instruments, basic dimensioning and descriptive geometry. Intro to computer-aided and designed drafting. Prereq: MATH& 141.

ENGR& 112 (4) S**Engineering Graphics 2**

Continuation of ENGR& 111. Includes basic principles of revolution and principles used to solve problems relating to curved and warped surfaces; intersection of surfaces; development of common shapes and surfaces; and procedures for finding the locus of a line. Prereq: ENGR& 111.

ENGR 116 (4) S**Engineering Design and Creativity**

Examine the nature of creativity and its process. Intro to analysis and solution of engineering problems, applications of vectors and calculus in statics and dynamics.

ENGR 141 (5) S**Scientific Programming**

Covers problem analysis, algorithm design, numerical techniques and the elements of programming using MATLAB or similar high-level programming language. Emphasis on learning how to write clean, efficient and well-documented programs for modeling of scientific and engineering problems. Prereq: MATH& 142 or higher.

ENGR 142 (5) C**Computer Programming**

Central: Learn the general principles of modern programming, including how to design, implement, document, test and debug computer programs. Based on Java. Covers objects, messages, expressions, statements, methods, classes, conditionals, iterations, arrays and collections. Prereq: CSC 110 and MATH& 141 (C). ENGR 142 may be taken as CSC 142.. South: Intro to computer science for scientists and engineers. Emphasizes design, algorithms (variables, expressions, statements), abstraction (data types, functions) and analysis (correctness, efficiency). Prereq: CSC 110 and MATH& 141 (S). ENGR 142 May be taken as CSC 142

ENGR& 204 (5) C | N | S**Electrical Circuits**

Covers basic circuit and systems concepts. Includes resistors, sources, capacitors, inductors and operational amplifiers. Includes solution of first and second order linear differential equations associated with basic circuit forms. Prereq: PHYS& 222 and MATH& 152.

ENGR& 214 (5) C | N | S**Statics**

Covers force and moment systems, equilibrium principles for particles and rigid bodies, analysis by vector algebra of two- and three-dimensional structures, frames, machines, trusses and beams. Includes analysis of internal forces, friction, centroids, and moment of inertia. Prereq: MATH& 152 and PHYS& 221.

ENGR& 215 (5) C | N | S**Dynamics**

Studies motion and the forces which affect the motion, including rectilinear motion, curvilinear motion, plane motion, dynamic force analysis, work and energy, impulse and momentum. Prereq: ENGR& 214 with a 2.5 or better and MATH& 152.

ENGR& 224 (5) C**Thermodynamics**

Intro to thermodynamics from a macroscopic point of view. Development of the laws of thermodynamics and application to energy transformations and state changes. Prereq: MATH& 153, PHYS& 222 and CHEM& 161.

ENGR& 225 (5) C | N | S**Mechanics of Materials**

Covers basic relationships between axial, torsion, bending and shear loads acting on solid elements such as rods, shafts, columns and beams and their allowable stress, strains and deformations, Mohr's circle of stress. Prereq: ENGR& 214 and MATH& 152.

ENGR 240 (5) C | N**Introduction to Numerical Methods**

Covers numerical solutions to engineering problems using modern scientific computing tools. Includes intro to MATLAB programming, matrix algebra, finding roots, curve-fitting, integration, differential equations. Prereq: MATH& 152 and CSC 110.

ENGR 299 (1-5) C | N | S**Independent Study**

Independent study of approved engineering topics. Prereq: Permission.

Engineering Graphics & Design Technology**TDR 100 (5) N****Basic BIM for Design and Construction**

Intro to basic Building Information Management/Modeling(BIM) practices using Autodesk's Revit program. Focuses on familiarization with BIM environment including drawing commands, efficiencies of CAD vs. BIM. Emphasizes production skills.

TDR 101 (5) N**Intermediate BIM for Design and Construction**

Covers drafting techniques for structural design using BIM with Autodesk's Revit Structure. Work with beam, column, structural details, schedules and analysis of all structural members. Lab. Prereq: TDR 100 or permission.

TDR 102 (5) N**Advanced BIM for Design and Construction**

Focus on whole commercial building creation, including details, construction drawings, building management and plotting as they relate to construction, design and sustainable applications. Focuses on Revit Architecture, MEP and Structure. Lab. Prereq: TDR 101 or permission.

TDR 103 (4) N**Energy Analysis Fr Building Information Modeling**

Continuation of TDR 102. Focuses on building Life Cycle Assessment (LCA), Building for Environmental Economic Stability (BEES), building envelope considerations, achievable green performance and use of green analysis software. Prerequisite: TDR 100, 101 and 102 or permission.

TDR 105 (1) S**Technical Employment Preparation**

Intro to the pre-employment components of the CAD / Design program. Covers job search techniques including resume writing, cover letters, job applications, interviewing techniques, industry visits, and portfolio preparation. Prereq: ENGL 105. Coreq: TDR 123.

TDR 109 (1) N**Architectural Engineering Lab**

A supervised drafting development lab where students can work on class projects to increase competency and hands-on skills using appropriate software or hand drafting techniques. May be repeated.

TDR 111 (5) N
Basic CAD Drafting for Construction and Design

Intro to basic Computer Aided Drafting practices using Autodesk's AutoCAD program. Focus on drawing commands, layering, scaling, dimensioning and text styles as used in construction/design applications. Emphasizes production skills. Open Lab.

TDR 112 (5) N
Intermediate CAD Drafting/Construction and Design

Continuation of TDR 111. Focuses on team usage of external sources, creation of blocks, paper space/model space, file management and exchange and plotting as it relates to construction/design Industry. May introduce isometrics and 3-D concepts. Emphasis on production skills. Prereq: TDR 111, TDR 174 or permission.

TDR 113 (5) N
Basic Drafting

Learn the basic fundamentals of hand drafting. Focus on drafting equipment and its use, basic linework, hand lettering, orthographic projections, isometrics and basic sheet layout. Select discipline options including structures for construction/design or basic mechanical drawings. Open lab.

TDR 115 (5) N
Civil and Site Drafting

Study development of site plans including basic contours, utility features, simple road layout and storm drainage features. Perform simple calculations.

TDR 121 (4) S
Drafting Technology I

Covers basic drafting knowledge, skills and standards required to prepare three-view and pictorial drawings to current industry standards. Prereq: COMPASS or SLEP test.

TDR 123 (4) S
Drafting Technology II

Covers basic principles and practices involved in the creation of production drawings including dimensions and tolerancing, sections and auxiliary views. Emphasizes standard practices and variations permitted when required for clarity. Prereq: TDR 121 or permission.

TDR 124 (5) N
Materials and Methods of Construction

Intro to basic materials used in construction, with discussion on manufacturing, fabrication, design and assembly processes for large and small buildings. Focus on steel, concrete, wood and masonry construction.

TDR 125 (4) S
Drafting Technology III

Advanced principles, techniques and application of engineering graphics including advanced dimensioning & tolerancing, detail and assembly drawings. Emphasis on standard practices ANSI, ASME or ISO and variation permitted when required for clarity. Prereq: TDR 123.

TDR 126 (4) S
Space Geometry

Covers basic principles of space geometry and use of direct projection techniques to resolve spatial relationships. Emphasizes projection techniques and application of principles to problem solutions. Prereq: TDR 121 or permission.

TDR 129 (3) S
Industrial Blueprint Reading

Primarily for the machinist. Covers the detail drawing page, title block, dimensioning, tolerancing, views of a drawing, drawing notes, drawing changes and geometric tolerancing.

TDR 131 (4) S
Introduction to CAD 2-D

Learn the features, limitations and considerations associated with the operation of a computer-aided design/drafting (CAD) system. Practice using the AutoCAD micro-based CAD software. Prereq: TDR 121 or concurrent enrollment.

TDR 133 (4) S
Intermediate CAD 2-D

Builds on skills developed in TDR 131, providing students with additional instruction on advanced commands of the AutoCAD micro-based CAD software. Prereq: TDR 131.

TDR 134 (5) N
Systems in Buildings

Focuses on the major building systems including HVAC, water and waste, fire protection, electrical and structural. Intro to the Uniform Building Code, type of construction and history. Includes heat loss calculation and lateral loads and their resisting elements, plus earth work and foundations.

TDR 135 (4) S
AutoCAD 3-D Modeling

Intro to computer-based three dimensional modeling. Explores the fundamental concepts and workflows for creating 3-D models using AutoCAD, using industry-specific design scenarios. Prereq: TDR 133 or permission.

TDR 144 (5) N
Design and Construction Environment

Intro to basic organizational, business and legal aspects of the construction/design industry. Includes business forms, contractual obligations, employment issues, registration duties, public safety and other issues which may affect business.

TDR 160 (5) N | S
Surveying/CAD Civil

Covers basics of surveying and mapping, survey planning and operations, measurement of distances, angles and elevations. Includes taking field notes, calculating and plotting the survey data. Prereq: MATH 111, 112, TDR 123, 131 or permission.

TDR 161 (5) N
Applied Mechanics II

A continuation of TDR 160. Covers basic wood beam design. Includes allowable stress, loading criteria, shear and deflection. Covers basic truss analysis.

TDR 169 (4) S
CAD - Electrical

Covers basic skills in electronic schematic drafting using 3D CAD capabilities. Learn drafting styles used in electrical plans, such as power stations, industrial and house wiring. Use layout symbols for electric power systems and plot plans for residential/commercial electrical plans. Emphasis on real world applications to engineering problems. Prereq: TDR 131 and MATH 112 or permission.

TDR 170 (5) N
Introduction to Design for 3d Printing

Introduces the 3D printing pipeline while keeping a focus on design and how to export models from CAD software. Familiarization with 3D slicing software and tools like Simplify3D and design software such as Autodesk Meshmixer. Emphasis on developing real world skills related to advanced design in manufacturing.

TDR 171 (5) N
Introduction to Solidworks

Intro to basic parametric solid modeling practices using SolidWorks or comparable programs to industry standards. Learn engineering graphics in the 3D environment including drawing commands, efficiencies of PSM vs. the 2D environment. CAD or 3D experience recommended.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN **Watch Technology**

NAME TO PREFIX

Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

TDR 173 (5) N
Advanced Design for 3d Printing

Continued application of 3D printing in the creation of prototypes to show ideas and concepts in a tangible way. Attention on advanced post-processing techniques for 3D prints and building sophisticated print jobs in Simplify3D. Significant practice troubleshooting and problem solving designs and 3D prints. Prerequisite: TDR 170.

TDR 176 (4) N
Advanced AutoCAD for Arch & Engineering Drafting

Advanced concepts of AutoCAD. Develop productivity tools such as macros, templates and system customizing. Begin to work in 3-D.

TDR 179 (4) S
CAD - Mechanical

Covers techniques used to prepare mechanical engineering drawings: basic mechanism geometry, detail and assembly drawings, emphasis on appropriate presentation of data. Prereq: TDR 123 & TDR 131

TDR 197 (1-5) S
Internship

Provides practical work experience and employment contacts by integrating academic studies with actual on-the-job training situations. Orientation to internships required prior to registration. Prereq: Permission.

TDR 200 (5) N
Introduction to Solidworks

Intro to basic parametric solid modeling practices using SolidWorks or comparable programs to industry standards. Learn engineering graphics in the 3D environment including drawing commands, efficiencies of PSM vs. the 2D environment. CAD or 3D experience recommended.

TDR 201 (5) N
Introduction to CATIA

This course will focus on students wanting to become a technical designer with emphasis in part creation, assemblies and minor surface commands. These are key elements of Catia and will be built upon on subsequent classes. Student should have strong skills in CAD applications that pertain to 3D and Solid Modeling.

TDR 202 (5) N
Intermediate CATIA

This course will focus on students wanting to become a technical designer building upon what was learned in TDR 201 with emphasis in advanced surfacing. The student should have advanced skills in various CAD applications as it pertains to 3D and solid modeling. Prereq: TDR 201 or instructor permission.

TDR 228 (4) S
CAD Sheet Metal/HVAC

Understand CAD operation including interactive graphics systems start-up, setup of drawing session, menus and commands, geometry, editing, drawing storage and retrieval using the latest version of AutoCAD. Prereq: TDR 123 & TDR 131 or permission.

TDR 230 (4) S
CAD 3-D Parametric Solid Design I

Intro to the capabilities of the 3D CAD software, using a feature-based parametric solid modeling design with many industry applications. Covers true 3-D surfaces and 3-D viewing options, the use of X, Y, Z filters and the user-defined coordinate system (UCS). Prereq: TDR 123 and 131.

TDR 231 (4) S
CAD 3-D Parametric Solid Design II

Explores 3-D graphics and construction capabilities of 3D CAD. Includes a review of point coordinate entry, X, Y & Z filters and the user coordinate system (UCS). Intro to spherical and cylindrical coordinate entry along with 3-D viewing options, 3-D geometry construction, surface mesh, region and solid modeling. Prereq: TDR 230 or permission.

TDR 236 (1) S
Design Project Management

Integration of basic elements of a design project: design process, teamwork, project planning and management and project presentation. Prereq: TDR 233 or 235, TDR 231 and MET 102.

TDR 237 (2) S
Design Project I

Practical application course utilizing previously acquired skills. Concentration on the civil aspects of a major design project. Prereq: TDR 236 or permission.

TDR 238 (2) S
Design Project II

Practical application course utilizing previously acquired skills. Concentration on the aspects of a major design project.

TDR 240 (4) S
Introduction to CATIA

Intro to CATIA (Computer Aided Three Dimensional Interactive Application). Gain understanding of the CATIA interface and how to use CATIA to create solid models of parts, assemblies and drawings. Understand how to manage parts in the context of an assembly. Produce simple parts drawings and assemblies. Prereq: TDR 135 or permission.

TDR 241 (4) S
Intermediate CATIA

Expand skills and techniques using advanced features of computer-based 3D modeling. Produce the parts, drawings and assemblies, surfacing and sheet metal drafting. Prereq: TDR 228 and 240 or permission.

TDR 243 (4) S
Basic Tool Design

Study locating and clamping of parts so that they can be formed, machined, or assembled with very simple tools or with automated machinery. Design projects include simple jigs and fixtures as well as automatic machinery tooling. Prereq: TDR 179 and 135 or permission.

TDR 245 (4) S
Design of Machine Elements

Intro to the vast field of machine design. Covers machine design principles and calculations to determine the strength, size and shape of various machine parts, such as bearings, shafts and couplings, gear drive systems, clutches and brakes. Includes loads of various types. Prereqs: TDR 179 and 272 or permission.

TDR 263 (4) S
Applied Mechanics I

Graphical methods for determining resultants and equilibrants in coplanar, parallel and non-parallel force systems, such as beams and trusses. For drafting majors. Prereq: MET 102 or permission.

TDR 268 (4) S
Architectural/Structural

Design considerations and drawing preparation required to construct a frame and masonry building. Includes floor plans, elevations, structural details, mechanical and electrical requirements. Prereq: Second-year standing or permission.

TDR 269 (5) N
Construction Estimating

Intro to quantity take-offs and pricing of materials by working on problems common to the general contractor. Focus on creating an ordered method of determining material and labor costs and other factors.

TDR 272 (4) S
Applied Mechanics II

Covers structural material strength and basic calculations involved when loading structural members and joints. For drafting majors. Prereq: TDR 263.

TDR 280 (4) S
Geometric Dimensioning & Tolerancing

Basic interpretation of geometric tolerances on engineering drawings. All studies are based on ANSI Y14.5M-1982. Prereq: TDR 179.

TDR 297 (1-10) N
Special Topics in Const Design Drafting with CAD

For students with solid AutoCAD skills. Intro to Architectural Desktop, one of Autodesk's specialized versions of the AutoCAD program. Focus on using the special tools and commands to create flexible computer models and drawing sets for construction/design applications. Emphasizes production skills. Prereq: TDR 174 and 175 or TDR 111 and 112 or permission.

TDR 298 (1-10) N | S
Special Topics, Drafting

Individual or group study in industrial drafting. Prereq: Permission.

TDR 299 (1-3) N
Drafting Design Projects

An independent laboratory course consisting of specially arranged sessions and substantial independent study to explore areas of special interest or expand specific drafting and/or computer skills.

English

See Languages & Literature, page 285.

English as a Second Language

See Languages & Literature, page 288.

Environmental Science**ENVS& 100 (5) C | N**
Survey of Environmental Science

Covers natural principles governing operation of the environment, including interaction between humans and the environment, emphasizing approaches and actions to maintain a healthy ecosystem.

ENVS& 101 (5) C | N
Intro to Environmental Science W/Lab

Covers natural principles governing operation of the environment including interaction between humans and the environment, emphasizing attitudes and actions to maintain a healthy ecosystem. This course has a lab component focusing on major topics in environmental science. Not open for credit to students who have taken ENVS 150 or ENVS&100. Prereq: ENGL& 101 eligibility and Math 098 (C); Prereq: ENGL& 101 recommended (N).

ENVS 150 (5) C | N | S
Environmental Issues and Problems

Covers natural principles governing operation of the environment including interactions between humans and the environment, emphasizing attitudes and actions to maintain a healthy ecosystem. Prereq: Eligibility for MATH 084 and ENG& 101.

ENVS 160 (5) C | N | S
Principles of Environmental Sustainability

Explores past and present contributions from major events and leaders to the sustainability movement. Principles of sustainability are used to analyze action on challenges such as urbanization, climate change, food systems and pollution. Prereq: Eligibility for ENGL& 101 and MATH 088 (or MATH 091).

ENVS 170 (5) N | S
Energy and Resources - Now and Future

Study of energy and material resources, both personal and worldwide production and consumption. Investigates the impact on the natural environment from production of coal, wind, solar and hydropower; gasoline, electricity and hydrogen fuel transportation; and natural gas and biomass heating options. Focus on sustainable alternatives to meet energy and material needs.

ENVS 196 (2) C
Spring Practicum in Sustainable Agriculture

Hands-on practical experience managing an urban farm enterprise for aspiring practitioners. Apply weekly on-farm education and training to spring operational and production tasks at the SAgE King County Student Farm. Prerequisites: Instructor's permission.

ENVS 197 (1-5) C
Internship in Sustainable Agriculture

Practical work experience at sustainable agriculture enterprises, including urban, small farm, and food system businesses, organizations, and agencies, that applies and builds upon the knowledge and skills derived from program coursework. Students establish learning objectives and outcomes with the internship providers. Prerequisites: Instructor's permission; and, must be employed or interning in a position approved by the Instructor or the Cooperative Education Office of SCC.

ENVS 198 (2) C
Summer Practicum in Sustainable Agriculture

Hands-on practical experience managing an urban farm enterprise for aspiring practitioners. Apply weekly on-farm education and training to summer operational and production tasks at the SAgE King County Student Farm. ENVS 196 recommended. Prerequisites: Permission.

ENVS 199 (2) C
Fall Practicum in Sustainable Agriculture

Hands-on practical experience managing an urban farm enterprise for aspiring practitioners. Apply weekly on-farm education and training to fall operational and production tasks at the SAgE King County Student Farm. Prior enrollment in ENVS 196 and 198 recommended. Prerequisites: Instructor's permission.

ENVS 200 (2) C
Careers Seminar in Sustainable Agriculture

Encompasses a series of presentations and panel discussions with professionals related to sustainable agriculture career options, work profiles, and the knowledge and skills required to be successful. Students identify career interests and resources, and develop education and career goals. Prereq: Eligibility for ENGL&101.

ENVS 201 (5) N
General Ecology

Covers the nature of ecosystems, energy flow, bio-geochemical cycles, population dynamics, organization and dynamics of communities and identification of environmental problems.

ENVS 202 (5) C**Agroecology: Ecological Approach to Agriculture**

Survey of agroecology, a multi-disciplinary field that applies ecological principles to the analysis and management of agriculture systems. Explore ways to create abundance and reduce external inputs by enhancing nutrient cycling, energy flow, and beneficial interactions. Field trips are an integral part of this course. Optional 2-credit service learning.

ENVS 204 (5) C**Soil Science & Conservation**

Examines soils as living ecosystems, including their physical, chemical, and biological properties. Nutrient cycling, fertility management, soil building, and site diagnosis and classification are also examined. Satisfies lab science requirement for the A.A. degree.

ENVS 216 (5) C**Urban Vegetable Production**

Design and implement a productive Pacific Northwest garden, focusing on site/crop selection, layout, soil building, intercropping, succession planting, crop rotation, season extension, harvesting and storage, cover cropping, and an analysis of production results and conservation values. Integration of urban livestock also considered. Field trips are an integral part of this course. Prior ENVS and/or BOT course recommended. Prerequisites: Eligibility for ENGL&101 and MATH 084, 087 or 091.

ENVS 298 (1-5) N**Special Topics**

Seminar of selected topics and/or activities. Prereq: Variable, dependent on topic.

ENVS 299 (1-5) C | N**Special Problems**

Independent study of approved topics in environmental sciences. Prereq: Permission.

Expanded Function Dental Auxiliary**EFDA 101 (3) C****Restorative Lab I**

Pre-clinical lab course. Practice skills and techniques on dentoforms and classmates. Clinical skills include radiographs, coronal polishing, fluoride treatments, use of dental materials, actual placement of amalgam and composite restorations on prepared typodont teeth, and taking final impressions on typodonts.

EFDA 110 (2) C**Dental Coronal Anatomy**

Covers dental anatomy related to the EFDA's scope of restorative practice: tooth morphology, anatomical features and function. Emphasizes coronal anatomy, occlusion, Black's classification of cavity preparation and basics of primary and permanent dentition.

French

See Languages & Literature, page 292.

Gender & Women's Studies**WMN 140 (5) N****Women in American History**

Focuses on the role of women in American history, with emphasis on frontier women, the industrial revolution, women's rights movements and the new feminism.

WMN 200 (5) C | N**Introduction to Gender Studies**

Interdisciplinary, multicultural intro to Women Studies focusing on the way gender, race, class, sexuality and culture have shaped women's lives. Examines why women occupy similar and different locations in the United States and international cultures. Reading includes both narrative and analytical approaches.

WMN 205 (5) C | N**Women in the Global Context**

Interdisciplinary intro to the study of women in Asia, Africa, Latin America, the Middle East and/or indigenous women in some Western societies. Explores commonalities and differences among women in various societies and cultures. Focuses on women from specific societies or regions varying by instructor.

WMN 213 (5) C | N**Women and Politics**

Intro to concepts of power and policy issues as they relate to women. Covers theoretical, historical and empirical studies of women's participation in social and political movements nationally and internationally. Includes women's diverse roles in relation to family, economics, labor, government and law.

WMN 257 (5) C | N**Psychology of Gender**

Explores major psychological theories of sex differences. Examines studies of sex-role development and biological and environmental influences that may determine and maintain sex differences in aggression, cognitive abilities, achievement, motivation, affiliation and sexuality. May be taken as PSYC 257.

WMN 298 (1-5) N**Special Topics in Gender and Women Studies**

Independent research and writing on selected women studies topics under faculty supervision.

General Educational Development (GED)**GED 050 (1-15) C | N | S****Basic GED Preparation 5**

Interactive course where students learn and apply knowledge of math, reading, and writing skills in academic content areas that will help them pass the GED exams. Reasoning and critical thinking skills are also emphasized. Prerequisite: Successful completion of GED Level 5 with an "S" grade"; appropriate score on ABE Department Math Placement Test and/or CASAS; or, Instructor's permission.

GED 051 (1-10) C | N | S**Basic GED Preparation Math Level 5**

Prepares learners to use the math concepts and applications needed to pass the math portion of the official GED test.

GED 052 (1-15) C | N | S**Basic GED Preparation Communication Level 5**

An interactive lecture or hybrid course to learn and apply knowledge of reading and writing skills in academic content areas to pass the GED exams in Language Arts. Includes learning reasoning and critical thinking skills to improve success in passing GED exams in the content areas.

GED 060 (1-15) C | N | S**Advanced GED Preparation Level 6**

Interactive course where students learn and apply knowledge of math, reading, and writing skills in academic content areas that will help them pass the GED exams. Reasoning and critical thinking skills are also emphasized. Prerequisite: Successful completion of GED 050 with an "S" grade," appropriate score on ABE Department Math Placement Test, CASAS, or Instructor's permission.

GED 061 (1-10) C | N | S**Advanced GED Preparation Math Level 6**

Prepares learners to use the math concepts and applications needed to pass the math portion of the official GED test.

GED 062 (1-15) C | N**Advanced GED Preparation Communication Level 6**

An interactive lecture or hybrid course to learn and apply knowledge of reading and writing skills in academic content areas to pass the GED exams in Language Arts. Includes learning reasoning and critical thinking skills to improve success in passing GED exams in the content areas. Prereq: Student intake testing placement, successful completion of pre-GED communication class, or instructor permission.

GED 064 (1-15) S**Adv Computer Assisted GED Preparation Level 6**

Improves general reading, writing, math and test-taking skills for the GED tests through the use of micro-computers and relevant basic skills software.

Geography**GEOG& 100 (5) C | S****Introduction to Geography**

Introduction to major concepts of geography, climate, landforms, and biogeochemical processes. The course also concentrates on analysis of population demographics, culture, language and religion, food production, patterns of urbanization, paths to economic growth, resource use, and environmental concerns in a globalized world. Prereq: ENGL& 101.

GEOG& 200 (5) C | N | S**Human Geography**

Intro to human patterns on the Earth's surface, distribution, political divisions and economic activities. Emphasis on the role of geography in understanding the developments and diffusion of value systems and cultural differences in the 20th century.

GEOG 230 (5) C**Urbanization in Developing Nations**

Focus on cities in their cultural and economic contexts, geographical patterns, internal structure, current problems in rapidly growing cities and selected policy solutions.

Geology**GEOL& 101 (5) C | N | S****Intro Physical Geology**

Explores the physical properties and processes of the Earth, including: mineral and rock identification, the rock cycle, plate tectonics, surface processes, and natural hazards related to geologic features such as earthquakes, tsunamis, landslides, and others.

GEOL& 103 (5) N**Historical Geology: Evolution of the Earth**

Studies the formation and development through time of the solid Earth, atmosphere, and biosphere. Covers past movements and locations of the continents and interpretation of past environments as recorded in rock and fossil records. Lab included. Field trips may be required.

GEOL 105 (5) C**Introductory Field Geology**

Survey of physical geology, including the Earth's interior and exterior. Covers the origin and evolution of the Earth, rocks and minerals, surface processes such as glaciation, river erosion and transport and mass movement. Field exercises involve data collection and analysis. Course may require extended overnight stays. Lab included.

GEOL 106 (5) C | N | S**Dinosaurs**

Studies dinosaurs and the world they lived in. Covers origins, evolution, biology, behavior and extinction of dinosaurs and their relationship to birds and mammals. Intro to history of the biosphere, Earth's climate and its changes.

GEOL 108 (5) N | S**Minerals Gems and Fossils**

Intro to the nature of earth materials, including minerals, with an emphasis on gem minerals and fossils. Covers mineral composition, structure, physical properties, and origins, along with gemology, color mechanisms, history and lore of gems, and uses of gems. Covers fossil identification, preservation and interpretation. Lab class.

GEOL& 110 (5) N | S**Environmental Geology: Geology and the Human Env**

Covers the effects of geologic processes and materials on human activity, and the effects of human activity on the Earth. Emphasizes awareness of geologic aspects of our everyday environment including the identification of problems, and the formulation and evaluation of solutions. Lab included.

GEOL 111 (1) C | N**Geology Field Day**

A one-day field trip and five-hour lecture on active and ancient geology in the Pacific Northwest. Topics include faults, glaciers, fossils, landslides, and the Cascade Mountain Range. Lab credit. Also offered as SCI 111.

GEOL& 115 (5) N**Geology National Parks**

Study of the geology and geologic history of selected national parks and monuments in the context of the geologic history of North America, the Pacific Basin, and the Atlantic Ocean. Labs deal primarily with geologic maps. At least two field trips required.

GEOL 118 (1) C | N**Volcano Field Day**

Introduction to the origin and destruction of the Cascade volcanoes such as Mount St. Helens, Mount Rainier and Glacier Peak. Includes five hours of lecture and a one-day field trip. Lab credit. Also offered as SCI 118.

GEOL 207 (5) N**the Ice Ages**

Provides a history of the plants, animals, and continental ice sheets of the last three million years. Special attention to fossil and archaeological records of human beings. Lab included.

GEOL& 208 (5) N**Geology of the Pacific Northwest**

Covers the geologic history of the Pacific Northwest including Washington, Oregon, Idaho, and Alaska. Emphasis on use of geologic principles to interpret present landscapes. Lab included. Prereq: GEOL&101 or instructor permission.

GEOL 299 (1-5) N**Independent Study**

Independent study of selected geology topics. Prereq: GEOL& 101 and permission.

German

See Languages & Literature, page 292.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN Watch Technology

NAME TO PREFIX
Watch Technology HIN

Common Course Numbering explanation is on page 202.

Graphic Design

DES 110 (4) C
History of Graphic Design

Explores the global history of visual communication and the graphic arts in media, commerce, and the social sphere. The field of graphic design, in particular, has continually evolved to align with and ultimately elevate the ever-changing landscape of technology and culture. Prereq: Successful completion of the program through preceding quarter.

DES 114 (3) C
Media Publishing I - Digital Assets

Intro to the Macintosh, the Mac OS and its functions. Learn Photoshop and Illustrator (part of Adobe's Creative Suite). Understand and use the Mac computer and Adobe software for web content, print content and for mobile devices by preparing digital assets such as wireframes, logos, images.

DES 121 (4) C
Typography I

Learn basic principles of micro typography, including the anatomy of letters, adapting letter forms, letter and word spacing, line spacing, and simple hierarchy of text. Create expressive typography.

DES 122 (4) C
Typography II

Focuses on using the grid for page construction. Explores page structure and hierarchy principles and grid systems.

DES 131 (4) C
Graphic Design I

Introduces students to the terminology, process, and social context of graphic design. Students will utilize traditional image making techniques and learn the language of graphic design for building communication and presentation skills. Prereq: Acceptance into the Graphic Design program.

DES 132 (4) C
Graphic Design II

Intro to color and its application to design, including the mechanics of light, the physiology of vision and the psychology of color. Study ways color is used in culture and methods designers employ in making their work effective.

DES 133 (4) C
Graphic Design III

Covers the design of packaging: three-dimensionality, marketing insights and innovations in technology. Study consumption and how packaging communicates to consumers. Projects may include soda bottles, folding box packages and a line of products, with high quality mockups.

DES 145 (4) C
Graphic Production I

Intro to the basic skills, concepts and techniques of successfully using the vector-based graphics program Adobe Illustrator. .

DES 146 (4) C
Graphic Production II

Intro to the basic skills, concepts and techniques of successfully using the page layout program Adobe InDesign.

DES 147 (4) C
Graphic Production III

Intro to the basic skills, concepts and techniques of successfully using the pixel-based program Adobe Photoshop. Learn to color correct a photo using curves and levels, create a non-destructive work flow and select the correct tool for the job.

DES 151 (4) C
Interactive I

This course will address the considerations needed when designing an interface and the differences and similarities between screen-based media and print-based media. This course is intended for the beginning to intermediate graphic design student who has an interest in designing interfaces for websites, mobile devices, kiosks, computer applications, and more.

DES 152 (4) C
Interactive II

Covers the basics of webpage design and development. Addresses the challenges of developing a series of webpages using the structural elements of HTML and the stylistic elements of CSS.

DES 153 (4) C
Interactive III

Design the user-experience for a website and build the final site using HTML and CSS. Includes the User-Centered Design process, designing a site architecture, conducting usability studies, producing task-flows and wireframes, and creating responsive site layouts.

DES 197 (1-3) C
Work Experience-Graphic Design

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply graphic design knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

DES 223 (4) C
Typography III

Interpret an author's written language into a meaningful visual form using the basic principles of traditional book design and typographic conventions. Create a case-bound book that eloquently expresses the author's words filtered through the student's interpretation.

DES 231 (4) C
Graphic Design IV

Explore advertising, art direction and photo direction, emphasizing expressive, creative and collaborative problem solving. Develop further research skills. Learn techniques for creating engaging ads for a variety of media and targeting the right market with the right messages.

DES 232 (4) C
Graphic Design V

Explores typographic rules, design principles, and grid formats for long documents as applied to print and screen-based media. Students research, strategize, and design long documents for both print medium and screen-based media. Prereq: Successful completion of the program through preceding quarter.

DES 233 (4) C
Graphic Design VI

Covers poster design as a form of visual communication. Emphasizes conceptual visual problem-solving for various audiences and outcomes. Solve various poster design problems with a variety of visual approaches, including typography, graphics, illustration and/or photography.

DES 234 (4) C
Graphic Design VII

Design and produce a corporate identity system, including trademark or logo and applied graphics, for a mix of visual applications for a business. Covers research, mind-mapping, creative development, contemporary design approaches, and creating a complete system.

DES 235 (4) C
Graphic Design VIII

Design and install the SCCA Portfolio Show. Working in teams, explore creative options to the layout and navigation of the show. Include 2-D and 3-D display installation options, print and web portfolios displays, motion graphics, internal and external signage in the planning.

DES 236 (4) C
Graphic Design IX

Acquire work contracts with a client and apply design skills in exchange for a fair wage or equitable trade. Gain practical experience with pricing and negotiating fees, writing proposals and design briefs, organizing efficient timelines, managing workflows, and applying basic accounting and business practices.

DES 249 (4) C
Graphic Production IV

Use InDesign and Acrobat for organization, layout and production of long documents such as magazine and books. Use guides, styles, master pages, editing tools and PDF options in simple and complex layouts. Organize files with Adobe Bridge, preflighting and packaging.

DES 251 (4) C
Interactive IV

Learn to design interfaces such as websites, mobile devices, kiosks, computer applications. Study the differences between screen-based media and print-based media.

DES 252 (4) C
Interactive V

Study a variety of content management systems, focusing on the popular, free, open-source WordPress blogging platform. Build an entire WordPress website for a community non-profit client.

DES 253 (4) C
Interactive VI

Covers User Experience (UX) design, rapid prototyping, usability testing, and Interface design challenges for smaller screens. Create animated mock-ups of mobile applications and build functional websites with HTML5 and CSS3 media queries.

DES 260 (4) C
Portfolio PREP

Develop, design and prepare a portfolio that represents individual creativity and demonstrates skills for seeking employment in the Graphic Design field. Develop a personal business card and stationery.

DES 270 (5) C
Environmental Graphics I

Explore graphics designs that are sensitive to human scale in built and natural environments, including way-finding systems, informational signs and symbols, exhibit design and ornamental solutions.

DES 280 (4) C
Special Projects I

First of three courses that expand current graphics design knowledge and skills through work on a major self-initiated design project. Emphasizes research and design process to reach a successful design solution.

DES 281 (4) C
Special Projects II

Second of three courses that expand current graphics design knowledge and skills through work on a major self-initiated design project. Emphasizes research and design process to reach a successful design solution.

DES 282 (4) C
Special Projects III

Third of three courses that expand current graphics design knowledge and skills through work on a major self-initiated design project. Emphasizes research and design process to reach a successful design solution.

DES 298 (1-5) C
Special Topics

Designed to provide a flexible format for offering in-depth studies in new and emerging technologies relevant to the Graphic Design Program.

DES 299 (1-5) C
Independent Study - Graphic Design

Independent study on selected graphic design topics.

Health**HEA 025 (5) S**
Health - Career Link

Covers physiology for understanding body functioning, including organic and functional disease and disease prevention. Prereq: Appropriate placement on English and Basic Skills tests.

HEA 090 (5) S
Health

The Health Education Course is designed to enhance the awareness and knowledge of healthy lifestyle choices. The six adolescent risk behaviors (tobacco use, dietary patterns that contribute to disease, sedentary lifestyles, sexual behaviors, alcohol and drug use, and behaviors that result in intentional and unintentional injury) will be addressed while advocating for the students to make healthy choices for their overall health. We will also cover mental and emotional health, and nutrition.

HEA 125 (5) C | S
Health and Wellness

Overview of health as an individual and community-based social construct. Analyzes health determinants and health outcomes as a function of genetics, culture, environment and health behaviors. Emphasizes a holistic model and intellectual inquiry into what constitutes health and well-being. Prereq: MATH 084 and ENGL& 101.

HEA 150 (5) N | S
Health and Human Sexuality

Covers principles of personality development, body functioning, problems and solutions. Includes human sexuality and family education relating to psycho-sexual development, behavior, problems and solutions.

HEA 160 (5) S
Human Wellness and Fitness

A comprehensive study of human fitness and wellness. Fully explores topics in physical fitness, including exercise physiology and training concepts. In addition, the course explores basic concepts in nutrition, weight management, chronic disease prevention, and health promotion. Students will assess one's fitness level and will design an individual program to achieve and/or maintain fitness.

HEA 225 (5) C | S
Global Health

Examines global patterns of health and disease as a function of economic, social and cultural determinants. Includes measurement of health outcomes, comparative analysis of health care systems, health and disease patterns of epidemiology, transnational disease, health inequalities and major players in global health.

HEA 226 (2) C
Advanced Global Health Seminar

Self-directed study, including research and presentation, of an area of global health. Prereq: HEA 225 or MATH 084, ENGL& 101 and permission.

HEA 299 (1-5) C
Independent Study
 Independent study in health education.
 Prereq: Permission.

Healthcare Services Management Bachelor of Applied Science

HSM 301 (5) C
Principles of Healthcare Services Management
 Covers basic managerial functions of healthcare services such as planning, organizing, leading, and controlling resources to accomplish organizational goals. Prereq: Permission.

HSM 322 (5) C
Human Resources
 Introduction to the functions of human resource management in health organizations with an emphasis on the relationship between human resources and organizational strategy.

HSM 325 (5) C
Financial Management in Healthcare
 Basics of healthcare financial management. Development of knowledge and skills to manage a departmental budget, capital budgets, and productivity and staffing resources.

HSM 451 (5) C
Healthcare Outcomes and Quality Management
 Overview of continuous quality improvement methods in healthcare systems. Covers the CQI process, data measurement and management, outcomes development, and outcomes assessment. Focuses on using quality data in the effective management of departmental processes and as a tool for the origination of departmental and hospital safety initiatives. Prereq: ENGL&102, MATH&146 (or equivalent), and HSM 301, each with a 2.0 or higher.

HSM 476 (1) C
Healthcare Services Management Capstone I
 The 1st of 3 successive capstone courses in Healthcare Services Mngmt. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g, education, systems improvement, etc). The 3 qtr. project concludes with a final paper & a presentation. Prereq: All BAS core classes with 2.0 or higher; or concurrent enrollment in any remaining BAS core classes.

HSM 477 (1) C
Healthcare Services Management Capstone II
 The 2nd of 3 successive capstone courses in the Healthcare Services Management degree. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g, education, systems improvement, etc). The 3 qtr. project concludes with a final paper & a presentation. Prereq: Completion of HSM 476.

HSM 478 (3) C
Healthcare Services Management Capstone III
 The last of 3 successive capstone courses in the Healthcare Services Management degree. A culmination of student learning. Students, collaborating with faculty & community mentors, synthesize the knowledge & skills to manage & complete a real-world project. Projects focus on one or more themes (e.g, education, systems improvement, etc). The 3 qtr. project concludes with a final paper & a presentation. Prereq: Successful completion of HSM 477.

HSM 479 (5) C
Healthcare Services Management Capstone
 A capstone course in the Healthcare Services Management degree representing the culmination of student learning. Students will take on a project using a faculty and/or community mentor to showcase their application of the concepts learned in the program. The content varies based on student projects and can take on many forms. Projects will be developed in collaboration with faculty and community mentors and are aligned with student interest.

Heating, Ventilation and A/C

HVC 101 (5) N
Essentials of HVAC
 First HVAC course in the HVAC Technician course of study on the fundamental principles of heating, ventilation, and air conditioning (HVAC). Covers safety, basic refrigeration, electricity, combustion and venting, air distribution and indoor air quality (IAQ). Prerequisite: BUS 169 or instructor permission.

HVC 210 (5) N
HVAC Cooling Systems Installation
 HVC 210 is the second class of a series in Heating, Ventilating and Air-Conditioning installation. The course covers the state, federal, and local codes and requirements on the installation of air conditioners, heat pumps, and hydronic heating systems. Included is the theory of, and hands-on installation of air conditioners, heat pumps, air distribution systems, refrigeration piping, electrical wiring, and basic control systems is covered. Prerequisite: HVC 101 and EET 160. Corequisite: HVC 211.

HVC 211 (5) N
HVAC Systems Installation II
 Part two of four HVAC Learning Solutions courses. Covers the basic theory and design of heating and cooling systems, including furnace, air handler service and air distribution, AC refrigeration, and heat pumps, electrical control subsystems, temperature control, system wiring, and motors. Prereq: HVC 101.

HVC 212 (5) N
HVAC System Installation & Nate PREP
 Part three of four HVAC Learning Solutions courses. Covers the repair and maintenance of cooling systems, including air handler service and air distribution, AC refrigeration, heat pumps, electrical control subsystems, temperature control, system wiring, and motors. Prereq: HVC 211.

HVC 220 (3) N
Green HVAC
 Intro to building science and sustainability with emphasis on HVAC. Includes new code updates, building science concepts, green building strategies, innovative and trending ?green? equipment options. Learn to translate new green HVAC into sales and enhanced comfort. Work on the link between building science and business science.

HVC 226 (5) N
HVAC Electronics and Control Systems
 Home and Building Automation Systems are centralized, interlinked, networks of hardware and software which monitor and control the environment in residential, commercial, industrial, and institutional facilities. Starting with the basics, this course covers analog and digital sensors and controls in residential and light commercial applications. Prerequisites: HVC 101 and EET 160 or instructor's permission.

HVC 228 (5) N**Energy Performance for the Field Technician**

Learn the basics of energy performance of homes including analyzing and recording various characteristics of the building envelope; the walls, ceilings, floors, doors, windows, and skylights. Learn how to perform blower door tests, duct blasting and duct air flow tests. Learn the use of infrared thermal imaging cameras to determine high loss/gain areas of the structure's envelope. Prerequisites: HVC 212 and HVC 220 or instructor permission.

High School Completion**HSC 041 (1-5) C | N | S****Fine Arts Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for fine arts credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

HSC 042 (1-5) C | S**Health Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for health credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

HSC 043 (1-5) C | N | S**Language Arts Portfolio**

Creation of a portfolio that demonstrates the mastery of the learning outcomes required by the Washington State Board of Education for language arts credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

HSC 044 (1-5) C | S**Lab Science Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for lab science credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

HSC 045 (1-5) C | N | S**Physical Education Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for physical education credit toward a high school diploma.

HSC 046 (1-5) C | S**Math Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for math credit toward a high school diploma. Prereq: ABE department placement and/or instructor permission.

HSC 047 (1-5) C | N**Washington State History/Government Portfolio**

Creation of a portfolio that demonstrates mastery of learning outcomes required by the Washington State Board of Education for Washington State History and Government. Course completion will fulfill the Washington State graduation requirement of 0.5 high school credit in WA State History and Government.

HSC 048 (1-5) C | N**Occupational Education Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for Occupational Education credit toward a high school diploma. Course completion will fulfill the Washington State graduation requirement of 1 high school credit in Occupational Education.

HSC 049 (1-5) C | N**Contemporary World Problems Portfolio**

Creation of a portfolio that demonstrates mastery of the learning outcomes required by the Washington State Board of Education for Contemporary World Problems credit toward a high school diploma. Course completion will fulfill the Washington State graduation requirement of 1 high school credit in Contemporary World Problems.

HSC 050 (1-5) C**United States History Portfolio**

Fosters the creation of a portfolio that demonstrates mastery of learning outcomes required by the Washington State Board of Education for US History. Course completion will fulfill the Washington State graduation requirement of 1 high school credit in US History. Prereq: ABE department placement, or Instructor's permission.

HSC 052 (1-5) N**U.S. History I**

An introductory United States history and government course which addresses the Washington State Essential Academic Learning Requirements for high school social studies. Students will explore the development of US politics, society, culture, and economy through an analysis of the issues and events surrounding European colonization through Reconstruction.

HSC 053 (1-5) N**Life Science**

An introductory life science course. Includes an introduction to diversity of life, processes within cells, maintenance and stability of populations, and mechanisms of evolution.

HSC 054 (1-5) N**Physical Science**

An algebra-based introductory physical science course. Includes an introduction to scientific inquiry, motion, forces, energy, momentum, gravity, and machines.

HSC 055 (1-5) C**Science Portfolio**

Creation of a portfolio that demonstrates mastery of learning outcomes required by the Washington State Board of Education for science. Course completion will fulfill the Washington State graduation requirement of 1.0 high school credit in science. Prerequisite: ABE department placement and/or instructor permission.

HSC 082 (1-5) C | N**Hsc Special Topics**

Designed to allow for special course offerings that are responsive to student need and/or current and emerging topics. Prerequisite: Placement by permission.

HSC 091 (5) C**EDP Skills Enhancement I**

Assessment portion of the National External Diploma Program (EDP). Measures reading, writing and math skills. Work individually with an instructor to identify skills needed for successful completion of the diploma program. www.nedp.org

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN **Watch Technology**

NAME TO PREFIX

Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

HSC 092 (5) C
EDP Skills Enhancement II

Project portion of the National External Diploma Program (EDP). Working with an instructor, complete five projects that demonstrate skills in 65 generalized competencies, including communication and computation. Demonstrate occupational preparedness by completing a sixth individualized project based on employment or other specific experiences. Must complete these projects with 100% accuracy.

History

HIST 035 (5) S
US History 1 - Career Link

Reviews the significant contributions of the Colonial period, emphasizing political and constitutional developments from the American Revolution through Reconstruction. Emphasis on the Constitution and causes and consequences of the Civil War. Includes contributions and achievements of the Native American population.

HIST 036 (5) S
United States History II

Covers U.S. development from the Civil War to the present. Includes political, social and economic forces affecting the United States during the period of westward movement, industrialization, world wars, economic growth and world dominance. Covers the profound technological developments of the twentieth century in relation to the world of work.

HIST 037 (5) S
Washington State History - Career Link

Covers the historical development of the Pacific Northwest, with emphasis on the development of Washington state. Looks at contemporary, economic, political and social problems.

HIST 090 (5) S
Washington State History

This course covers the historical development of the Pacific Northwest, with emphasis on the development of Washington State. A major component of the course is the pre-European settlement of the Pacific Northwest, including the geography, geology, and first peoples of the region. An examination of the historical trends and events that led to the settlement of the Pacific Northwest will be covered. Contemporary economic, political, and social problems are considered.

HIST 091 (5) S
History I

American History I covers significant events in Northern America from pre-colonial times to the formation of the United States as a new nation. Specific attention will be placed on Native Americans, Colonial Life, the French and Indian War, the American Revolution, and the development of a new American Government.

HIST 092 (5) S
United States History II

This course will cover modern world historical events (primarily 20th Century) with a focus on the dominant issues that set the course of world history and the role of the United States in those events.

HIST 120 (5) C
Survey of African History

Surveys the complexity of African societies, including colonialism and its impact, the rise of socialism, the Cold War, as well as trade, kinship and traditional practices.

HIST& 126 (5) C | N | S
World Civilizations I

Reviews the historic foundations and development of civilizations from 6000 BCE to 1500 CE with emphasis on social, political, cultural and economic aspects. Studies the nature of history and its role as an intellectual and academic discipline.

HIST& 127 (5) C | N | S
World Civilizations II

Reviews the foundations of modern civilization with emphasis on the scientific, industrial and political revolutions that have transformed societies. Emphasis on the period between 1500-1750 and the resulting cross-cultural contact on a global scale.

HIST& 128 (5) C | N | S
World Civilizations III

Study of world civilization during the 19th and 20th centuries. Survey of dramatic events and often-conflicting forces and ideologies affecting contemporary life. Analysis of modern peoples? solutions to challenges and problems confronting civilization.

HIST 131 (5) C
Asian American History

Surveys the experiences of Chinese, Japanese, Filipino, Korean, Asian Indian and Southeast Asians in the United States from the mid-19th century to the present. Major themes include imperialism, labor migration, racism, exclusionary immigration laws, community formation, and resistance. Prereq: Eligibility for ENGL 099.

HIST 132 (5) S
Pacific Islands History

Explores the histories and culture of the Pacific Islands region (Melanesia, Micronesia and Polynesia) from early navigators and settlers to the colonial and postcolonial eras of the nineteenth and twentieth centuries.

HIST& 136 (5) C | S
US History 1

Reviews U.S. history from the migration of the first Native populations through Reconstruction. Focuses on encounters, territorial expansion and development of political, social, cultural, legal and economic institutions affecting the populations in regions that became the United States.

HIST& 137 (5) C
US History 2

Covers U.S. history from the Civil War to the present. Focuses on industrial and urban development, immigration, race, ethnicity and reform, politics, economics, social change and Americans at war.

HIST 140 (5) C | N | S
Women in American History

Surveys U.S. women's roles, work, status, accomplishments, issues and movements, from the pre-Colonial period to the present.

HIST& 146 (5) C | N | S
US History I: America Until 1791

Study of what is now the USA in its formative period, from its Native, European, and African origins to early nationhood. Emphasis on the American Revolution. Prereq: Eligible for English 101 (C).

HIST& 147 (5) C | N | S
US History II: the 1800s

Examines changes shaping American society in the 1800s: slavery, sectionalism, the Civil War, the westward movement, industrialization and emergence of the United States as a world power. Emphasizes social change and conflicts, including abolitionism, women's rights, labor, immigration, Manifest Destiny, Reconstruction, and the Gilded Age. Prereq: Eligible for English 101 (C).

HIST& 148 (5) C | N | S
US History III

Covers an era of conflict, war, uncertain peace, depression and great social changes. Emphasizes historical, economic, social, racial and political events that have formed the modern U.S.

HIST 150 (5) C | N
Multicultural Experiences in US History

Focuses on the history of selected communities of people of color in America. Emphasizes a historical approach to understanding contemporary American issues by examining both the lived experiences of specific people of color and the larger history of race and ethnicity in the United States.

HIST 200 (5) C
Critical Issues for the 21st Century

Examines current global issues from global perspectives, using materials from diverse history sources and the research tools of the historian.

HIST 210 (5) C | N
the Pacific Century

Study of the transformation of selected Asian Pacific countries and their histories and roles in the modern world. Emphasis on responses to the problems and challenges of economic, political and social development.

HIST 211 (5) S
History of the Middle East

Examines the history of the Middle East (Arab countries, Turkey, Iran and Israel) from the emergence of Islam to the present. Includes cultural, economic and political aspects of history with emphasis on the modern period.

HIST& 214 (5) C | N | S
Pacific Northwest History

Investigates the history of the Pacific Northwest from earliest human habitation to the present. Focuses on Washington state and the Puget Sound, contributions by diverse populations, environmental developments, and the region's changing roles within the context of national and global developments.

HIST 221 (5) N
Sports & Social Change in the Twentieth Century

Examines the development of sports and its importance for United States culture and society. Focuses on the struggles of athletes who resisted social restrictions, prejudices, gender and racial segregation and the role of sports in creating the diverse American society of the 20th century. Also explores the interplay between sports and immigration, technology and globalization.

HIST 240 (5) C
Globalization, Power, and Resistance

Explores globalization, empires, and former colonies. Critiques transnational power dynamics while exploring local resistance to protect small-scale and regional economies. Examines "soft power" initiatives and diasporic migrations related to regions like Asia (where 60% of the world's population lives). Prereq: Eligibility for ENGL099.

HIST 251 (5) C
History of China

Surveys the historical development of Chinese society from ancient times to the present, including social, economic and political aspects. Emphasis on the modern period and China's global role, including the perspectives of Chinese and ethnic minorities in the People's Republic of China.

HIST 268 (5) C | N
History of Latin America

Covers the development of the Latin American republics, from indigenous European and African foundations through independence and the 20th century. Focuses on social, economic, cultural and political development.

HIST 269 (5) C
History of the Holocaust

Interdisciplinary examination of the context and origins of the Holocaust, using history, film/documentaries and voices from the Holocaust. Emphasizes multiple perspectives, including perpetrators, victims, bystanders, resisters and rescuers. Analysis of modern institutions (nation-states, bureaucracies) and ideologies (anti-Semitism, scientific racism, nationalism) illuminates the meaning, impact and legacies of the Holocaust.

HIST 298 (1-5) C | N
Special Topics: History

Independent study in selected history topics under faculty supervision. Prereq: Permission.

HIST 299 (1-5) C
Special Problems - History

Small class format to study and discuss selected topics in history. Prereq: Permission.

Hospitality**HOS 101 (1) C**
Customer Service Practicum I

Application of basic customer service theory in a full service restaurant or pastry case. Includes busing, housekeeping, mise en place for both casual and formal restaurant settings; and customer service and sales techniques in bakery counter settings. Prereq: Permission. .

HOS 102 (1) C
Customer Service Practicum II

Students refine customer service skills by further practice in a pastry case or full-service restaurant. Includes dining room arrangement, buffet set up, customer service and wait staff duties. In bakery counter settings, students practice product rotation and merchandising. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

HOS 103 (1) C
Customer Service Practicum III

Students acquire expertise in customer service by performing opening and closing procedures, training bus staff and using a variety of service techniques including the French, English and Russian styles of table service. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

HOS 104 (1) C
Customer Service Practicum IV

Introduction to leadership positions in the front of the house. Includes maître d' duties, managing reservations, cashiering, tableside food preparation and service in a fine dining setting. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

HOS 105 (1) C**Customer Service for Specialty Desserts Breads**

Students assume responsibility for opening/closing, sales, organization and merchandising of product, and training of first-quarter students at a retail pastry case. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

HOS 108 (4) C**Dining Room and Kitchen Management**

Students experience supervisory roles in a variety of management situations in both the front and back of the house. This class also includes tableside cooking and service coordination for other students' chef of the day projects.

HOS 110 (3) C**Principles of Sanitation**

Fundamentals of food service sanitation and its importance to the industry. Includes microorganisms in food spoilage and food-borne illness, ways of limiting microbial contamination and growth, creating a clean and sanitary environment, accident prevention and first aid, Material Safety Data Sheets, sanitation in crisis situations, principles of designing safe and sanitary kitchens and government regulations. Prereq: Admission into the Culinary Arts Program.

HOS 111 (1) C**Introduction to Customer Service:Theory**

Covers the theory and operation of table service in a variety of dining environments. Includes dining room safety, proper service and etiquette, guest interaction, menu knowledge, ticket writing and use of a variety of dining room equipment. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

HOS 112 (1) C**Spreadsheet for Hospitality**

Introduces key tools and concepts in using business spreadsheet applications such as Microsoft Excel. Topics include elements of spreadsheet such as cells, rows, columns, and sheets, applying formatting, working with functions, tables, and charts. Focuses will be on Hospitality industry related tools and solutions. Prereq: Enrollment in Culinary Arts program.

HOS 122 (1) C**Purchasing and Inventory: Theory**

Intro to principles of inventory procedures. Encompasses formal and informal purchasing methods, flow of goods, food buying, legal and ethical purchasing considerations, market analysis, stock rotation, bid specifications, yield and cost comparisons, quality tests and inventory. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

HOS 123 (1) C**Food Costing Principles and Application**

Explores connection between profit and food cost; discusses product waste and defines costing terms and purchasing units. Use mathematics skills to make conversions, cost bulk and sub-recipes and calculate the selling price of a menu item. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

HOS 124 (2) C**Computerized Menu Planning**

Learn various menu layouts and designs. Learn and use proper menu language while using word processing and spreadsheet programs in the creation of menus. Perform weight to volume conversions while learning how to cost out recipes. Prereq: Successful completion of 3rd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

HOS 197 (1-5) C**Work Experience-Food and Hospitality**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply food/hospitality knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

HOS 201 (2) C**Functions of Management**

Covers management and communication theories and practices within the culinary arts and baking industries. Includes intro to the hospitality industry and overview of the Americans with Disabilities Act, sexual harassment, as well as other legal and human resource topics. Presents communications skills, functions of management, beverage management, financial statement analysis and resumé writing. Prereq: Successful completion of previous quarter's courses with minimum GPA of 2.0 in each course.

HOS 203 (1-3) S**Commercial Food Nutrition**

Complete overview of the six nutrient categories ? carbohydrates, lipids, protein, vitamins, minerals and water. Practical information on how the body uses nutrients, food sources and alternatives for each nutrient and methods of evaluating nutrition information. In evaluating dietary Intake use current USDA food guidelines.

HOS 299 (1-5) S**Individual Projects/Hospitality, Culinary Arts**

To help prepare the student to understand and the theoretical and applied aspects of team hot food competition as outlined by the American Culinary Federation (ACF). The student will be required to participate in weekly team practices and scheduled competitions. The student will work in close supervision with the instructor (coach) through the development of hand skill, menu development and hot food cooking as specified by the ACF competition guidelines. The student will be handling and preparing food items that will be eaten Requirements: Concurrent enrollment into the Culinary Arts Program

**Hospitality Management
Bachelor of Applied Science****HMG 301 (3) S****Introduction to Hospitality**

Survey of the various segments of the hospitality industry, including a brief history and current issues, with an emphasis on service.

HMG 302 (5) S**Hospitality Management**

Survey of management theories, functions, methods, and concepts applied to hospitality settings.

HMG 303 (5) S**Hospitality Marketing**

Incorporates theory and practice for an actual business, including elements of local store marketing and sales.

HMG 310 (3) S**Hospitality Computer Applications**

Explores the technology fundamentals and software applications for business functions and management practices.

HMG 311 (3) S**Lodging Operations**

Study of each hotel department by function and personnel. Presents concepts of yield management and revenue management in depth.

HMG 312 (3) S

Legal Issues in Hospitality
Study of liability, dram shop laws, contracts, and innkeeper laws with the purpose of reducing the risk environment for operators.

HMG 313 (3) S

Entrepreneurship
Concepts and issues related to new business ventures, including small businesses.

HMG 314 (5) S

Diversity and Culture in Travel and Tourism
Learn the cultural principles and practices in domestic and international travel and tourism and the impact on hospitality businesses. Emphasizes diversity.

HMG 330 (5) S

Intro to Process Improvement in Operations
This class explores the use of Business Process Improvement methodology for analyzing and improving operational effectiveness in business. The Course requires students to already have earned an AA Degree or higher or instructor permission.

HMG 401 (5) S

Cost Controls
Provides the basics of cost control management in the food and beverage industry within the Hospitality Industry.

HMG 402 (5) S

Hospitality Accounting
Explores the use of management tools for creating and analyzing operational effectiveness in the hospitality industry. In addition to credits, successful completion earns widely recognized national certification from the American Hotel and Lodging Association (AHLA).

HMG 411 (3) S

Human Resource Management
Policy and practice of human resources utilization: selecting, training, motivating, evaluating and compensating employees; labor relations; EEO legislation.

HMG 412 (5) S

Service Operations Management
Design and management of service systems in hospitality operations; control of customer interaction, personnel activities and inventory.

HMG 420 (3) S

Ethical Leadership
Nature and sources of ethical conflicts and dilemmas leaders and organizations confront in the hospitality industry.

HMG 430 (5) S

Sustainable Business Practices in Foodservice I
Policy and practice in the use of sustainable business practices in the foodservice industry including: Design of Goods and Services, Sustainability in the Supply Chain, Managing Quality, Statistical Process Control, Process Strategy, Capacity and Constraint Management, Location Strategies, Layout Strategies and Human Resources, Job Design, and Work Measurement.

HMG 489 (1) S

Professional Career Development
Preparation for industry employment, including résumé writing, interview skills, professional dress, and business etiquette.

HMG 490 (3) S

Internship Lecture
Tracks student requirement of 1000 hours of industry experiences.

HMG 491 (5) S

Hospitality Management Capstone
Project-based course integrating all components in the curriculum.

HMG 499 (1-5) S

Independent Study Hospitality Management
Independent Study Hospitality Management.

Human Development**HDC 100 (1-3) N**

Career Planning and Personal Evaluation
Intro to a systematic approach to help the individual gain a better understanding of self relating to occupational interests and goals. Includes testing and discussions of values, interests and skills.

HDC 101 (1-3) C | S

Orientation to College Success
Assists new students in their adjustment to community college. Includes goal-setting, self-motivation skills, identifying college resources, personal development and general study hints.

HDC 102 (3) C

College Survival Skills
Assists new and struggling students to identify and develop strategies for success in college and life. Includes learning effective study skills and use of college support services.

HDC 103 (3) C

Self-Awareness Through Critical Thinking, Etc.
Covers methods of comparison, inference and deduction to solve abstract and practical problems. Sequential steps in the evaluation of people, knowledge and values, in which thinking becomes more complex and less categorical and absolute. Designed to start a reflecting process that helps in understanding how cultural beliefs, attitudes and values affect the way we think.

HDC 106 (1-2) S

Interviewing, Resumes, Jobhunting, Employer/ Ee Inte
Focuses on the development of cover letters, résumés, interviewing skills and job-hunting strategies.

HDC 111 (1) C

Math Study Strategies
Introduces students to study skills to improve math success. Covers reading, note-taking, test-taking, math anxiety and college resources. Most appropriate for students who struggle with math or have not taken a math class for a long time. PREREQ: Test placement at or higher than ENGL 092, ESL 093/096 or equivalent course completion.

HDC 113 (1) C

Reading and Textbook Note Taking Strategies
Become a self-directed learner for reading and thinking academically and personally. Focuses on the development of practical knowledge and strategies to assist students towards that goal.

HDC 114 (1) C

Listening and Lecture Note Taking Strategies
Develop ability to take more effective lecture notes through exploration of some well-known note-taking systems. Enhance listening skills and learn to use notes as a study tool.

HDC 115 (1) C

Test Taking Skills and Anxiety Management
Strategies for effective test-taking and test anxiety to enhance testing performance and curriculum retention. Includes assessment of personal learning style, test and question types and strategies, study habits and environment, anxiety reduction strategies, resources and planning for testing.

HDC 119 (1-3) S

Stress Management
Focus on changing stressful situations and personal responses to them. Includes time management, cognitive restructuring, health and wellness and relaxation training.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

HDC 120 (1-5) C
Introduction to Leadership Theory and Practice

Explores theory behind visionary, servant and citizen leadership styles. Covers practical leadership skills such as time management, goal-setting and effective communication. Emphasizes involvement in various student activities and programs.

HDC 190 (1-2) C
Women in Society

Examines women's changing social roles?locally, nationally, globally?and their effects on women. Explores how these issues relate to college students facing challenges such as achieving goals, balancing responsibilities, overcoming barriers; and establishing inclusiveness. All genders encouraged to enroll.

HDC 197 (1-3) C
Leadership Practice and Application

Integrates educational studies with supervised experience with student government, campus clubs/committees, or off-campus leadership activities. Provides individualized opportunities to apply knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

Humanities

HUM 104 (5) C | N
Visual Thinking

Intro to thinking in images to release creativity; using the right brain in concert with the left brain; the focusing power of relaxed attention; idea sketching to generate, express and record ideas; use of new problem-solving strategies for problems defying usual solutions. Prereq: Placement in ENGL 098 or higher.

HUM 105 (5) C | N | S
Intercultural Communication

Examines the skills in communication and empathy required for intercultural communication. Includes an interdisciplinary study of diverse cultures and perspectives in the United States in the context of economic, political, and cultural globalization.

HUM 110 (5) C | N | S
Introduction to American Film

Examines Hollywood film-making as an art form, a business and a shaper of culture. View, discuss and critically analyze classics, features and documentaries for increased understanding of literary and artistic elements. Covers the impact of films on personal experience, American culture and the world.

HUM 112 (5) C
Responsibilities & Rights of A Free Society

Examines individual rights and responsibilities in a free society in the practical context of an individual's roles as a citizen and resident of various levels of government, family member and employee or employer. Distinguishes between legally enforceable rights and obligations and the relationship between responsibilities and legal authority. Adds values to the critical thinking process.

HUM 120 (5) S
Introduction to Asian Cinema

Survey of cinema of Asian and Asian Pacific Islander countries, including but not limited to Japan, China, Hong Kong, Taiwan, Korea, Vietnam, Cambodia, Philippines, Samoa, India and Iran. Course satisfies API Emphasis AA requirement at South. Prereq: Placement in ENG& 101.

HUM 125 (5) C
Hip-Hop Theory and Culture

Identifies and critically examines the theoretical foundations of hip-hop culture and rap music, the evolution of hip-hop philosophy and the community from which it originated. Analyzes the influences that the background, music and style of the hip-hop generation have upon a multicultural nation and world. Prereq: ENGL& 101.

HUM 130 (5) C | S
World Cinema

Survey of 20th and 21st century international films and filmmakers from around the globe. Analyzes how film themes are conveyed through narrative and style. Examines cinema as an art form that represents and influences social, political and cultural movements worldwide. Prereq: Eligible for ENGL& 101.

HUM 135 (5) N
History of Film

Historical overview of the origins and development of world cinema from 1900 to the present. Examines the various influential directors, major film movements, and national cinemas that have most influenced world cinema. Prereq: ENGL& 101 placement.

HUM 140 (5) N
Transnational Cinema

Examines films from at least four non-Western cultures as means of storytelling, as art form, and as commercial product. Covers financial, political, and ideological conditions of the making and reception of these films. Considers how globalization and post colonialism are reflected in these films and how Western viewers and critics understand and value them.

HUM 145 (5) C | N | S
Film Genre

Study of a particular film genre through a theoretical lens to discover its historical and cultural roots, significance and context.

HUM 150 (5) C
Ways of Knowing

Students study self-assessment or self-evaluation by writing and talking about their own education. Includes a study of learning styles and an exploration of individual learning styles.

HUM 155 (5) C
Sports and Culture

Provides a forum for critical analysis with multiple perspectives of the cultural framework of sports and the sports world. Includes dynamics in sports related to social issues such as race, class, gender and oppression.

HUM 197 (1-5) C
Work Experience-Humanities

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply humanities knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

HUM 200 (5) C | N
Reading the Media

Examines the way cultural identities are constructed by and represented in contemporary media such as film, television, radio and newspapers. Prereq: Placement into ENGL& 101 (N).

HUM 210 (5) C | S
Introduction to Lgbtq Studies

Introduces key themes and critical frameworks in Lesbian, Gay, Bisexual, Transgendered, and Queer (LGBTQ) Studies. Topics include histories of sexuality; forms of oppression including heterosexism, homophobia, and transphobia; resistance to oppression; violence against LGBTQ people; queer activism; diverse experiences of sexuality; and representations in literature, art, and popular media. Prereq: Satisfactory Completion of ENGL& 101.

HUM 261 (5) C
Japanese Civilization

Covers the development of Japan as a society and nation including its origins, history, government, literature, economic institutions, material culture, social organizations and religions.

HUM 270 (5) C
Comic Books, Manga and Graphic Novels

Survey the history of comic books, manga and graphic novels. Study cartoonists' works as channels of human expression and as evidence of changing and differing cultural conditions. Learn the basics of cartooning. Research self-chosen questions pertaining to "sequential art."

HUM 289 (1-10) C
Chinese Language Through Experiential Activities

Self-paced experiential education for undergraduates who plan to take advantage of language study opportunities outside the USA, such as living with a family for total language immersion or attending a language school while studying the local cultures. All course requirements must be completed upon return to the USA.

HUM 290 (1-10) C
German Language Through Experiential Activity

See course description listed for HUM 289.

HUM 291 (1-10) C
Spanish Language Through Experiential Activity

See course description listed for HUM 289.

HUM 292 (1-10) C
French Language Through Experiential Activity

See course description listed for HUM 289.

HUM 293 (1-10) C
Italian Language Through Experiential Activity

See course description listed for HUM 289.

HUM 294 (1-5) C
Independent Projects

Independent projects based on humanities research. Prereq: Permission.

HUM 297 (1-10) C
Japanese Language Through Experiential Activity

See course description listed for HUM 289.

HUM 298 (1-10) C
Portuguese Language Through Experiential Activity

See course description listed for HUM 289.

HUM 299 (1-5) C | N | S
Special Problems in Humanities

An independent study/research course in the interdisciplinary field of humanities. Prereq: Permission.

Industrial First Aid**IFS 100 (2) S**
Industrial First Aid and Safety

Offered at Duwamish Training Center. Covers mandate of Washington State's Workman's Compensation Act to recognize, treat and utilize advanced life support services available to the general public for ill or injured victims. Focuses on safety and prevention of industrial accidents and infectious disease control. Prereq: Covered by Washington State Workman's Compensation Act.

IFS 102 (1) S
Industrial First Aid (Renewal)

This course covers basic information required to perform first aid measures on suddenly ill or injured persons. It also covers the application of CPR (Cardio Pulmonary Resuscitation).

IFS 105 (1) S
Ind 1st Aid/CPR-AED Bloodborne Pathogens

Covers Industrial First Aid/CPR-AED instruction per the American Heart Association's Basic Life Support Curriculum. This course will also cover Bloodborne Pathogens using the American Academy of Orthopedic Surgeons curriculum.

Industrial Technology**INT 100 (3) S**
Overview of Manufacturing Processes

Study how machined parts are fabricated. Includes limited hands-on experience on both lathe and milling machines. For Engineering, Drafting and Quality Assurance majors.

INT 101 (3) S
Manufacturing Basics I

Students gain industry-relevant knowledge and applicable topics relevant for work in a diversified manufacturing environment. Topics include but are not limited to: Newton's Law, pressure awareness, energy, force, torque, and gas laws. An introduction to basic electricity and electron flow/charge, circuits, DC & AC, generation and safety practices.

INT 108 (3) S
Intro to Blueprint Reading for Construction

Learn to identify, read and interpret construction drawings. Emphasis on practical understanding of the processes involved in construction and interpreting them from drawings.

INT 109 (1) S
Flagging and Traffic Control

Covers basic knowledge, information and awareness of directing traffic and setting up traffic control devices within Washington state. Learn to perform flagging and traffic control job duties safely. Covers the Evergreen Safety Council Flagger Handbook. This course is recognized by the Washington State Traffic Control Oversight Committee. Flagger certification earned in this course is good for three years and is recognized in Oregon and Idaho.

INT 112 (5) S
Manufacturing Tools and Trades

Covers the use of hand tools, shop and manufacturing tools, shop safety and personal protective equipment needed to work in a diversified manufacturing lab. Includes tours to employer sites with the potential of job shadows with current employees. Complete an individual design and manufacturing project using the lab.

INT 115 (3) S
Introduction to Lean Manufacturing

Learn English language communication strategies and tools to grow and more fully participate in the implementation of the concepts of lean. Integrates English language learning with the Lean Manufacturing training environment.

INT 126 (1-12) S**Introduction to Mechatronics**

This course will provide instruction relating to entry-level positions in diverse manufacturing industries, with a focus on preparation for industrial machine maintenance and mechatronics. Content includes a survey of shop practices, safety standards, mechanical concepts, hydraulics, pneumatics, electronic assembly, and soldering.

INT 160 (1-3) S**Introduction to Safety and Health OSHA 10**

Covers both Federal OSHA (29 CFR 1910) and State of Washington (WISHA) general industry standards as they apply to the industrial manufacturing industry. Learn the hazards associated with the manufacturing industry and how to apply industry standards to ensure compliance with the occupational Health and Safety Act of 1970.

INT 163 (1) S**Hazard Communication**

The goal of this course is to enable students to recognize and understand the required elements of OSHA's written hazard communication program, including how to identify and evaluate chemical hazards using Safety Data Sheets and chemical labels.

INT 165 (3) S**OSHA 30 General Safety**

Orientation to occupational safety and health standards in general industry. Provides comprehensive safety program knowledge and skills necessary to receive OSHA/MSDS certification and provides complete information on OSHA compliance issues.

INT 180 (3) S**Introduction to Composites**

Intro to materials science. Learn the properties and processing of solid materials used in manufacturing. Covers composite materials in general and focuses on a variety of materials used in manufacturing, including ceramics, metals, and fiber reinforced polymer composites. Learn the properties and manufacturing techniques of composite fabrications.

INT 197 (1-5) S**Industrial Internship**

Spend time in the field under the guidance of an instructor and/or mentor to learn about operations, policies, procedures, cultures and behavioral standards in a given private or public sector, paid or non-paid. Meet as a group during the internship. May be used as an internship during ongoing program coursework, upon completing the coursework or both. Prereq: Permission.

Industrial Vehicle**IVP 100 (2) S****CDL Knowledge Test Preparation**

Preparatory course in order to take Washington State's Class A CDL written knowledge test. Test preparation, study skills, and terminology are covered. Specific topics include vehicle skids, gearing and hills, rollovers, safety, trip inspection, brakes and brake adjustment, coupling, emergencies, collisions, loads, stalls, and accident reporting.

IVP 101 (6) S**Fundamentals of Commercial Truck Driving**

This course is designed to give student drivers the technical and background knowledge necessary to operate a class A commercial vehicle. With successful completion, students will have basic entry level knowledge necessary to begin class A street driving, backing and maneuvering, trip inspection, and lab, range, and observation.

IVP 102 (2) S**Class A Street Driving**

This course provides basic and advanced behind-the-wheel instruction. The course deals with common and unique driving situations. Instruction in safety and environmental awareness, starting and stopping, turning, and hills will be covered.

IVP 103 (2) S**Class A Backing and Maneuvering**

This course is designed to provide CDL class A students with the understanding and ability to safely and successfully back and maneuver class A vehicles. Straight-line backing, angled backing, blind-side backing, and turns will be incorporated.

IVP 104 (2) S**Class A Trip Inspection**

This class will prepare future class A truck drivers to pass the trip inspection portion of Washington State Department of Licensing Class A CDL exam. The course includes compliance, safety, and accountability procedures from the Federal Motor Carrier Safety Association. Students will learn the 7 step inspection procedure, how to check air brakes, and how to assess tires.

IVP 105 (7) S**Class A Lab Range and Observation**

This course is designed to prepare student drivers with the technical and background knowledge necessary to test for Washington State Commercial Driver's License skills test. The focus of this course is on backing and maneuvering, street driving, sliding tandem axles, chaining up, coupling and uncoupling, and scaling loads. When successfully completed, students will have the practical driving and operational skills necessary to safely and efficiently operate a commercial motor vehicle.

IVP 106 (1-3) S**Class A Drive Experience**

This course is designed to prepare student drivers with work experience and background knowledge necessary to test for Washington State Commercial Driver's License skills test. The focus of this course is on work situations, including backing and maneuvering, street driving, sliding tandem axles, chaining up, coupling and uncoupling, and scaling loads.

Information Technology**IT 102 (5) N****Introduction to Programming**

Gain a basic understanding of the programming field. Learn to solve problems through programming logic and design and use efficient troubleshooting techniques to find and correct errors.

IT 109 (1) N**Itil Foundation Certification Preparation**

Students will learn how IT services are managed so that they meet and exceed business expectations. Prepares students for the ITIL Foundations Certificate exam. Prereq: EET 131 or instructor permission.

IT 111 (5) N**Internet and Web Authoring Using XHTML**

Survey of basic Internet services and protocols and a comprehensive intro to web development with HTML5 and CSS3. Also emphasizes web page design and website set up and maintenance.

IT 115 (5) S**Networking 1: Networking Fundamentals**

This course explores computer and communications technologies, network hardware and software, protocols, and standards. It is designed to serve the needs of those interested in understanding the field of computer networking and how it relates to other areas of Information Technology (IT). Prereqs: Placement into English 107, Math 136 or Math 146 or by instructor permission. Coreqs: IT 118 Hardware Fundamentals.

IT 118 (5) S**Hardware 1: Hardware Fundamentals**

This course explores the inter-relationships between hardware and software at the system level. Topics covered include processors and chipsets, motherboards, memory, storage devices, and multimedia devices. Diagnostic software is used to identify and isolate faulty devices and sub-systems. This course is also for those preparing for (CompTIA) A+ certification exam. Prereqs: Eligibility for English 107; Math 136 or Math 146 or by instructor permission. Coreqs: IT 115; MATH 136 or MATH 146.

IT 120 (5) N**Network Essentials - CompTIA Network +**

Understand core protocols, devices, and technologies for wired and wireless networking. Intro to current networking technology for local area networks (LANs), wide area networks (WANs) and the Internet. Introduces key concepts and practices for network security, management, and troubleshooting. Prereq: EET 131 (may be taken concurrently) or permission.

IT 122 (5) N | S**Installing and Configuring Windows Server**

This course offers in-depth coverage of core services such as Active Directory and networking services and provides validation of skills necessary to implement a core Windows Server Infrastructure into an existing enterprise environment. Additionally, the course provides the broad-based knowledge necessary to prepare students for further study in other specialized Information.

IT 124 (5) N**Network OS 2 - Windows Server**

For those new to Microsoft Windows Server and responsible for installing, configuring, securing, managing and supporting a network infrastructure using Microsoft Windows Server. Provides knowledge and skills for installing Windows Servers in host and compute environments, implementing high availability, and maintaining and monitoring server environments. Prereq: IT 122 or permission.

IT 125 (5) N**Using Structured Query Language and SQL Server**

Provides instruction in techniques for creating, modifying, deleting and querying databases using SQL. Focuses on designing and understanding SQL queries using Microsoft SQL Server, although techniques can also be used with other relational DBMS like MySQL, Oracle and Access. Recommended: Work experience or class (such as IT 101) using a DBMS.

IT 126 (5) N**Network OS 3 - Windows Network Infrastructure**

Introduces networking features and functionalities available in Windows Server. Students will learn to implement and manage DNS, DHCP, and IPAM; deploy remote access solutions such as VPN and RADIUS; manage DFS and branch cache solutions; and configure high performance network features. Provides the prerequisite knowledge and skills for IT 128. Prerequisites: IT 124 or instructor permission.

IT 128 (5) N**Network OS 4 - Windows Active Directory**

Learn to plan, implement, secure, and manage Microsoft Windows Active Directory Services in an enterprise environment. Topics include: Active Directory Configuration; Group Policy Management; Certificate Management; and Digital Rights Management. Prereq: IT 126 or permission.

IT 131 (5) S**Linux Fundamentals**

This course will provide students with the fundamental concepts of Linux/UNIX operating systems. The course covers such topics as the Linux/UNIX file system, commands, utilities, text editing, shell programming, and text processing utilities. Students will learn command line syntax and features of the popular Linux/UNIX shells, including filename generation, redirection, pipes, and quoting mechanisms.

IT 135 (5) N**Introduction to Linux**

Intro to the Linux operating system. Includes the fundamental GNU and UNIX commands, system installation, packages and libraries, file editing, and file management. Strongly recommended: Computer and Windows Operating System experience.

IT 138 (5) N**Linux for Network Administration**

This is a second course in Linux. Covers the organization of Linux-based hardware components and software tools used by the host administrator to control access, tune the system and account for system resources used. Focuses on Linux tools, network schedulers, security, remote access, performance monitoring and networking aspects of Linux. Includes multi-user, multi-tasking, time-sharing networked communications and setup and maintenance of an Internet server.

IT 140 (5) N**UNIX Shell Scripts with Perl**

Includes Unix host administration with shell scripts and the use of Perl for administrative functions, basic Internet operations on Unix systems. Focuses on data collection on the World Wide Web. Prereq: IT 138 or permission.

IT 142 (5) N | S**Network 2-Interconnecting CISCO Network Device 2**

This course introduces the student to the architecture, components, and operation of switches and routers, as well as the fundamentals of switching, routing, and the primary routing protocols. The course is designed to help students prepare for professional careers in the information and communication technology (ICT) field.

IT 143 (8) S**Network 3: Interconnect CISCO Network Device 3**

This course will equip students with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. It will ensure that students understand and are ready to deploy the latest shifts in technologies and solutions as follows: understanding of Quality of Service (QoS) elements and their applicability; how virtualized and cloud services will interact and impact enterprise networks.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

IT 144 (5) N
Network Management - CISCO II

Covers safety, networking, network protocols, LANs, WANs, Ethernet, LAN switching, Router IOS, TCP/IP Addressing, Router configuration, dynamic routing, static routing, and the network administrator's role and function. Includes decision-making and problem-solving techniques for networking. Prereq: IT 142 or instructor permission.

IT 146 (5) N
Network Management - CISCO III

Continuation of IT 144. Covers configuring LANs, Novell Networks, Internet-work Packet Exchange (IPX) routing, Interior Gateway Routing Protocol (IGRP), Wide Area Networks (WANs) and network troubleshooting. Covers Integrated Services Data Networks (ISDN), Point-to-Point Protocols (PPP) and frame relay design, configuration and maintenance. Prereq: IT 142, IT 144 or permission.

IT 150 (5) N
IT Systems Security +

Provides both Windows and Unix Network Administrators an awareness of security-related issues and the essential skills needed to implement security in such networks. First course in the Security Certified Network Professional Exam. Prerequisites IT 124, IT 135, IT 142 or instructor permission.

IT 157 (5) N
Ethical Hacking

Students will learn offensive security techniques according to the Certified Ethical Hacker (CEH) methodology. Tools and testing networks will focus on the Linux operating system. Primary emphasis will be on open source platforms.

IT 220 (5) N
Desktop Management and Virtualization

Intermediate level. Covers desktop image optimization, image building and deployment, group policy application, DHCP fundamentals, virtualization and cloud computing, virtualization software, and desktop image deployment tools. Prereq: IT 128.

IT 223 (5) S
Administering Windows Server

This course builds on IT 122 Configuring Windows Server by continuing to provide validation of skills necessary to implement a core Windows Server Infrastructure into an existing enterprise environment. Additionally, the course provides the broad-based knowledge necessary to prepare students for further study in other specialized Information Technology and security fields.

IT 296 (2) C | N | S
Certification Test PREP Net+

CompTIA Network+ is a performance-based certification that helps you develop a career in IT infrastructure by validating the hands-on skills needed to troubleshoot, configure, and manage both wired and wireless networks.

IT 297 (2) S
Certification Test PREP Icd 1

This course introduces the student to the architecture, components, and operation of switches and routers, as well as the fundamentals of switching, routing, and the primary routing protocols. The course is designed to help students prepare for professional careers in the information and communication technology (ICT) field.

IT 298 (2) N | S
Certification Test PREP Icd 2

This course will equip students with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. It will ensure that students understand and are ready to deploy the latest shifts in technologies and solutions as follows: understanding of Quality of Service (QoS) elements and their applicability; how virtualized and cloud services will interact and impact enterprise networks.

IT 299 (2) S
Certification Test PREP Security +

CompTIA Security+ is the certification globally trusted to validate foundational, vendor-neutral IT security knowledge and skills. This course covers the essential principles for network security and risk management preparing students to successfully pass the test and receive certification.

ITC 102 (5) C
Information Systems Concepts

Introduces computers and information systems, including hardware, software, data organization, data communications, systems development, the constantly changing roles of Information Technology (IT) professionals, and the evolving role of computers in society.

ITC 110 (5) C
Programming Fundamentals

Intro to basic computing concepts and object orient programming using a object oriented language such as C# or Java. Prereq: BTM 111 and eligible for MATH 098, or instructor's permission.

ITC 111 (5) C
Programming & Web Page Concepts

Covers introductory concepts in HTML, CSS, scripting, procedural, and object oriented programming languages. Prerequisite: BTM 111 with 2.0 or higher; or, appropriate score on SCC placement test (e.g., SAM/STEM Challenge).

ITC 115 (5) C
Object Oriented Programming

Intro to object oriented programming, structures and concepts with Java. Intro to the C++ language Create objects and understand how they relate to classes. Develop C++ code for practical applications. Prereq: ITC 110 o with 2.0 or higher.

ITC 134 (5) C
Intro to Software Development & Version

Introduces hardware architecture and software systems that support web applications as well as development environments and systems used to build, test and deploy applications. Explores processes utilized by developers to manage, version, test and deploy their work across *nixes, BSD's, and windows systems. Prerequisite: ITC 102 with 2.0 or higher.

ITC 136 (5) C
UNIX Operating System

Introduces the LINUX operating systems and its basic commands. Explores the unique aspects of Linux and its interoperability with other Operating Systems. Utilizes hands-on assignments utilizing a Linux-based system. This course satisfies "Restricted IT Elective" requirement at SCC. Prerequisite: MIC 101 and ITC 102 with 2.0 or higher in each; or, Instructor's permission.

ITC 140 (5) C**Introduction to Computer Hardware**

Provides a basic understanding of hardware components in personal and portable computers/peripherals. Hands-on experience installing/configuring components, and how software interacts with the hardware. Recognize problems and logically analyze symptoms to develop step-by-step troubleshooting procedures that may be applied to new and unexpected situations. Prereq: ITC 102 with a 2.0 or higher; or, Instructor's permission.

ITC 141 (5) C**Introduction to Operating Systems**

This course covers the structure and function of computer operating systems, including but not limited to installation, configuration, and maintenance of Windows and Linux environments. Topics include system concepts, system-level commands and commands relating to program, file and application management.

ITC 151 (5) C**Introduction to Security for Computing**

Introduces securing resources on computing infrastructure or computing as a service. A survey of concepts, techniques, tools and processes to minimize attack surfaces, harden exposed access, create business continuity and repair or recover from attacks. Multiple operating systems, platforms and networks structures will be examined. CompTIA's S+ will be a guiding framework for class work. Prereq: NET 120 with 2.0 or higher, Instructor-verified equivalent work experience, or Instructor's pe.

ITC 155 (5) C**Data Structures and Algorithms with JAVA**

Covers advanced Java language features and programming concepts: collections, generics, exceptions, file I/O, graphics, recursion, sorting, searching, algorithm analysis, and dynamic structures such as lists, stacks, and queues. Prerequisite: ITC 115 with a 2.0 or higher.

ITC 162 (5) C**Android Application Development I**

Covers advanced Object Programming concepts and their application in a mobile environment. Includes OOP inheritance, interfaces, and good design principles. Covers installation and configuration of Android Studio and SDK. Develop a use interface design, write Java code (or Kotlin) code to work with an activity, work with layouts, widgets and handle events. Work with themes and styles. Create a simple mobile application. Prereq: ITC 115 with a 2.0 or higher.

ITC 165 (5) C**Intermediate Android Development**

xpands knowledge of Android Fundamentals with new concepts and functionality. Topics include working with threads, services, notifications, and broadcast receivers. Explore and implement persistent data storage, and work with app widgets and content providers. Examines how to deploy apps. Prerequisite: ITC 162 with a 2.0 or higher.

ITC 172 (5) C**Web Programming with Python**

This hands-on, project driven course uses python and a framework such as django to illustrate the creation of data driven web sites. Prereq: itc 110 w/ 2.0 Or higher or instructor permission.

ITC 102 (5) C**Information Systems Concepts**

Introduces computers and information systems, including hardware, software, data organization, data communications, systems development, the constantly changing roles of Information Technology (IT) professionals, and the evolving role of computers in society.

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Introduces hardware architecture and software systems that support web applications as well as development environments and systems used to build, test and deploy applications. Explores processes utilized by developers to manage, version, test and deploy their work across *nixes, BSD's, and windows systems. Prerequisite: ITC 102 with 2.0 or higher.

ITC 136 (5) C**UNIX Operating System**

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Covers advanced Java language features and programming concepts: collections, generics, exceptions, file I/O, graphics, recursion, sorting, searching, algorithm analysis, and dynamic structures such as lists, stacks, and queues. Prerequisite: ITC 115 with a 2.0 or higher.

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ITC 165 (5) C**Intermediate Android Development**

Expands knowledge of Android Fundamentals with new concepts and functionality. Topics include working with threads, services, notifications, and broadcast receivers. Explore and implement persistent data storage, and work with app widgets and content providers. Examines how to deploy apps. Prerequisite: ITC 162 with a 2.0 or higher.

ITC 172 (5) C**Web Programming with Python**

This hands-on, project driven course uses python and a framework such as django to illustrate the creation of data driven web sites. Prereq: itc 110 w/ 2.0 Or higher or instructor permission.

ITC 205 (2) C**Software Development Career Strategies**

Provides resources, strategies, & techniques for software development job search and placement. Learn how to research employers and understand the interview and hiring processes. Create industry-oriented resumes, cover letters, and portfolios. Practice programming interview questions, discuss problem-solving strategies, and learn about online resources. Soft, or behavioral, interview questions are also discussed. Prereq: ITC 110 with a 2.0 or higher; or, ITC 115 with a 2.0 or higher.

ITC 210 (5) C**Advanced Web Development**

Provides hands-on experience working on a web team with real-world client projects. Offered with WEB 210. ITC 210 students provide the main database and programming skills while WEB 210 students provide the main design and development skills. Prereq: ITC 280 with 2.0 or higher.

ITC 220 (5) C**Database Development**

Designed to provide students with an overview of database design and development. PREREQ: BTM111 with a 2.0 or higher, or Instructor's permission.

ITC 222 (5) C**SQL**

Introduces the use of the relational database language SQL to access, summarize, and alter database information, as well as to create and alter database objects. Prereq: ITC 220 with a 2.0 or higher; or Instructor's permission.

ITC 224 (5) C**Designing Database Solutions**

Focuses on importing complex data into relational databases, creating database-driven reports, and developing business intelligence solutions. Prereq: Completion of ITC 220 and ITC 222, each with a 2.0 or higher; or, Instructor's permission.

ITC 226 (5) C**Database Administration**

Provides practice with administrative activities, security and backup on a Relational Database Management System (RDBMS), using Administrative SQL and other RDBMS tools offered by the Relational Database Management System. Prereq: Completion of ITC 222 with a 2.0 or higher, or the Instructor's permission.

ITC 230 (5) C**Advanced JavaScript**

Covers JavaScript technologies that power a modern full-stack development workflow, including server-side scripting, single-page web applications with Model-View-Controller (MVC) structure, package management, and JavaScript Object Notation (JSON) data storage. Includes building a fully-functional prototype application that can be referenced for job applications or future JavaScript-based projects. Prereq: WEB 150 with a grade of 2.0 or higher, or Instructor's permission.

ITC 240 (5) C**Web Application Programming 1**

Covers the fundamentals of programming using a server-side scripting language such as Hypertext Preprocessor (PHP). Students learn basic programming skills in order to manage variables, control structures, and arrays and to elegantly incorporate their scripts into their websites to create dynamic web pages and gather data from HTML forms. PREREQ: WEB 110 with 2.0 or higher, or Instructor's permission.

ITC 250 (5) C**Web Application Programming 2**

Covers more advanced server-side scripting. Learn how to collect data from forms and to store and retrieve data from a database. Emphasizes proper coding conventions, security, and code organization. Prereq: ITC 240 with 2.0 or higher or permission.

ITC 255 (5) C**Systems Analysis**

Students analyze complex systems for development using various tools and approaches that reflect current industry practices. Prerequisite: ITC110 with a 2.0 or higher, or Instructor's permission.

ITC 260 (5) C**Web Application Programming 3**

Builds on ITC 250. Covers more advanced server-side scripting. Into to object oriented programming principles, more advanced database interaction and popular frameworks. Prereq: ITC 250 with 2.0 or higher or permission.

ITC 262 (5) C**Android Development Capstone**

Focuses on the utilization of Android Development skills from ITC 162 and ITC 164 to ideate, design, and build a more complex and robust app as part of a team project. The group project follows the Agile SCRUM methodology, introduced to students in this course. Students use code collaboration tools. Prereq: ITC 165 with a 2.0 or higher.

ITC 285 (5) C**Capstone Project Class**

Students define a project that summarizes what they have learned in their studies, document the project and the process, and present the results. The course will also include white-boarding some aspects of their projects as prelude to job interviews. Prereq: Student must be in the last quarter of the program; or, Instructor's permission.

ITC 298 (1-5) C
Special Topics
 In-depth studies in new and emerging technologies relevant to the IT programs. Prereq: Permission.

Integrated Studies

INTS 100 (10) N
Integrated Studies
 Ten-credit Integrated Studies course organized around a theme.

INTS 101 (1-8) N
Integrated Studies Link
 Eight-credit Integrated Studies course consisting of two independent courses linked by a theme.

INTS 102 (10) N
Integrated Studies Link
 Ten-credit Integrated Studies course consisting of two independent courses linked by a theme.

International Business Bachelor of Applied Science

IBN 301 (5) N
International Management
 Covers fundamentals of the global business environment: varying political, economic, and legal environments; globalization; international organizations; regional integration. Explores the cross-cultural environment, the dimensions of culture, cross-cultural communication, motivation, leadership, and negotiation. Includes global human resources.

IBN 302 (5) N
International Marketing
 Covers fundamentals of marketing within a global context, including the impact of economic, cultural, political, legal and other environmental influences on international marketing. Analyze international cases, considering product, pricing, placement, and promotion.

IBN 303 (3) N
Ethics and International Business
 Increase awareness of ethical issues of international corporate decision-making. Learn business strategies and frameworks needed to analyze and resolve ethical problems. Explore corporate social responsibility and moral decision-making processes.

IBN 310 (5) N
Operations Management
 Intro to processes that convert resources into goods and services and extends these to suppliers, distributors, and customers. Overview of operations, including operations strategy, system and process design, lean manufacturing, continuous improvement, global supply chain, production and workforce planning, inventory and materials management, and quality improvement.

IBN 311 (3) N
International Business Law
 Examines common legal issues and risks that affect business transactions in the global marketplace. Learn the international legal framework; methods of resolving disputes including litigation, arbitration, and mediation; joint ventures; trade agreements; sales contracts; intellectual property issues; labor matters; and risks of foreign direct investment.

IBN 320 (5) N
International Finance
 Focuses on the international financial environment. Study the risks of doing business in a global environment and tools available to minimize those risks. Examines foreign exchange and political risks, working capital management, long-term investments, financing and accounting controls. Familiarity with spreadsheets is needed.

IBN 350 (5) N
International Business Practicum
 Gain practical experience in a language/culture the student is studying through an educational excursion to a country speaking that language, working or volunteering in a non-profit or business that primarily communicates in that language, or other means.

IBN 401 (5) N
International Project Management
 This course focuses on project management using the traditional approach of planning, scheduling, monitoring, and control within the broader global context. The course will cover the basic methodologies and tools of the project manager, the technical and management challenges he/she may face, and the strategic perspective of project management within the global environment. Prereq: Acceptance into the International Business BAS program.

IBN 402 (5) N
Management of Information Systems
 Overview of how businesses use information technologies and systems to achieve company objectives and attain competitive advantage in operations, product development, decision-making, and customer relations. Learn IT issues facing organizations: infrastructure, security, business intelligence, networking, the Internet, telecom, wireless, enterprise applications, e-commerce, and ethics.

IBN 410 (3) N
International Entrepreneurship
 Overview of the international entrepreneurial process, examination of the marketplace and successful business strategies. Addresses product or service selection, selling and marketing strategies, and sources of information and assistance.

IBN 420 (5) N
Global Business Strategy
 This course examines the fundamentals of business strategy development within a global context. Students learn to consider the impact of external environmental influences together with the constraints of an enterprise's internal strengths and weaknesses to develop a global strategy that competes in a competitive business environment.

IBN 490 (2) N
Research Skills for International Business
 An introduction to the organization, retrieval and evaluation of electronic and print information sources. Overview of library classification systems, scholarly resources, and the concepts underlying the research process. Universal research techniques will be explored through the use of international business-specific information resources and topics. Prerequisite: acceptance into the IB BAS program/cohort.

International Student Development

ISD 200 (1-3) N | S
Orientation to the American College
 Provides international students with the knowledge and skills necessary for success in an American community college. Prereq: Advisor permission.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN **Watch Technology**

NAME TO PREFIX

Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

International Studies

ISP 101 (5) C
the Global Society

Intro to the globalization of cultures and societies in producing the current world system. Includes human interaction, social institutions, social stratification, socialization, deviance, social control, social and cultural change within the context of international inequality.

ISP 201 (5) C | N
the Making of the 21st Century

Studies international political economy through facets/events of post-World War II era. Covers postwar changes leading to the creation of international financial institutions, rise of MNCs, emergence of the United States as a major power, globalization of production debt crisis and structural adjustment policies. Emphasis on Asian Pacific, South Asian, Sub-Saharan African and Latin American countries.

ISP 205 (5) C | N
Women in the Global Context

Interdisciplinary intro to the study of women in Asia, Africa, Latin America, the Middle East and/or indigenous women in some Western societies. Explores commonalities and differences among women in various societies and cultures. Specific societies or regions covered vary by instructor.

ISP 210 (5) N
the Pacific Century

Study of the transformation of Pacific Asia and its contribution to the modern world. Emphasis on responses to problems and challenges of economic, political and social development. Attention to impact of China and Japan on contemporary Pacific Asia.

ITL 197 (5) C
International Cooperative Education

Provides an opportunity to earn academic credit for work experience or volunteer service in an international setting. Supplemental assignments offer opportunities for research and reflection of experiences. NOTE: Job/internship/volunteer time and language school attendance must be verified.

ITL 198 (5) C
International Cooperative Education

Provides students with an opportunity to earn academic credit for work experience or volunteer service in an international setting. Supplemental assignments offer opportunities for research and reflection of experiences. NOTE: Job/internship/volunteer time and language school attendance must be verified.

Internship

IIP 101 (1) C
Internship Preparation: Exploration & Job Search

The International Internship Work Experience provides international students with a meaningful work experience in the United States related to their career objectives. It is based on the principle that one learns not only through academic achievement but also through practical experience. IIP 100 - 102 prepares students for employment in the United States. IIP is a seminar participants attend with IIP 150, the actual work experience.

IIP 102 (1) C
Internship Preparation: Skill Application/Com Exp

The International Internship Work Experience provides international students with a meaningful work experience in the United States related to their career objectives. It is based on the principle that one learns not only through academic achievement but also through practical experience. IIP 100 - 102 prepares students for employment in the United States. IIP is a seminar participants attend with IIP 150, the actual work experience.

IIP 103 (1) C
Internship Seminar: Skill Development/Wrk Exp

The International Internship Work Experience provides international students with a meaningful work experience in the United States related to their career objectives. It is based on the principle that one learns not only through academic achievement but also through practical experience. IIP 100 - 102 prepares students for employment in the United States. IIP is a seminar participants attend with IIP 150, the actual work experience.

Italian

See Languages & Literature, page 292.

Japanese

See Languages & Literature, page 292.

Journalism

JRN 199 (1-5) C
Independent Study in Journalism

Internship on a professional publication through arrangement between editor and journalism instructor, or management position on college publication. Prereq: CMST 102 or JRN 101 and 104, plus permission.

Landscape Horticulture

LHO 100 (1) S
Careers in Horticulture

Explore career opportunities in horticulture, landscaping, urban food production, and sustainable land care. Learn about work requirements, training requirements, trade organizations, professional certification, continuing education opportunities, and related four-year degree programs. Create a personal career-development plan.

LHO 108 (3) S
Weed Identification and Management

Recognize common landscape weeds and other invasive species. Use print and electronic weed identification tools. Explore weed biology, become familiar with various weed management strategies (cultural, biological, chemical) and learn how to develop an integrated approach to weed management. Helps prepare for the weed section of the WSDA pesticide license exam.

LHO 109 (3) S**Integrated Pest Management**

Principles of integrated pest management (IPM). Covers pesticide laws, health and environmental concerns, and how to develop an IPM plan. Helps prepare for the WSDA pesticide license exam.

LHO 110 (5) S**Integrated Pest and Weed Management**

Learn the principles of plant health care, integrated pest and weed management for landscape plants. Recognize common landscape weeds and invasive species. Basic information on integrated strategies for insect, disease and weed management. Covers Washington State pesticide laws, safety, and environmental concerns. Preparation for the WSDA pesticide license exam with the goal of obtaining a pesticide applicator/consultant license.

LHO 111 (4) S**Greenhouse Operations**

Experience plant growth and development through crop production. Manage plant health, environments and growth media from propagation to sales. An introduction to greenhouse structures and systems.

LHO 112 (3) S**Nursery Operations**

Examine the world of retail and wholesale nursery operations through field trips to local nurseries. Learn the basic methods of business operations and apply them in the campus retail garden center.

LHO 115 (4) S**Fall Plant Identification**

Using fall seasonal features of interest, knowledge of plant adaptations, structures, and growth, identify and properly use ornamental shrubs, trees, vines, and ground covers adapted to and utilized in the Pacific Northwest landscapes.

LHO 116 (4) S**Winter Plant Identification**

Using winter seasonal features of interest, knowledge of plant adaptations, structures, and growth, identify and properly use ornamental shrubs, trees, vines, and ground covers adapted to and utilized in the Pacific Northwest landscapes.

LHO 117 (4) S**Spring Plant Identification**

Using spring seasonal features of interest, knowledge of plant adaptations, structures, and growth, identify and properly use ornamental shrubs, trees, vines, and ground covers adapted to and utilized in the Pacific Northwest landscapes.

LHO 119 (3) S**Native Plants for Northwest Landscapes**

Explore the successful use of native plants in landscapes: plant identification and culture, native plants in urban landscapes, native plant revegetation and plant ecology. Prereq: Recommend LHO 150.

LHO 20 (3) S**Perennial Plant Identification**

Identify and properly use plants adapted to and utilized for annual perennial plantings in the Pacific Northwest. Field trips to established gardens. Recommended: LHO 150. Prereq: Recommend LHO 150.

LHO 122 (5) S**Residential Landscape Design I**

Gain a conceptual foundation in manual drafting and design, an overview of tools, elements, computer assisted design software, and the process for residential landscape design. Covers horticultural graphics, survey, measurement, analysis of site and environmental field conditions, and development of an accurate scaled plot plan and base map.

LHO 126 (5) S**Residential Landscape Design II**

Information on how to complete the residential design process from the preliminary diagram to the final conceptual planting plan including CAD and the digital design process. Emphasis on functional, aesthetic, spatial, and ecological use of plants and trees to achieve a predetermined style, theme, or user response. Prereq: LHO 122 with 2.0 or higher or permission.

LHO 135 (3) S**Introduction to Drainage & Irrigation Systems**

Study basic principles of hydraulics, drainage and irrigation systems, irrigation fixtures and apparatus.

LHO 137 (3) S**Landscape Management**

Covers sustainable maintenance practices, lawn management, tool and small equipment use, safety, landscape management plans, and the impact of design on maintenance requirements.

LHO 139 (4) S**Landscape Maintenance**

Covers sustainable maintenance practices, lawn management, tool and small equipment use, safety, landscape management plans, and the impact of design on maintenance requirements.

LHO 140 (4) S**Introduction to Arboriculture**

Explore the current science and practice of managing trees in urban landscapes. This course will help students prepare for the International Society of Arboriculture's Certified Arborist Examination.

LHO 142 (4) S**Sustainable Practices for the Urban Landscape**

Examine sustainability with an emphasis on natural processes and ecological services in constructed and managed landscape systems. The use of "closed loop" systems to conserve site resources, including the integration of perennial edibles.

LHO 150 (4) S**Horticulture Science**

Discover the basic principles of plant anatomy and physiology, growth and development, adaptations, and plant-soil-water relations. Exploration of ecology, people, plants and the environment as they relate to horticulture.

LHO 152 (3) S**Soils**

Uncover the mysteries of soil through in-depth study of soil properties, management and conservation. Explore the plant-soil-water relationship, urban soils, assessment of soils on site, soil fertility and plant nutrition.

LHO 155 (4) S**Pruning**

Learn the art and science of pruning through lecture, demonstration, and extensive field practice. Develop skill at pruning broadleaf trees and shrubs, conifers, fruit trees, vines, and roses.

LHO 160 (3) S**Garden Renovation**

Learn by renovating an existing garden. Includes site assessment, developing a timeline, removal and handling of materials, sourcing new plant material, installation and final evaluation of the process.

LHO 189 (3) S**Introduction to Landscape Construction**

Introduction to the standards and procedures of the landscape construction industry. Covers the proper and accepted methods of a multitude of landscape installations. Includes construction specifications, project sequencing and safety practices.

LHO 197 (1-7) S**Internship in Landscape Horticulture**

Students apply horticultural knowledge and skills learned throughout the LHO program directly to the local industry. Course credit can be earned through current employment or the development of opportunities found in conjunction with the WorkSource Office. Student must complete hours and submit a Training Agreement, Learning Outcomes, and a Self-Evaluation in order to pass. Prerequisite: Approval from a Faculty Mentor (Instructor) and Embedded Career Specialist.

LHO 198 (2) S**Greenhouse and Nursery Practicum I**

Hands-on practical application course for first year students pursuing the Horticulture Studies pathway. Work focuses on nursery and greenhouse production, propagation, and maintenance of plants. Prerequisites: LHO 111 or concurrent enrollment, or instructor permission.

LHO 210 (4) S**Plant Problem Diagnostics**

Learn to diagnose and manage plant problems and write prescriptions for their management: insect, disease, cultural, and environmental maladies. This course will stress a total plant health care approach that utilizes cultural, biological, and chemical strategies. Pesticide recertification credits available pending WSDA approval. Prerequisite: LHO 110 or instructor permission.

LHO 215 (4) S**Plant Propagation**

Learn the art and science of plant propagation by seed, cuttings, and division. Examine the art of grafting. Hands on instruction and field trips to plant production facilities. Recommended for Success: LHO 111.

LHO 217 (3) S**Advanced Plant Propagation**

Explore propagation and plant production. Follow plant materials propagated in LHO 215. Production and management of specific species and quantities for sale in the campus retail garden center. Prereq: LHO 215 or permission.

LHO 218 (5) S**Plant Production & Marketing**

Production of plant materials for marketing and nursery sales. Crop planning, propagation, maintenance, management and finishing. Examine and apply nursery marketing and business methods to facilitate sales of plant material. Prerequisite: LHO 111 and LHO 215.

LHO 236 (5) S**Advanced Irrigation System Design**

In-depth study of irrigation equipment, hydraulics, fluid behavior, micro-climatization, design theory, and application technology. Provide the knowledge to engineer, design and layout irrigation systems for field installation and estimate purposes. Prerequisite: LHO 135; or permission from instructor.

LHO 237 (5) S**Advanced Irrigation Diagnostics and Repair**

In-depth study of the diagnostic skills necessary to troubleshoot, locate and repair problems associated with improper design and installation, malfunctions of equipment and parts and the evaluation of a systems efficiency. Emphasis will be on turf and landscape areas. Mechanical, electrical and hydraulic systems will be analyzed. Prerequisite: LHO 135 and LHO 236; or permission from instructor.

LHO 238 (3) S**Maintenance Estimating and Bidding**

Estimating material cost and quantity for bidding individual jobs and writing annual contracts. Addresses specifications and maintenance practices including the design of efficient residential and commercial landscapes with regards to maintenance needs and requirements. Provides an understanding of business operations. Recommended for Success: LHO 139.

LHO 239 (4) S**Advanced Landscape Management**

Advanced skills and practices pertaining to sustainable landscape maintenance programs including developing landscape management plans, project management, supervising small maintenance crews, tool and small equipment maintenance and repair, and the impact of design on maintenance requirements. Prerequisite: LHO 139, Recommended for success: LHO 108 or 109, LHO 135, LHO 155.

LHO 240 (3) S**Ecological Restoration: An Introduction**

Explore the field of ecological, restoration as it applies to horticulture attempting to repair damaged landscapes. This class will investigate the science and practice of restoration through meetings with restoration practitioners, visits to restoration sites, reading and discussion, and service learning.

LHO 241 (3) S**Ecological Restoration Project Planning Implemen**

Study the recovery of degraded, damaged, or destroyed ecosystems. Learn to plan, implement, maintain, and evaluate the success of ecological restoration projects. Includes planning and implementing a restoration project near campus. Prerequisite: LHO 240 or permission.

LHO 242 (3) S**Introduction to Permaculture**

Explore permaculture and sustainable land use design based on ecological principles. Covers ecosystems, soils, water catchment and conservation, the food forest, and zones. Learn to apply these concepts and methods.

LHO 250 (3) S**Small Business Management for Horticulture**

Organization and operation of a horticulture-related small business. Topics include success and failure factors, legal forms of business organizations, financing, credit, and collections, marketing, record keeping and interpreting financial statements, legal issues and considerations, and development of a business plan.

LHO 255 (3) S**Edible Trees Shrubs and Vines**

Explore plants and their uses for edible, medicinal and health purposes. Covers selection, culture, maintenance and siting of plants in the landscape, home and community gardens. Includes site visits and service learning.

LHO 263 (5) S**Residential Landscape Design III**

Increase sophistication and usage of plant selection, placement, planting patterns, and structures. Develop products using digital applications for individual portfolios. Discuss and practice on-site consulting and other professional services. Prereq: LHO 126 with 2.0 or higher or permission.

LHO 265 (3) S**Landscape Contracts and Specifications**

Practical applications for developing and writing bids with accurate specifications for the landscape industry. Identification of business operation expenses, calculating construction and business cost, project management, and minimizing and controlling risk. Familiarization with industry opportunities and standards. Recommended for Success: LHO 238.

LHO 267 (5) S**Dynascope for Landscape Design**

Use Dynascope professional CAD software as a design tool. Design landscapes, generate planting plans and reports, design irrigation, make estimates and bids, track supplier and purchasing information, and customize data libraries and client reports.

LHO 272 (4) S**Landscape Construction Project - Fall**

Application of standard trade procedures and techniques for residential landscaping. Covers care and safe use of tools used in garden structures and in trade. Prereq: LHO 189 with 2.0 or higher or permission.

LHO 273 (4) S**Landscape Construction Project - Spring**

Application of standard trade procedures/techniques for residential landscaping. Covers care and safe use of tools used in garden structures and in trade. Prereq: LHO 189 or permission.

LHO 298 (2) S**Greenhouse and Nursery Practicum II**

Continuation of LHO 198. Hands-on practical application course for second year students pursuing the Horticulture Studies pathway. Continue focus on nursery and greenhouse operations involved in the propagation, production, maintenance, and retail sales of plants. This course allows the student to apply and build upon the skills and knowledge from courses previously taken in the program. Prerequisites: LHO 215, and 218, or instructor permission.

LHO 299 (1-4) S**Special Topics**

Special individual or group study topic in the landscape horticulture field. Prereq: Permission.

Languages & Literature**American Sign Language****ASL 120 (5) C****Introduction to Deaf Studies**

Overview of the types, causes, treatment and psychological aspects of deafness; history of deaf people; education of deaf people; and Deaf culture. May transfer to the University of Washington as an Individual and Society course.

ASL& 121 (5) C | N**American Sign Language I**

American Sign Language (ASL) is the complex, naturally existing language used by Deaf people in North America. ASL I introduces this language and the community of people that use it. Covers fundamental vocabulary, grammar, and culturally-appropriate uses of ASL through natural, everyday conversational situations in both formal and informal registers. For students who have not previously studied ASL. Prereq: Placement into ENGL& 101.

ASL& 122 (5) C | N**American Sign Language II**

Continuation of ASL 121. Develops ASL grammar skills, increases vocabulary, and deepens knowledge and appreciation of Deaf culture through natural, everyday conversational situations in both formal and informal registers. Prereq: Successful completion of ASL& 121 with a grade of 2.0 or higher or instructor permission.

ASL& 123 (5) C | N**American Sign Language III**

Continuation of ASL 122 with focus on grammatical features such as complex sentences, depiction, spatialization, and non-manual components. Intensive work in vocabulary development, grammar, and continued study of Deaf culture. Prereq: Successful completion of ASL& 122 with a grade of 2.0 or higher or instructor permission.

ASL 125 (5) C**American Deaf Culture**

Covers discussion of Deaf people as a culture, a group of people held together by strength of culture rather than disability. Examines Deaf minorities and current issues in the field.

ASL 132 (4) C**Fingerspelling and Numbers**

Emphasis on receptive and expressive fingerspelling and number use within a range of contexts. Learn strategies for maintaining uninterrupted language flow. Prereq: ASL& 223 or ITP 165 with 2.5 or higher or permission.

ASL& 221 (5) C | N**American Sign Language IV**

Emphasis on expressive skills development and ASL fluency. Attention to the correct formation of signs, movement, rhythm, phrasing, linking, and clarity, intensive vocabulary building and proficiency in ASL grammar. Prerequisite: ASL& 123 with a 2.0 or higher or instructor permission.

ASL& 222 (5) C**American Sign Language V**

Continued development of receptive and expressive skills. Produce/receive narratives at a near-native level and decrease dependency on English syntax structures. Prereq: ASL& 221 with a 2.0 or higher or permission.

ASL& 223 (5) C**American Sign Language VI**

Continue vocabulary development and participate in most formal and informal conversations on general topics. At this level signing errors seldom interfere with understanding and rarely disturb native signers. Prereq: ASL& 222 with a 2.0 or higher or permission.

ASL 299 (1-10) C**Independent Study for ASL**

Independent study of selected topic(s) in ASL. A mutually desirable research project is assigned by faculty.

SPS 201 (5) C**Introduction to Audiology**

Understand the process of hearing, interruptions in the normal hearing process, remediations options. Learn issues of the deaf community within the larger population of hearing-impaired individuals.

Chinese**CHIN& 121 (5) C | N****Chinese I**

Intro to the standard language, emphasizing correct pronunciation and basic structure, with oral practice and structure skills. Emphasis on systematic study of the phonetics (Pinyin) and basic grammar. Covers everyday expressions and vocabulary, and background on history, culture and customs. Intended for students who have not previously studied Chinese. Recommended: Eligibility for ENGL& 101 (C).

CHIN& 122 (5) C | N**Chinese II**

Continuation of CHIN& 121. Prereq: CHIN& 121 or permission.

CHIN& 123 (5) C**Chinese III**

Continuation of CHIN& 122. Prereq: CHIN& 122 or permission.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

English**ENGL 040 (5) S
Composition I - Career Link**

Assessment and development of skills in language and communications including spelling, vocabulary, grammar and usage in a pre-technical career-oriented context. Emphasizes sentence and paragraph development to describe situations, objects and basic processes. Prereq: Appropriate testing and counseling.

**ENGL 041 (5) S
Composition II - Career Link**

Assessment and development of language skills and communications skills in a pre-technical career-oriented context. Emphasizes paragraph and multi-paragraph writing and revision in various formats and purposes. Research paper or project relating to educational or career opportunities. Prereq: Appropriate placement testing and counseling.

**ENGL 042 (5) S
Senior Project Research - Career Link**

Assessment and development of language and communications skills in academic and career contexts. Analysis of models of effective writing and speaking. Research paper or project on career-oriented topic integrated with a personal, historical, technical or sociological perspective. Prereq: Appropriate placement testing and counseling.

**ENGL 046 (5) S
American Literature Analysis and Writing C-Link**

Survey of the American heritage through its literature. Includes reading and analysis of fiction, poetry and drama. Write book reviews, biographical sketches and interpretations of characters or verse.

**ENGL 079 (2) S
English SAT PREP**

Builds skills in persuasive writing; grammar rules, mechanics, and punctuation; sentence structure and revision; reading strategies and comprehension; and vocabulary development.

**ENGL 080 (1-5) N
English Skills Shop**

Support class for students enrolled in developmental English programs and students seeking to strengthen their academic writing skills. Individual and small group tutoring to improve listening; speaking; study skills; reading comprehension and rate; vocabulary; phonics and word skills; spelling; grammar; and writing sentences, paragraphs, and essays. Strongly recommended for students enrolled in developmental English courses.

**ENGL 081 (1-5) S
Reading Skills I**

Continuation of ENGL 080. Prereq: ENGL 080.

**ENGL 084 (1-5) S
Spelling and Vocabulary**

Improving vocabulary through study of prefixes, suffixes, roots, context clues and essential vocabulary words; improving spelling through practice and study of spelling rules and patterns.

**ENGL 085 (1-5) C
English Skills for College Success**

Support class for students enrolled in developmental English programs and students seeking to strengthen their academic skills. Develops strategies to improve listening; speaking; study skills; reading comprehension and rate; vocabulary; phonics and word skills; spelling; grammar; and writing sentences, paragraphs, and essays. Strongly recommended for students enrolled in developmental English courses.

**ENGL 086 (1-10) S
Grammar and Punctuation I**

Open to native and non-native speakers of English. Emphasis on basic sentence-level grammar: prepositional phrases, subject-verb identification, conjunction and sentence types. Practice in thinking, writing, proofreading and editing. Prereq: Placement into ESL 096/7 or higher or placement on English placement test or teacher recommendation.

**ENGL 090 (1-5) S
Independent Study of Basic English**

Addresses individual learning needs of students in college preparatory reading or writing skills. Credit awarded according to students' mastery of various skills as determined by the successful completion of material specified by the instructor. Prereq: Appropriate placement on English placement test or permission (N). Appropriate placement, contact the Testing Office (S,C).

**ENGL 091 (1-5) S
Basic Reading and Study Skills I**

Covers essential reading and study skills. Includes techniques for developing good reading skills and habits, vocabulary, comprehension, textbook reading and classroom skills. Prereq: Placement Test.

**ENGL 092 (1-5) C
Basic Writing Improvement I**

Emphasis on the sentence. Includes basic sentence grammar and practice in thinking, writing, editing and proofreading. Prereq: Placement Test.

**ENGL 093 (1-5) C
Reading and Study Skills II**

Development of college reading and study skills. Includes strategies for taking lecture notes, studying for exams, improving memory and reading comprehension and participating in small group discussions. Prereq: Placement Test.

**ENGL 094 (1-5) S
Writing Improvement II**

Emphasis on paragraph structure and basic sentence grammar. Practice in thinking, writing, editing and proofreading. Assignments in writing clear sentences and paragraphs. Prereq: Placement Test (S). For students who have completed ENGL 092 but still need more work at that level (C).

**ENGL 095 (1-5) C | N | S
College PREP Reading and Study Skills**

Emphasis on increasing reading speed and vocabulary, identifying the main idea and supporting ideas in expository reading, making inferences and evaluations and understanding figurative language. Includes study strategies for test-taking, note-taking and outlining. Prereq: Placement Test.

**ENGL 096 (1-5) C | N | S
College Preparatory Writing III**

Build writing skills through clear, correct sentences, well-developed paragraphs and coherent short essays. Prereq: Placement Test.

ENGL 097 (10) C | N | S**English 097: Integrated Reading and Writing I**

This course provides students with opportunities to develop the reading, writing, and critical thinking skills needed to write in academic settings. Topics include reading and writing processes, critical thinking strategies, study skills, and grammar instruction. Upon completion, students should be able to apply those skills toward understanding a variety of academic and career-related texts and composing unified and coherent sentences, paragraphs, and short essays.

ENGL 098 (1-10) C | N | S
Integrated Reading and Writing II

This course provides students with opportunities to further develop the reading, writing, and critical thinking skills needed to write in academic settings. Topics include reading and writing processes, critical thinking strategies, study skills, and grammar instruction. Upon completion, students should be able to apply these skills toward understanding a variety of academic and career-related texts and composing a college-level essay. Prereq: Placement Test or Appropriate Prerequisite.

ENGL 099 (5) C | N | S
Supporting College Writing

This course is intended for students who are English 098 ready who wish to move directly into English 101. Any students who choose to bypass English 098 must enroll in a hard-linked English 099 and English 101. The primary focus of this course is to provide students with more in-depth opportunities to acquire the reading, writing, and critical thinking skills needed to write at the career and college ready level.

ENGL 100 (5) S
Critical Literacy for College Writing

Tandem course for students who are eligible for ENGL 098 but choose to move directly to ENGL& 101. Material advances and supports college-level academic critical literacy in both reading and writing. Prereq: Eligible for ENGL 098; Coreq: ENGL& 101.

ENGL& 101 (5) C | N | S
English Composition I

English 101 is a college-level writing course that emphasizes academic writing and major strategies of reading and writing analytically. Writing assignments focus on engaging with and responding to a variety of texts. Instruction encourages students to develop, through revision and reflection, as readers, writers, and critical thinkers. PREREQ: Placement into ENGL&101.

ENGL& 102 (5) C | N | S
Composition II

Continuation of the composition sequence with further instruction and practice in the writing process, concentrating on critical reading and writing techniques needed for the preparation and completion of documented essays. Prereq: ENGL&101.

ENGL 103 (5) S
Transitional English

Improvement of skills required for professional-technical communications. Assessment of reading, writing and oral improvement. Use of computer to teach principles of organizing, drafting and editing technical reports. Prereq: Satisfactory performance on English placement test.

ENGL 104 (5) C | N
Advanced English Grammar

Study of rhetoric and grammar of the English sentence. Includes sentence structure, grammar of the paragraph, usage, diction and mechanics. This course is not remedial. Prereq: Eligible for ENGL& 101 or permission.

ENGL 105 (3) C | S
Applied Composition

Covers skills and strategies needed to meet writing demands in college and on the job. Prereq: Satisfactory performance on English placement test.

ENGL 106 (3) C | S
Technical Writing

Writing strategies geared to target audiences. Emphasis on research and problem-solving requiring critical reading and writing; development of ideas and argumentation. Includes layout and design, use of illustration, schematics and mathematics. Prereq: ENGL 105 or permission.

ENGL 107 (5) S
Applied Composition

This course designed to help students from a variety of majors to master the composition skills needed for careers in business and industry. Students will learn the principles and conventions of technical writing and practice those conventions in a variety of assignments that would typically be encountered in the work place. Attention will also be paid to strengthening the surface and stylistic aspects of their writing. Prereq: Satisfactory performance on English placement test.

ENGL 108 (3) C | N | S
Technical Report Writing

Technical writing for the professional or student. Covers technical communication skills needed in industry. Provides examples of written or oral presentations typically required in a technical work setting. Prereq: ENGL 106.

ENGL& 111 (5) C | N | S
Introduction to Literature

Study and analysis of fiction, poetry and drama with emphasis on understanding the art and techniques of each genre. Prereq: Eligible for ENGL 099.

ENGL& 112 (5) C | N
Introduction to Fiction

Survey of 20th century fiction. Study and analysis of the art, elements, and techniques of short stories, novellas, and novels of American and international authors. Prereq: Placement into ENGL& 101.

ENGL& 113 (5) C | N | S
Introduction to Poetry

Study, appreciation and analysis of the form, meaning, music and metaphor of poetry. Includes poems from diverse sources. Prereq: Placement into ENGL&101.

ENGL& 114 (5) C | N
Introduction to Drama

Study and analysis of great works of the theater, including major themes and trends of playwrights from the Greeks to the present. Prereq: Placement into ENGL& 101.

ENGL 115 (5) C
Lgbt Literature

Surveys lesbian, gay, bisexual, and transgender literature. Explores ideas, themes, historical contexts, and social issues in fiction, poetry, drama, creative non-fiction, and essays. Prereq: Placement into ENGL&101.

ENGL 116 (5) S
Graphic Novels

Graphic Novels surveys visual storytelling literature such as graphic novels, manga, and comics. Covers a variety of genres (e.g. fantasy, science fiction, dystopian, classic literature, plays, short stories, autobiography, historic fiction, etc.) presented in graphic formats. Examines complex and culturally relevant literary themes related to history, politics, gender identity, ethnic diversity, sexuality, and many social justice issues.

ENGL 120 (5) C**Digital Literature**

Exploration of digital literature and authors who use digital media to present their work. Overview of history of digital literature and emerging digital literary forms such as hyper-text, interactive fiction, blogs, social media, apps, video games, and multimedia formats. No specialized software knowledge required. Access to computer and internet recommended. Prereq: Placement into ENGL&101.

ENGL 125 (5) C**Writing About Science**

Explore and create works of non-fiction literature about the Physical, Earth, and Life Sciences, technology, the environment and related themes, contexts, and issues. Exploration of the role of science and science writing in public discourse, policy, debate, news reporting, and a variety of media presentation formats. No specialized science knowledge required. Prereq: ENGL&101 Placement.

ENGL 130 (5) C**Literature and the City**

Introduction to fiction, non-fiction, poetry, and drama that illustrate life in American cities and issues such as race, politics, gender, class, family, education, and media. Prereq: ENGL&101 Placement.

ENGL 151 (5) C | N | S**Creative Writing**

Creative writing with focus on development of language, imagery, style, voice and emphasis on techniques. Prereq: ENGL& 101 or permission.

ENGL 152 (5) C | N | S**Creative Writing**

Continuation of ENGL 151. Prereq: ENGL 151, ENGL& 101 or permission.

ENGL 153 (1-5) C | N | S**Creative Writing**

Continuation of ENGL 152. Emphasis on writing, editing and proofreading manuscripts. Includes literary magazine production experience in editing, design and layout. Prereq: ENGL& 101, ENGL 151 and ENGL 152 or permission (N). Includes workshops and seminars for those with writing experience (C).

ENGL 198 (1-3) C**English Workshop**

Emphasis on building skills in a variety of areas: vocabulary development, reading comprehension, grammar, punctuation, sentence structure and strength. Addresses diagnosed student needs individually, with a mixture of workshop and lecture techniques.

ENGL 199 (2) N**College Applications & Personal Statements**

Focuses on writing effective Personal Statement essays, and other college or scholarship application essays. Students will research application requirements, and write essays that contribute to an engaging and effective application. Class sessions will focus on intensive essay work and support from college advisors. 8-week course; students will work on a schedule that fits their specific application deadlines. Prerequisites: Completion of ENGL& 101 or instructor permission.

ENGL 201 (5) S**Advanced Composition**

Reading and writing exposition with emphasis on context, audience and rhetorical options. Provides critique experience for own and others? writing. Prereq: ENGL& 101 or permission.

ENGL 204 (5) C**English Language & Linguistics**

Overview of the fundamental structures of English from the perspective of linguistic studies. Emphasis on the basic principles and tools of the field of linguistics, contemporary theories of morphology, syntax (grammar), semantics, and study of historical, geographical, and socioeconomic variations of the English language. Prereq: ENGL&101.

ENGL 205 (5) C | N**Creative Nonfiction**

Designed to familiarize students with the techniques and narrative structures of creative nonfiction. Reading and writing will focus on personal essays and memoir, but may also cover related sub-genres such as science writing, travel writing, and profiles/biography. Prerequisite: ENGL&101.

ENGL 218 (5) C**Holocaust Literature: Voices From the Holocaust**

Examines literature written by survivors of the Holocaust or the Shoah. Read accounts written by people who survived to write and publish their memories. Meet one of the authors. Develop an historical context for World War II and the rise of Nazi Germany to understand the literature.

ENGL 219 (5) C**Between the Wars**

Explores the character, mood and atmosphere of post-WWI American writers, including African-American, Native-American, Asian-American and European-American. Considers the implications and nature of their work in the context of their time. Prereq: Eligible for ENGL& 101.

ENGL& 224 (5) C | N**Shakespeare I**

Study of a representative selection of Shakespeare's comedies, tragedies, romances, and history. Covers the range of Shakespeare's career (without duplication of materials from ENGL& 225). May take one or both classes. Prereq: ENGL&101 Placement.

ENGL& 225 (5) C**Shakespeare 2**

Study of a representative selection of Shakespeare's comedies, tragedies, romances, and history. Covers the range of Shakespeare's career. Continuation of ENGL& 224. May take one or both classes. Prereq: ENGL&101 Placement.

ENGL& 226 (5) N**British Literature I**

The early Celtic period, the Roman occupation, the Anglo Saxon period, the Norse invasions, the Middle Ages to the English Renaissance before Shakespeare. Emphasizes the historical forces, social shifts and significant cultural clashes that form the context for this literature. Prereq: Eligible for ENGL& 101 (N).

ENGL& 227 (5) N**British Literature II**

From 1540 -1800. Covers Shakespeare and the English Reformation and Renaissance, English global expansion, growing awareness of science and The Age of Reason. Emphasizes the historical forces, social shifts and cultural differences that form the context for this literature. Prereq: Eligible for ENGL& 101.

ENGL 231 (5) C | S**Children's Literature**

Explores a representative collection of children's and young adult literature from multiple cultures within the Western literary tradition. Includes close reading of texts such as fairy tales, traditional tales, illustrations, picture books, realistic and historical fiction, and fantasy. Emphasizes historical context, literary themes, cultural implications for reading audiences, and the role of children's narratives in the social construction of childhood. Recommended: Completion of ENGL&101.

ENGL 232 (5) C | N | S
Young Adult Literature

Exploration of young adult literature that represents culturally diverse populations within the United States with emphasis on values reflected and the power and elements of story. Prerequisite: Placement into ENGL&101.

ENGL& 235 (5) N | S
Technical Writing

Explores basic formats and content of technical communication. Covers writing process; analysis of purpose and audience for various reports and documents; research, documentation, presentation of technical material; and communication in digital media. Projects include writing and editing, digital communication, and collaboration. Prereq: ENGL& 101.

ENGL 240 (5) C | N
Reading and Writing Autobiography

Read autobiographies of well-known people and write your own. Involves both critical and personal writing assignments, with an emphasis on the personal dimension of writing. Prerequisite: ENGL&101 Placement.

ENGL& 244 (5) C
American Literature I

Survey of literature of the United States from Colonial times to the early 19th century. Prereq: Placement into ENGL&101.

ENGL& 245 (5) S
American Literature II

Covers 19th century writers in all written forms. Prereq: Eligible for ENGL& 101.

ENGL& 246 (5) C | N | S
American Literature III

Covers late 19th and 20th century writers with emphasis on modern fiction, drama, poetry and trends in literature. Practice critical techniques. Prereq: Eligible for ENGL& 101.

ENGL 247 (5) C
21st Century American Literature

Survey of 21st Century United States literature with emphasis on contemporary fiction, drama, poetry and literary trends. Prereq: Placement into ENGL&101.

ENGL 252 (5) S
Novels of Western Literature

Emphasis on European and American novels from the past two centuries viewed in the philosophical and historical contexts. Prereq: ENGL&101 Placement.

ENGL 253 (5) C
Studies in the Novel

Continuation of ENGL 252. Prereq: Eligible for ENGL& 101 (N).

ENGL& 256 (5) C | N | S
World Literature III

Cross-cultural survey of contemporary world literature from Latin America, Africa, Asia, the Middle East, Europe and the United States from the 20th Century to the present. Prereq: Placement into ENGL&101.

ENGL 258 (5) C | N | S
Literature of American Culture

Survey of literature from a variety of U.S. cultures including Asian American, African American, European American, Chicano and Latino American, Middle Eastern American, Native American, and others. Emphasis on analysis of social, cultural, political, and historical contexts. Prereq: Placement into ENGL&101.

ENGL 260 (5) C | S
Asian American Literature

Focuses on fiction and poetry of Asian-Americans, covered in order of their immigration: Chinese, Japanese, Filipino, Korean, Southeast Asian and the recent groups from Asia and the Pacific Islands. Prereq: Eligible for ENGL& 101.

ENGL 263 (5) C
the Bible As Literature

Studies the Bible as an anthology of literary texts expressing the religious ideas of ancient Israel. Emphasizes reading the Old Testament and New Testament with literary and historical understanding. Prereq: Eligible for ENGL& 101.

ENGL 265 (5) C | N
Literature and Society

Studies patterns of literary expression as a guide to social attitudes and value systems, the part society plays in shaping literature and the degree to which literature reflects society. Prereq: Placement into ENGL&101.

ENGL 266 (5) C
Postcolonial Literature

Surveys literatures from Africa, Asia, the Pacific, and/or the Americas in a postcolonial context, which explores the ways in which the processes of colonization and de-colonization have influenced peoples and cultures. Prereq: Recommended completion of ENGL& 101.

ENGL 270 (5) C
the Beat Generation Writers

Focus on the literature of the Beat Generation writers in the U.S. in the 1940s, such as Jack Kerouac, Allen Ginsberg and William Burroughs, who continue to have an influence on American society today. Prereq: Eligible for ENGL& 101.

ENGL 291 (5) C | N
Literature by Women

Surveys literature by culturally diverse American women authors. Analyzes fiction and non-fiction texts of various genres. Examines the ways in which women's literary voices have shaped society, culture, politics, and gender roles in the United States. Prereq: Eligible for ENGL 099.

ENGL 293 (5) C
Science Fiction

Examines selected readings in science fiction and fantasy from the 19th century to present. May include American, British, continental European and other international writers. Prereq: Placement into ENGL&101.

ENGL 296 (1-3) N
Special Topics in English

Special courses developed by instructors. Prereq: permission.

ENGL 298 (5) C | N
Special Topics

In-depth examination of current and emerging topics and themes relevant to the study of English. Consult Humanities & Social Sciences Division and quarterly class schedule for the specific topic to be offered. Prerequisite: Placement Into ENGL&101.

ENGL 299 (1-5) C | N | S
Independent Study

Create an individual project, syllabus and outcomes with instructor. Prereq: Permission.

English as a Second Language**ESL 007 (1-15) C**
English As A Second Language-Pre-Literacy

For true beginners – students who are unable to read, write, speak or listen in English and who are pre-or-non-literate in their native language. Introduces beginning concepts of reading and writing and spoken English for aural comprehension to help students use English for meeting classroom and personal needs.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

ESL 010 (1-15) C | N | S
English As A Second Language 1

Emphasis on basic vocabulary, simple sentence structure, pronunciation, basic reading and writing needed for daily functioning. Concentrates on developing oral and listening skills through drills, dialogues, role-playing, dictation and conversation. Work on literacy skills. Prereq: ESL placement test or instructor permission.

ESL 011 (1-15) C | N | S
English As A Second Language-Level 1a

For preliterate ESL students or very low-beginning students literate in a written language based on a non-Roman alphabet. Learn very basic English vocabulary and grammar. Practice very basic reading, writing, listening, and speaking skills in the context of daily life, jobs, and school.

ESL 012 (1-15) N | S
English As A Second Language-Level 1b

For low-beginning ESL students. Learn basic English vocabulary and grammar. Practice basic reading, writing, listening, and speaking skills in the context of daily life, jobs, and school.

ESL 013 (1-15) N | S
English As A Second Language Level 1c

For low-beginning ESL students. Learn more basic English vocabulary and grammar. Practice more basic reading, writing, listening, and speaking skills in the context of daily life, jobs, and school.

ESL 015 (1-15) C | N | S
ESL Reading and Writing 1

Designed for low-beginning ESL students, this practice-based course introduces basic English reading and writing skills in the context of daily life, jobs, and school for more success living in the United States. Prerequisite: Appropriate score on placement test, or Instructor's permission.

ESL 016 (1-15) C | N
ESL Speaking and Listening 1

Designed for low-beginning ESL students, in this course students practice basic English speaking and listening skills in the context of daily life, jobs, and school for more success living in the United States. Prerequisite: Appropriate score on placement test, or Instructor's permission.

ESL 020 (1-15) C | N | S
English As A Second Language 2

ESL 020 is a high-beginning level English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use very basic oral and written phrases, statements, and questions. The content focus is on employability and readiness for vocational and academic programs. Prereq: ESL placement test, successful completion of ESL 010 or instructor permission.

ESL 021 (1-15) C | N | S
English As A Second Language-Level 2a

For beginning ESL students. Learn beginning English vocabulary and grammar. Practice beginning reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

ESL 022 (1-15) N | S
English As A Second Language-Level 2b

For high-beginning ESL students. Learn more beginning English vocabulary and grammar. Practice more beginning reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

ESL 023 (1-15) S
English As A Second Language Level 2c

Intermediate-level course for non-native speakers of English. Continued emphasis on vocabulary development, reading and writing needed to function effectively in a job or daily situations. Prereq: ESL 022 or placement.

ESL 025 (1-15) C | N | S
ESL Reading and Writing 2

Designed for beginning ESL students, this practice-based course focuses on beginning English reading and writing skills in the context of daily life, jobs, and school for more success living in the United States. Prerequisite: Appropriate score on placement test; ESL 015 with an "S" grade"; or Instructor's permission.

ESL 026 (1-15) C | N
ESL Speaking and Listening 2

Designed for beginning ESL students, this practice-based course focuses on beginning English speaking and listening skills in the context of daily life, jobs, and school for more success living in the United States. Prerequisite: Appropriate score on placement test; ESL 016 with an "S" grade"; or, Instructor's permission.

ESL 027 (1-5) N
Introduction to Digital Literacy for ESL

Introductory digital literacy course for non-native speakers of English with emphasis on improving vocabulary, reading with understanding, and conveying ideas in writing. Prerequisite: instructor permission.

ESL 030 (1-15) C | N | S
English As A Second Language 3

ESL 030 is an intermediate level, English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use basic oral and written phrases, statements, and questions. The content focus is dependent on the specific contextualization of each ESL 030 course. Prereq: ESL placement test, successful completion of ESL 020 or instructor permission.

ESL 031 (1-15) C | N | S
English As A Second Language Level 3a

For low-intermediate ESL students. Learn low-intermediate English vocabulary and grammar. Practice low-intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

ESL 032 (1-15) N | S
English As A Second Language Level 3b

For low-intermediate ESL students. Learn more low-intermediate English vocabulary and grammar. Practice more low-intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

ESL 035 (1-15) C | N | S
ESL Reading and Writing 3

Designed for low-intermediate ESL students. Focuses on practicing low-intermediate English reading and writing skills in the context of daily life, jobs, and school for more successful living in the United States. Prereq: Appropriate score on placement test, successful completion of ESL 025, or Instructor's permission.

ESL 036 (1-15) C | N
ESL Speaking and Listening 3

Designed for low-intermediate ESL students. Provides practice of low-intermediate English speaking and listening skills in the context of daily life, jobs, and school for more successful living in the United States. Prereq: Appropriate score on placement test; ESL 026 with an "S"; or Instructor's permission.

ESL 037 (1-5) C | N | S
Beginning Digital Literacy for ESL

Beginning digital literacy course for non-native speakers of English with emphasis on improving vocabulary, reading with understanding, and conveying ideas in writing. Prerequisite: Completion of ESL 027.

ESL 039 (1-15) C | N | S
Vocational ESL 3

Intermediate level for non-native speakers of English. Focuses on workplace and survival English and beginning academic English. Includes career planning, test-taking, study skills, interview skills, résumé writing, and computer and math skills. May also cover health, finances, college/training programs and/or citizenship.

ESL 040 (1-15) C | N | S
English As A Second Language 4

ESL 040 is a high intermediate level, English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use familiar oral and written phrases, statements, and questions with some difficulty. The content focus is dependent on the specific contextualization of each ESL 040 course. Prereq: ESL placement test, successful completion of ESL 030 or instructor permission.

ESL 041 (1-15) C | N | S
English As A Second Language-Level 4a

For intermediate ESL students. Learn intermediate English vocabulary and grammar. Practice intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

ESL 042 (1-15) N | S
English As A Second Language-Level 4b

For high-intermediate ESL students. Learn high-intermediate English vocabulary and grammar. Practice high-intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States.

ESL 045 (1-15) C | N | S
ESL Reading and Writing 4

For intermediate ESL students. Provides practice of intermediate English reading and writing skills in the context of daily life, jobs, and school for more success living in the United States. Prereq: Placement Test, ESL 035, or Permission.

ESL 046 (1-15) C | N
ESL Speaking and Listening 4

For intermediate ESL students. Provides practice of intermediate English speaking and listening skills in the context of daily life, jobs, and school for more success living in the United States. Prereq: Placement Test, ESL 036, or Permission.

ESL 047 (1-5) C | N
Intermediate Digital Literacy for ESL

Intermediate digital literacy course for non-native speakers of English with emphasis on improving vocabulary, reading with understanding, and conveying ideas in writing. Prerequisite: Placement at ESL 031 or higher and completion of ESL 037 or instructor permission.

ESL 049 (1-15) C | S
Vocational ESL Level 4

Supports vocational, technical and employment training.

ESL 050 (1-15) C | S
English As A Second Language 5

ESL 050 is a low-advanced level, English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use familiar oral and written phrases, statements, and questions. The content focus is dependent on the specific contextualization of each ESL 050 course. Prereq: ESL placement test, successful completion of ESL 040 or instructor permission.

ESL 051 (1-15) N | S
English As A Second Language - Level 5a

For very high-intermediate ESL students. Learn very high-intermediate English vocabulary and grammar. Practice very high-intermediate reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States. Begin to focus more on academic English skills to prepare for transitioning into college academic or professional/technical classes.

ESL 052 (1-15) N | S
English As A Second Language - Level 5b

For low-advanced ESL students. Learn low-advanced English vocabulary and grammar. Practice low-advanced reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States. Continue to focus more on academic English skills to prepare for transitioning into college academic or professional/technical classes.

ESL 055 (1-15) C | N | S
ESL Reading and Writing 5

For low-advanced ESL students. Provides practice of English reading and writing skills needed for successful transition into college academic and professional-technical courses. Prereq: Placement Test, ESL 045, or Permission.

ESL 055A (15) C
ESL 5a R/W

For students who want to improve their writing skills. Study English word order, spelling problems, sentence boundaries, some persistent grammatical problems and simple paragraph writing. Prereq: Placement at Level 5 or teacher recommendation.

ESL 055B (15) C
ESL 5b R/W

For students who want to improve their writing skills. Study English word order, spelling problems, sentence boundaries, some persistent grammatical problems and simple paragraph writing. Prereq: Placement at Level 5 or teacher recommendation.

ESL 056 (1-15) C | N
ESL Speaking and Listening 5

For low-advanced ESL students. Provides practice of English speaking and listening skills needed for successful transition into college academic and professional-technical courses. Prereq: Placement Test, ESL 046, or Permission.

ESL 056A (15) C
ESL 5a L/S

Upon completion, be able to listen actively and speak so others can understand and participate effectively and independently in conversations on everyday survival, work and social situations, in person and on the telephone.

ESL 056B (15) C
ESL 5b L/S

Upon completion, be able to listen actively and speak so others can understand and participate effectively and independently in conversations on everyday survival, work and social situations, in person and on the telephone.

ESL 057 (1-5) C | N
Advanced Digital Literacy for ESL

Advanced digital literacy course for non-native speakers of English with an emphasis on improving vocabulary, reading with understanding, and conveying ideas in writing. Prerequisite: ESL 041 or higher and completion of ESL 047 or instructor permission.

ESL 058 (1-10) N
English for Business and Accounting Preparation

This course is designed to prepare ESL students for study in Business and Accounting programs. Topics will include business and workplace vocabulary. Also covers skills related to computers, studying, job searches, and employability.

ESL 059 (1-15) C | N | S
Vocational ESL

For students currently enrolled in the ESL Program. Provides specific support in vocational ESL and assists students pursuing career and professional technical programs. Prereq: Permission.

ESL 060 (1-15) S
English As A Second Language 6

ESL 060 is an advanced level, English as a second language course which utilizes an integrated skills approach to language teaching. This class is intended for students who understand and use every day oral and written phrases, statements, and questions comfortably. While detailed content focus is dependent on the specific contextualization of each ESL 060 course, the overall focus is transition to Prof/Tech or Academic college programs. Prereq: ESL placement test, successful completion of ESL.

ESL 061 (1-15) N
English As A Second Language - Level 6a

For advanced ESL students. Learn advanced English vocabulary and grammar. Practice advanced reading, writing, listening, and speaking skills in the context of daily life, jobs, and school for living in the United States. Focus especially on academic English skills to prepare for transitioning into college academic or professional/technical classes.

ESL 062 (1-15) N
English As A Second Language - Level 6b

Emphasis on composition, reading a variety of texts, grammar and vocabulary expansion. Prereq: ESL 061 or placement.

ESL 065 (1-3) N | S
Focus On Writing Level 6

For students who want to improve their writing skills. Study English word order, spelling problems, sentence boundaries, some persistent grammatical problems and simple paragraph writing. Prereq: Placement at Level 6 or teacher recommendation.

ESL 066 (1-15) N
ESL Speaking and Listening Level 6

On completion, be able to listen actively and speak so others can understand.

ESL 068 (1-3) C | N | S
Educational Interviewing for ESL Students

Helps ESL students at all competency levels identify their current abilities, characteristics, styles and readiness to learn. Intro to campus resources.

ESL 069 (1-15) N | S
Vocational ESL

For ESL students concurrently enrolled in a professional-technical program. Provides specific support in content courses and vocational ESL and assists students in completing their programs and building job-related language skills. Prereq: Permission.

ESL 075 (1-3) N
English Pronunciation 2

Intro to the basics of accurate English pronunciation such as vowel and consonant sounds and sentence intonation. Prereq: Placement in Level 3, 4, or permission.

ESL 076 (1-5) C | S
English Pronunciation

Intro to some of the basics of accurate English pronunciation for non-native speakers of English: some stressed and unstressed vowel sounds, basic word stress patterns, sentence stress and rhythm and other features.

ESL 078 (1-15) N
Advanced English Pronunciation 2

Advanced course on accurate English pronunciation: troublesome vowel and consonant sounds, word stress and sentence intonation. Prereq: Placement into ESL 061 or 092/093 or instructor permission.

ESL 081 (1-15) C
College and Career Readiness ESL

Provides ESL students with practice of integrated English reading, writing, listening, and speaking skills for the workplace and successful transition into college academic and professional-technical courses. Prereq: Placement Test, or Completion of ESL 055A and ESL 056A with an 's', or permission.

ESL 083 (1-5) C | N
Strategic Learning in A Content Area

Supports strategic learning in a college credit class through concurrent enrollment in the college class and ESL 083. Learn appropriate study skills such as metacognitive strategies, previewing, skimming and scanning of written materials, summarizing and paraphrasing, note-taking, revision and expansion of notes and research techniques. Understand and meet content teacher expectations.

ESL 085 (5) C | S
Survey of English Grammar: Verb Review

For students under-prepared for college level English. Covers basic English grammar with a focus on writing simple, compound and complex sentences and paragraphs. Learn and practice academic English vocabulary to enhance writing skills. Prereq: Placement on ESL COMPASS test.

ESL 086 (5) C | S
Survey of English Grammar II

Covers intermediate to advanced English grammar with an emphasis on sentence and paragraph writing using simple, compound and For students under-prepared for college level complex sentences. Continue developing academic English vocabulary to enhance writing skills. Prereq: Placement on the ESL COMPASS test.

ESL 090 (1-5) C
Standard Pronunciation for Non-Native Speakers

Emphasizes improving pronunciation and comprehension of spoken English by non-native speakers. Focuses on general and individual pronunciation problems, especially stress and intonation. Includes class presentations and group communications. Prereq: Permission.

ESL 091 (1-5) C
Listening & Note-Taking Skills for ESL Students

Improve listening, speaking and note-taking skills necessary for college lecture courses. Participate in lectures, workshop and video-taped lectures. Prereq: Placement on ESL COMPASS test.

ESL 093 (1-5) C**Grammar for Academic Writing**

Provides English language learners the opportunity to master control of the English sentence, with a strong focus on incorporating grammar into paragraph writing. Through the combination of lectures and workshops, students will build awareness of specific problems in their writing and will learn strategies for reducing them. Prereq: placement on ESL COMPASS Test (C).

ESL 095 (5) S**English for Non-Native Speakers II-Writing**

For non-native speakers of English. Focuses on mastering sentence control and developing clear, coherent paragraphs. Prereq: Placement on ESL COMPASS test. Coreqs: ESL 085 and 094.

ESL 096 (5) C**College PREP English for Non-Natives I- Reading**

For non-native speakers. Increase reading comprehension and speed, improve vocabulary, and build confidence using college preparatory materials. Respond to readings using academic vocabulary in writing. Prereq: minimum passing grade of 2.5 in ESL 094, English Placement Test or Instructor Permission (S). Prereq: ESL 081 with a grade of S, or ESL 055B with a grade of S and ESL 056B with a grade of S, or ESL 093 with a 2.5 or higher, or placement on English placement test, or permission (C).

ESL 097 (5) C | S**College PREP English for Non-Native Speakers I**

For non-native speakers. Practice developing coherent, multiple paragraph compositions. Review English writing styles and their application to academic writing. Prereq: minimum passing grade of 2.5 in ESL 095, ESL COMPASS placement or instructor permission (S); Prereq: ESL 081 with a grade of S, or ESL 055B with a grade of S and ESL 056B with a grade of S, or ESL 093 with a minimum grade of 2.5, or placement on the English placement test, or permission (C).

ESL 098 (5) C**College PREP English for Non-Natives II**

Focuses on developing reading strategies, increasing reading comprehension, speed and fluency, engaging in critical reading and analysis, integrating outside sources, and expanding vocabulary. Uses college-level reading materials. Prereq: ESL 096 and ESL 097 with a minimum grade of 2.5 in each course, placement on the English placement test, or permission.

ESL 099 (5) C**College PREP English for Non-Natives II**

Develop coherent paragraphs and short essays. Emphasis on complex paragraphs using appropriate style and techniques of paraphrasing and summarizing. Includes library research skills. Preparation for college-level writing. Prereq: ESL 097 and ESL 096 with a minimum grade of 2.5 in each course, placement on the English placement test, or permission.

French**FRCH& 121 (5) C | N | S****French I**

Highly interactive class fostering communicative skills where the language is situated within francophone cultural contexts and emphasis is placed on meaning as well as grammatical forms. Develops students' four skills (reading, writing, listening, and speaking) at the novice level. Required exercises are assigned to increase oral and written proficiency. Intended for students with little or no college-level French. Prereq: Recommended eligibility for ENGL&101.

FRCH& 122 (5) C | N | S**French II**

Intended for students who have completed French 121 or its equivalent. Continued study of the fundamentals of grammar and syntax, pronunciation, reading and conversation, and cultural aspects of the countries in which French is spoken. Emphasis on written and oral communication.

FRCH& 123 (5) C | N**French III**

Intended for students who have completed French 121 and French 122 or their equivalents. Continued study of the fundamentals of grammar and syntax, pronunciation, reading and conversation, and cultural aspects of the countries in which French is spoken. Increased emphasis on oral communication. Requires oral and listening practice with CD'S outside of class.

FRCH& 221 (5) C**French IV**

Detailed review of French grammar and syntax. Focus on writing, conversation and discussion of literary texts. Includes oral presentations on aspects of francophone cultures. Prereq: FRCH& 123 or permission.

FRCH 298 (1-5) C**Independent Study/French**

Independent study of selected topic(s) in French. To be arranged with instructor. Prereq: Permission.

FRCH 299 (1-5) C**Independent Study/French**

Independent study of selected topic(s) in French. Prereq: Permission.

German**GERM& 121 (5) C | N****German I**

Covers fundamentals of grammar and syntax, oral and written exercises, pronunciation, reading and conversation, and cultural aspects of the countries in which German is spoken. Requires oral practice with online audio programs. For students who have not previously studied German.

GERM& 122 (5) C | N**German II**

Continued systematic study of German focusing on listening, speaking, reading, writing, and cultural understanding. Prerequisite: GERM& 121 or permission.

GERM& 123 (5) C | N**German III**

Continuation of GERM& 122. Emphasis on speaking, reading, writing and grammatical concepts and cultural discussions. Prereq: GERM& 122 or permission.

GERM 299 (1-5) N**Independent Study in German**

Further skills beyond the level of GERM& 123. Uses an intermediate text of contemporary short stories. Prereq: Permission.

Italian**ITAL 121 (5) C | N****Italian I**

For beginning students. Intro to spoken and written Italian with emphasis on speaking, listening and reading comprehension. Covers phonetic system and basic grammar concepts. Includes Italian culture and contemporary customs as an aid in learning the language.

Japanese**JAPN& 121 (5) C | N | S****Japanese I**

For students who have not previously studied Japanese. Intro to Japanese conversation, grammar, culture, and the Japanese Hiragana & Katakana writing systems.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

JAPN& 122 (5) C | N | S
Japanese II

Continuation of JAPN&121. Includes development of speaking, listening, reading, and writing skills. Introduces the kanji (Chinese character) writing system. Students learn to read up to 86 Kanji characters.

JAPN& 123 (5) C | N | S
Japanese III

Continues the development of language skills in all areas. Presents another 60 characters. Prereq: JAPN& 122 or permission.

JAPN& 221 (5) C
Japanese IV

Expands basic grammar, vocabulary and writing systems to intermediate level speaking, reading, writing and aural comprehension of the language. Acquire mastery of hiragana, katakana and 100 kanji. Prereq: JAPN& 123 or permission.

JAPN 298 (1-10) C
Study Abroad: Japan

Independent study of selected topic(s) in Japanese arranged with faculty. Prereq: Permission.

JAPN 299 (1-5) C | N | S
Independent Study for Japanese

Independent study of selected topic(s) in Japanese arranged with faculty. Prereq: Permission.

Linguistics

LAN 101 (5) C
Introduction to Linguistics

Intro to the study of natural language. Presents the similarities in the basics of language as an instrument of thought and communication. Covers the sources for cultural differentiation between all linguistic materials.

LAN 110 (5) C

Comparative Linguistics: ASL and English

Introduction to linguistics as applied to English and American Sign Language. Examination of phonology, morphology, syntax and language use. At Central, fulfills one of the distribution requirements for the Associate of Arts with Emphasis in Deaf Studies. Prereq: ENGL& 101 and ASL& 221 with a minimum GPA of 2.0, or permission.

Russian

RUSS& 121 (5) N
Russian I

For those who have not previously studied Russian. Intro to Russian, emphasizing speaking, listening and reading comprehension. Covers the writing system and basic grammar concepts. Studies culture and contemporary customs. Prereq: Eligibility of ENGL& 101 (C).

Spanish

SPAN& 121 (5) C | N | S
Spanish I

Begins the systematic study of Spanish focusing on listening, speaking, reading, writing, grammar, and cultural aspects of the countries in which Spanish is spoken. No prior knowledge of Spanish required. Prereq: Eligibility for ENGL& 101 (C).

SPAN& 122 (5) C | N | S
Spanish II

Continued systematic study of Spanish focusing on listening, speaking, reading, and writing. Includes study of the cultural aspects of the regions where Spanish is spoken.

SPAN& 123 (5) C | N | S
Spanish III

Continuation of SPAN&122. Continuing study with intensive focus on listening, speaking, reading, and writing. Further study of the cultural aspects of the regions where Spanish is spoken.

SPAN& 221 (5) N | S
Spanish IV

Continuation of SPAN& 123. Review of grammatical structures, intensive practice in writing, conversations and reading on a variety of topics. Intro to Hispanic culture, literature and art. Prereq: SPAN& 123 or permission.

SPAN& 222 (5) N

Spanish V

Continuation of SPAN& 221. Emphasis on the four aspects of language: reading, writing, listening and speaking through composition, oral presentation and guest speakers. Prereq: SPAN& 221 or permission.

SPAN 236 (5) C

Spanish American Colonial Literature

Surveys literary expressions of Colonial times through 18th century in Spanish America and Peninsular Spain. Covers representative and outstanding prose works of 16th and 17th centuries. Also offered as LIT 236.

SPAN 238 (5) C

Chicano Narrative

Intro to significant works in Chicano literature. Study of genre development. Understand the implications of interdependence among diverse cultural groups. Also offered as LIT 238.

SPAN 299 (1-5) C | N

Independent Study in Spanish

Independent study of selected topics in Spanish arranged with instructor. Prereq: Permission and completion of 100 and 200 series or equivalent.

Learning Center Seattle

LCS 090 (1-15) C

Learning Center Seattle 090

Focuses on integrating basic skills instruction in the context of college and career readiness. Develops reading, writing, math, and communication skills to prepare for a high school equivalency credential as well as for entry into college programs and the world of work. Prereq: Permission.

Library Research

INFO 101 (1-5) C | N | S

Introduction to Information Resources

Develops critical thinking in the research process. Examine strategies for locating and using information resources. Emphasizes proficiency using electronic resources and other research tools and retrieval techniques. Explores information policy issues such as copyright, censorship and freedom of information. Prereq: Eligible for ENGL& 101.

INFO 102 (1) C | S**Info in Action Research Basics**

Covers the process to get started with a research project and gain a solid understanding of research options. Prereq: Eligible for ENGL& 101.

INFO 103 (1) C**Info in Action Books and Media**

Intro to the purpose, structure, and uses of books, ebooks and media as sources of in-depth or historical information on a subject. Covers use of local and regional library catalogs to find books, and strategies to evaluate them. Prereq: Eligible for ENGL& 101.

INFO 104 (1) C | S**Info in Action Research Databases**

Explores periodical databases for research purposes, including basic database structure and the variety of databases available. Focuses on research strategies and database features to retrieve and evaluate articles on a topic. Prereq: Eligible for ENGL& 101.

INFO 105 (1) S**Info in Action Scholarly Information**

Intro to scholarly communications that form the basis of new information, including where these communications are published, how to search periodicals databases for scholarly articles, and how to evaluate and cite sources for academic research. Prereq: Eligible for ENGL& 101.

INFO 106 (1) C | S**Info in Action Web Research**

Examines the Internet as a conduit for research information from a wide range of sources. Discover strategies for uncovering difficult to find "deep web" resources and evaluating content from multiple sources. Prereq: Eligible for ENGL& 101.

INFO 110 (1-3) C | N | S**Researching Information Age Issues**

Develops strategies to locate, evaluate and use information safely and ethically. Includes extra language support for non-native English speakers. Prereq: Eligible for ENGL& 101

INFO 180 (5) C | S**Research for the 21st Century**

Develops a framework for research in the online environment and helps build skills and techniques for success as online learners through a quarter-long research project on global issues. Prereq: Eligibility for English 101.

INFO 300 (1-5) N**Information Literacy for Undergraduate Research**

Explores strategies, topics, and concepts to develop research practices for Bachelor's level study. Focuses on in-depth investigation of the organization, retrieval, and evaluation of professional and discipline-specific digital and print information sources.

Life Skills to Work**LST 065 (14) S****Life Skills to Work for Pre-College Success**

This class is designed to provide students without a high school diploma instruction in life skills for pre-college success. Students will focus on learning math, reading, science and social studies by using everyday examples. In addition, there will be an emphasis on transitioning back into the community while preparing for high school completion alternatives and pre-college testing.

LST 085 (4) S**Stop the Turn Stile Lifestyle**

This prep course provides the skills necessary for new KCCC/CCAP court referrals to jump-start the cognitive learning process for GED and LSW classes.

LST 090 (1-6) S**Life Skills to Work**

A short-term program designed to provide skills needed for community re-entry following incarceration. This program emphasizes practical life and workplace skills development and application for successful community, family and workplace reintegration.

Linguistics

See Languages & Literature, page 293.

Literature**LIT 236 (5) C****Latin American Colonial Literature**

Surveys literary expressions of Colonial times through 18th century in Spanish America and Peninsular Spain. Covers representative and outstanding prose works of 16th & 17th centuries. Also offered as SPAN 236.

Logistics**LOG 235 (3) S****Introduction to Transport and Logistics**

Covers fundamentals of commercial transportation: operations and processes in efficient movement of cargo, logistics, supply chain management and the impact of these on the financial performance of business. Includes major transportation modes, the legal and regulatory environment, costing and pricing, security issues, managing transportation partnerships, and use of information and technology in the logistics sector.

LOG 237 (4) S**Supply Chain Management**

Examines the global supply chain with an emphasis on supply sources, distribution, production planning, information systems, customer service, inventory management, warehouse management, supply chain relationships, and challenges facing managers today. Covers supply chain management systems and relationships.

Manufacturing / Machinist Technology**MFGT 102 (5) S****Introduction to Machining**

This course will provide instruction relating to safety, basic schematics, and overviews of manual and CNC machining.

MFGT 104 (5) S**Introduction to Lasers and Optics**

This course will provide instruction relating to basic operation of the laser cutter and optical comparator.

MFGT 105 (20) S**Basic Manufacturing**

This course is an introduction to machining using lecture, online and hands-on classroom experience. The class will cover conventional machining, basic blueprint reading, applied mathematics, health and safety, and an introduction to CNC machining. The class also introduces technology sectors, team concepts, team development, and problem solving. It is the first in a three quarter certificate.

MFGT 106 (20) S
Intermediate Manufacturing

This course prepares individuals as CNC machinists. Instruction covers programming, set-up and operation of CNC machines and turning centers, blueprint reading, math, machine tool theory, CMM inspection, surface plate techniques, and lean manufacturing.

MFGT 115 (6) S
Manufacturing Technology Programming

This course presents introductory concepts of machining technology as it affects part design, part programming, and part production. In addition, students will learn about numerical controls and its impacts on the manufacturing industry, and absolute and incremental dimensioning as it applies to numerical control machines.

MFGT 120 (20) S
Advanced Manufacturing

This course is designed to prepare individuals as CNC Machinists. Instruction covers advanced programming, set-up and operation of CNC machining and turning centers, geometric dimensioning and tolerance, trigonometry, machine tool theory, statistical process control.

Marine Technology**MGO 100 (24) C**
Deckhand Cook

Two-quarter class. Learn cooking theory and train to prepare crew meals at sea. Also includes seamanship, specifically securing ropes and wires to barges, vessel and equipment maintenance checks and repairs and watch-keeping skills.

MGO 101 (2) C
Principles of Marine Mechanics

Provides training in proper use of hand tools, power tools (both hand and stationary) and measuring instruments commonly used in mechanical trades. Covers safe work practices, including safety equipment, work procedures, etiquette and regulatory considerations. Includes fastenings, bearings, seals, gasketing methods and other relevant materials and equipment.

MGO 103 (3) C
Survival Craft

A study of survival craft commonly found aboard ships today. Training in lifeboat operation and handling congruous to that required for the U.S. Coast Guard rating of Lifeboatman. Includes lifeboat nomenclature and equipment, launching procedures, handling by oars, inflatables and other types of lifesaving equipment.

MGO 105 (3) C
Leadership and Management

Examines relevant concepts and principles in management, leadership and organizational communication as they apply aboard ship. Emphasis on instilling an attitude and work ethic required to realize the objectives of 'social Responsibility' advocated by the STCW Code. Satisfies the General Education Requirement in human relations.

MGO 111 (3) C
Seamanship

Study in seamanship to prepare for employment aboard ship. Includes training in seamanship congruous to that required for the U.S. Coast Guard rating of Able Seaman (AB). Includes nomenclature, ship structure, vessel equipment, deck fittings, knots and splices, rigging and watchstanding duties.

MGO 112 (2) C
Marlinspike

Practical instruction in use of line, cordage, wire rope and splicing methods. Includes reeving tackles and rigging stages, boat-swains' chairs, pilot ladders and emergency steering gear.

MGO 113 (3) C
Marine Safety

Covers basic damage control, marine fire-fighting and other safety topics to prepare for employment in the marine industry. Includes stability changes to a damaged vessel, emergency repairs to hull and vessel systems, proper use of marine fire-fighting equipment, vessel safety equipment, shipboard emergency procedures and survival at sea.

MGO 119 (3) C
Marine Mathematics

Reviews algebraic and trigonometric methods. Includes the basics of signed numbers, linear equations, fractions, percentages, plane geometry, measurement and variables which represent additional aspects of mathematics required to solve shipboard problems. Satisfies the General Education Requirement in computation. Prereq: Math placement exam or permission.

MGO 120 (2) C
Vessel Maintenance

Practical experience in vessel cleaning maintenance procedures and routine operation of a ship. Tasks include washing, sanding, scaling, chipping, grinding, priming, painting, stenciling and other assigned work both on the interior and exterior of training vessels. Focus on proper technique, optimal resource utilization, cost effectiveness and corrosion prevention.

MGO 123 (3) C
Basic Piloting and Navigation

Focuses on chart navigation and basic methods of piloting with emphasis on use of charts and nautical publications, the IALA 'B' buoyage system and solving standard navigation problems. Covers how to determine geographic and luminous ranges of lights; correct for compass error, set and drift; plot dead reckoning tracks, running fixes and lines of position; solve time, speed and distance equations; predict tides and tidal currents; calculate simple ETA; and formulate anchorage procedures.

MGO 124 (2) C
Basic Vessel Handling

Covers fundamentals of ship handling for small vessels based on single-screw theory. Instruction in ship handling techniques includes backing and filling, 'Y-backing,' emergency stopping, flanking, and docking and undocking. Uses a small training vessel.

MGO 127 (4) C
Fundamentals of Marine Electricity

Fundamentals of AC and DC electricity and elementary electronics. Focuses on basic theory, measurements and instruments, routine maintenance of electrical components and general operation of shipboard electrical systems. Prereq: MGO 119, MATH 098 or permission.

MGO 133 (6) C
Seamanship Practicum

Introductory underway practicum. Receive indoctrination to both watchstanding duties and shipboard responsibilities of an able seaman. Perform all deck-related tasks one might expect to encounter when actually at sea. Involves 12-hour voyages weekly aboard SMA's training vessels.

MGO 137 (2) C**Electronic Navigation AIDS**

Intro to standard electronic equipment and systems used to aid navigation and communication. Covers radar, gyro compass, depth sounder, Loran C, RDF, GPS, GMDSS and radiotelephone. Includes training in radar piloting and collision avoidance theory using SMA's computer radar simulator. NOTE: This course is not designed to satisfy the requirements of either 46 CFR 10.480 or 15.815. Students pursuing the license option will need to take a USCG-approved radar observer course from an organization so certified by the Coast Guard.

MGO 140 (3) C**Nautical Rules of the Road**

Comprehensive study of navigation rules and regulations including purpose, technical provisions and application. Provides a comparative study of the international (COLREGS) and inland (U.S. domestic) rules with emphasis on practical interpretation and application.

MGO 147 (6) C**Marine Engineering Practicum**

Introductory underway practicum. Receive an indoctrination to both watchstanding duties and shipboard responsibilities of a marine engineer. Covers how to read vessel blueprints, trace machinery systems and troubleshoot simulated malfunctions. Involves 12-hour voyages weekly aboard SMA's training vessels.

MGO 166 (6) C**Navigation Practicum**

Advanced underway practicum. Under supervision, assume role of mate aboard ship and be responsible for navigating the training vessel and operating all related navigational equipment as well as directing the deck crew while underway. Demonstrate competency, proficiency and confidence in navigating a vessel without guidance. Includes 12-hour voyages weekly aboard SMA's training vessels. Prereq: MGO 133.

MGO 177 (6) C**Advanced Engineering Practicum**

Advanced underway practicum. Under supervision, assume the role of Designated Duty Engineer aboard ship and be responsible for all facets of the operation of the engine room and related equipment while the training vessel is underway. Demonstrate competency, proficiency and confidence in running an engine room without guidance. Involves weekly 12-hour voyages aboard SMA's training vessels. Prereq: MGO 147.

MGO 200 (1-5) C**At Sea Internship**

Provides real-world at-sea experience on vessels of at least 500 gross tons that operate beyond the boundary line. During 30?60 day internship demonstrate mastery of the competencies outlined in Table A-II/4 of STCW for ratings forming part of navigational watch or Table A-III/4 of STCW for ratings forming part of an engineering watch.

MRT 101 (14) C**Introduction to Composite Boatbuilding**

Introduces fiberglass boatbuilding as well as wood joinery. Students work in teams to lay up, by hand, a complete fiberglass hull and then trim it with wood. Industry standards in safety and production will be modeled. Prereq: WCO 110 with a minimum GPA of 2.0.

MRT 102 (4) C**Introduction to Marine Electrical Systems**

Introduces basic AC and DC electrical systems as found on recreational and small commercial vessels. Safe installation and troubleshooting of engine starting and charging systems, DC house systems for lights, pumps, navigational gear and shore power AC systems. Prereq: WCO 110 with minimum GPA 2.0.

MRT 103 (10) C**Wooden Boat Joinery and Repair**

Construction and repair of both contemporary and traditional wooden boats. Topics include: tools, wood types, adhesives, pattern making and interior joinery on wood and composite vessels. Personal and shop safety are emphasized. Prereq: MRT 101 and MRT 102 with a minimum GPA 2.0 for each course.

MRT 104 (8) C**Introduction to Marine Mechanical Systems**

Introduces basic gas and diesel engine operating principles, service, maintenance and troubleshooting. Course also covers marine sanitation systems, various marine pumps and plumbing. Prereq: MRT 101 and MRT 102 with minimum GPA 2.0 for each course.

MRT 105 (14) C**Advanced Composites**

Complex fiberglass boatbuilding and repair problems, including repair of damaged fiberglass structures, plug and mold building, and advanced composites, including resin infusion. Direct hands-on experience in safe and productive use of machinery and supplies is emphasized. Prereq: MRT 103 and MRT 104 with a minimum 2.0 GPA for each course.

MRT 106 (4) C**Marine Electrical II**

Advanced vessel electrical systems, sizing of battery banks, AC battery charging systems, inverter systems, engine operation gauge systems, gen-sets and galvanic corrosion. Preparation for ABYC Marine Electrical Certification exam. Prereq: MRT 103 and MRT 104 with minimum 2.0 GPA for each course.

MRT 108 (1-18) C**Advanced Wooden Boat Joinery and Repair**

Provides the opportunity to build one's own boat or undertake a more comprehensive boat restoration project. Emphasis is on performance in a professional manner in safety and project execution. Course is optional. Prereq: MRT 105 and MRT 106 with minimum GPA of 2.0 for each course.

MTS 201 (2) C**Naval Architecture**

Survey of ship design and construction of all types of vessels. Emphasis on basic naval architecture and management considerations regarding ship structure. Includes hull structure and components, vessel design process, design stresses, tonnage measurements and load line assignments.

MTS 202 (2) C**Stability**

Covers principles, terms and procedures used in the determination of transverse, longitudinal and damage stability of ships. Includes physical laws affecting a floating body, effects of cargo operations, loose water, fuel consumption, grounding and flooding on vessel stability. Includes analyses of case studies involving loss of stability and how to perform trim and stability calculations.

MTS 210 (2) C**Marine Meteorology**

A non-mathematical intro to meteorology with specific emphasis on marine applications. Focuses on ocean weather phenomena as they impact vessel operations and the role of the ship's officer in observing, recording and analyzing developing weather patterns.

MTS 212 (4) C**Auxiliary Machinery and Ship Design**

Intro to auxiliary machinery and naval architecture. Includes heat exchangers, pumps, air ejectors, steering gear, distilling plants, pressure vessels, piping systems, cargo handling equipment, vessel design, vessel structure and stability.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN **Watch Technology**

NAME TO PREFIX

Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

MTS 217 (4) C
Diesel Engine Maintenance and Operation

Theory, fundamental operating procedures, troubleshooting and repair of marine diesel engines. Applied training in diesel engine labs.

MTS 221 (4) C
Applied Marine Electricity

Applied course in AC and DC motors, generator applications and electrical theory to typical marine equipment. Covers 3-phase circuits and transformers. Operate marine electrical equipment in the laboratory, on a panel board simulator and aboard SMA's training vessels (dockside). Prereq: MGO 127 or permission.

MTS 223 (3) C
Advanced Piloting and Navigation

Continuation of MGO 123. Emphasizes advanced aspects of navigation and piloting essential to ocean voyaging. Studies methods for determining ETA of CPA by distance off; learn navigational techniques for ocean sailing and perform advanced ETA computations involving time conversion. Includes use of a sextant in determining position and range, measuring speed by RPM, fuel consumption and use of the speed log.

MTS 228 (5) C
Marine Hydraulics

Emphasizes routine maintenance, troubleshooting and repair of marine hydraulic equipment. Disassemble, analyze and reassemble various hydraulic components through simulation models.

MTS 233 (5) C
Marine Refrigeration

Fundamentals of refrigeration cycles, system components, common refrigerants, theory of operation and preventive maintenance techniques as they apply in the marine industry.

MTS 257 (4) C
Advanced Diesel Engines

Continuation of MTS 217. Advanced training in the disassembly and rebuilding of marine diesel engines. Special emphasis on air intake systems, fuel injectors, governors, lubrication systems, cylinder wear, ring wear, piston clearances, bearing wear and crankshaft alignment. Prereq: MTS 217.

MTS 263 (3) C
Propulsion Systems

Focuses on the principles, operation, maintenance and repair of select propulsion systems. Includes design and application of engines and related systems such as fuel, lubricating, cooling, exhaust and heat recovery. Includes reduction gears, shafting, bearings and propellers.

MTS 284 (2) C
Shipboard Pollution Prevention

Using a non-technical format, review issues in pollution prevention and control as they impact on the duties and tasks performed by deck and/or engineering personnel onboard ship.

MTS 285 (3) C
Marine Boilers

Combines theory and applied training in operating steam boilers. Covers the principles, operation, maintenance and repair of marine boilers.

MTS 294 (2) C
License Seminar

Seminar on licensure knowledge requirements for deck/engineering candidates preparing to take the U.S. Coast Guard deck/engineering exams. Learn to consult and reference the Code of Federal Regulations, Title 46 and other publications.

Materials Science

MSC 101 (5) N
Introduction to Materials Science

Introduction to materials science and engineering. Emphasis on describing the structure of different materials and how structure affects a material's macroscopic properties. Topics include crystalline metals and alloys, ceramics, polymers and composites. Mechanical, thermal, optical and electrical properties are discussed as well as applications of materials based on material properties.

Mathematics

MATH 079 (2) S
Math SAT PREP

Covers percents, fractions, linear equations, systems of equations, quadratics, factoring, word problems, angles, triangles, area perimeter, circles, averages, data interpretation and functions.

MATH 080 (5) C | N
Preparatory Mathematics

Computer-based, self-paced math course covering all topics from Basic College Mathematics through Intermediate Algebra. Provides an opportunity to accelerate through the developmental math sequence. Online access code required. Currently requires eligibility for MATH 081, 084, 085, 087, or 096. Beginning Spring 2016, requires eligibility for Math 081, 087, or 096.

MATH 081 (5) C | N | S
Basic Math Skills

Covers operations with whole numbers, fractions, decimals and signed numbers, order of operations, ratios, proportions, percents, measurement, and geometry.

MATH 083 (5) S
Arithmetic

High school-level course emphasizing the structure of the number system. Review of fundamental arithmetic, particularly the addition and subtraction of fractions and decimals. Intro to elementary algebraic concepts and primary concepts of probability, statistics and geometry. Reviews problem-solving strategies and applications. Prereq: Basic computational math skills.

MATH 084 (5) C | N | S
Algebra I

Basic operations with algebraic expressions; solving and graphing linear equations and inequalities; word problems; systems of equations. Prereq: MATH 081 or higher or placement exam (C,N); MATH 083 or higher (S).

MATH 085 (5) C | N | S
Algebra II

Real numbers, linear equations, linear inequalities, systems of linear equations in two variables, polynomials and factoring, rational expressions and equations, radical expressions and equations, quadratic equations and problem-solving. Prereq: MATH 081 or placement.

MATH 086 (5) S
Geometry I

Covers points, lines and angles, triangles, parallel lines, polygons, proofs on congruence and similarity of triangles. Calculator required. Prereq: MATH 085 with a 2.0 or higher.

MATH 087 (5) C
Foundations of Algebra

Basic concepts of algebra that form a foundation for Intermediate Algebra. Topics include evaluating expressions, properties of variables, solving basic linear equations and inequalities, graphing lines in slope-intercept form, interpreting slope and intercepts, solving systems of linear equations by graphing, basic rules of exponents, basic rules of roots, solving simple quadratic equations, and basic polynomial arithmetic. Prereq: MATH081 with a minimum grade of 2.0 OR Placement Exam Score.

MATH 088 (5) C
Intermediate Algebra in Context

A quantitative reasoning course in which ideas, concepts, and skills from algebra are applied to real-world contexts. Designed, with MATH 087, to prepare non-STEM students for courses such as MATH 107, 116, and 146. Extensive collaborative learning is utilized. Technology is applied appropriately. Reading and writing are both central elements of the course. Prereq: MATH 84, 87, or 96 with a minimum grade of 2.0 or Placement Exam Score or Instructor Permission.

MATH 090 (1-5) N | S
Mathematical Modules

Review class on different topics in math ranging from arithmetic to precalculus to help students meet necessary prerequisites. Taken together, Math 091, 092 and 136 in sequence result in credit for a college-level statistics course.

MATH 091 (5) C | S
Descriptive Statistics with Algebra I

For non-STEM majors. First of 3 Statway? courses for teaching statistics with integrated algebra. Covers concepts and methods of statistics with emphasis on data analysis, collecting data, graphical and numerical descriptions, correlation and simple linear regression. Application problems are multidisciplinary and multicultural. Completion of Statway? sequence results in credit for college-level statistics course. Prereq: Eligible for MATH 084 and ENGL& 101.

MATH 092 (5) C | S
Descriptive Statistics with Algebra 2

For non-STEM majors. Second of 3 Statway? courses for teaching statistics with integrated algebra. Continuation of content from MATH 091. Completion of Statway? sequence results in credit for a college-level statistics course. Prereq: MATH 091 with 2.0 or higher or permission; eligible for ENGL& 101.

MATH 094 (5) S
Introductory & Intermediate Algebra I

Covers basic math review, linear equations and inequalities in one and two variables, systems of linear equations, and exponents and polynomials. Prereq: MATH 083 or COM-PASS core of 48.

MATH 095 (5) S
Introductory & Intermediate Algebra II

Covers factoring and the use of factoring to solve equations; quadratic equations and methods to solve them; simplifying and solving rational expressions; basic math review, linear equations and inequalities in one and two variables, systems of linear equations, exponents and polynomials. Prereq: MATH 094 with a 2.0 or higher.

MATH 096 (2) C
Preparation for Intermediate Algebra

A bridge course between the Foundations of Algebra course (MATH 087) and our Intermediate Algebra course (MATH 098). Designed for future STEM majors and those wishing to fulfill an Intermediate Algebra (MATH 098) prerequisite for transfer to a 4-year institution. Covers polynomial math, square root math, solving quadratic equations, and graphing parabolas. Prereq: MATH87 or 88 with minimum grade of 2.0, or placement exam, or instructor permission.

MATH 097 (5) N
Elementary Algebra

Fast-paced, for those with previous success in algebra. Includes linear and quadratic equations and graphs, inequalities, exponents, polynomials, rational expressions and radicals. Prereq: Placement exam.

MATH 098 (5) C | N | S
Intermediate Algebra

Covers real number system, polynomial and rational expressions, exponents and radicals, first and second degree equations, linear systems of equations and graphs. Intro to functions and logarithms. Prerequisite: Placement or Math 085 or Math 097 with 2.0 or better.

MATH 102 (5) C | N | S
College Algebra

For students in Math and Science. Bridges the gap between Intermediate Algebra and Pre-Calculus functions. Strongly recommended in preparation for MATH& 141(S). Required for entry into MATH 120 (N). Prereq: MATH 098.

MATH& 107 (5) C | N | S
Math in Society

Primarily for liberal arts majors. Designed to enhance mathematics literacy. Instructors choose college-level topics centered around a theme such as Environmental Math, History of Math, or General Topics in Math. Fulfills QSR requirement for A.A. degree. Minimum 2.0 required to meet Intermediate Algebra proficiency and QSR. Prereq: MATH 098 or placement test.

MATH 110 (3) C | S
Applied Math for Technicians

Emphasizes application of mathematics in professional technical courses. Prereq: Satisfactory score on College's math placement test.

MATH 111 (1-5) S
Applied Mathematics I

Intro to applied algebra, geometry and trigonometry. Includes algebraic operations, integral exponents, scientific notation, dimensional analysis, metric system, radicals, calculator fundamentals, first-degree equations, plane and solid geometry, solution of right triangles, systems of equations, graphs, determinants and applications. Prereq: Satisfactory performance on Math placement test.

MATH 112 (5) S
Applied Mathematics II

Includes factoring, algebraic fractions, fractional and quadratic equations, rational exponents, operations with radicals, oblique triangles, law of sines and cosines and trigonometric graphs. Prereq: MATH 111 or permission.

MATH 116 (5) C | N | S
Applications of Math: Mngmnt, Life and Soc Sci

Explores functions and graphs as found in business and the social sciences. Students utilize linear, polynomial, exponential and logarithmic functions, solve systems of equations and inequalities, and learn applications of the growth of money.

MATH 119 (3) C**Mathematics Behind Information Technology**

Learn basic aspects of discrete mathematics common to information technology: scientific notation; binary and hexadecimal number systems; logical operations and the design of logical networks; set theory; relations and functions; combinatorics; graphs and directed graphs; regular expressions; and finite-state machines.

MATH& 131 (5) C | S
Math for Elementary Education I

Covers the mathematics elementary teachers are responsible for teaching at K-8 levels, including computing with whole numbers, fractions, decimals and percents; multiplicative comparisons and reasoning; ratio, rates, and proportions; negative numbers; algebra and graphing; relationships between time, distance and rate; patterns and functions. Fulfills QRS requirement for A.A. degree. Prereq: MATH 098 with 2.0 or higher.

MATH& 132 (5) S
Math for Elementary Education 2

Covers the mathematics elementary teachers are responsible for teaching at K-8 levels, including polyhedra, polygons, symmetry, tessellations, size changes, curves and curved surfaces, transformations, length, angles, area and surface area, volume, measure formulas, quantifying uncertainty, simulating probabilistic situations; sampling; and organizing and interpreting data with one and two variables. Fulfills QSR requirement for A.A. degree. Prereq: MATH 098 or 131 or permission.

MATH 136 (5) C | S
Inferential Statistics

For non-STEM majors. Third of 3 Statway? courses (MATH 091, 092, 136) for teaching statistics with integrated algebra. Continuation of content from MATH 092. Completion of Statway? sequence results in credit for a college-level statistics course. Fulfills QSR requirement for A.A. degree through 2015 only. Prereq: MATH 092 with 2.0 or higher or permission; eligible for ENGL& 101.

MATH 140 (1-10) C**Precalculus: Computer Based**

Examines polynomial, rational, exponential, logarithmic, & trigonometric functions; & related functional, algebraic, & geometric topics & applications. Computer-based, self-paced course requiring online access code. Replaces Math&141 &/or Math&142. Prereq: MATH&141 (MATH 098 with 2.5 or higher, OR 1.5 years of high school algebra AND placement exam within the last 3 years); MATH&142 (MATH&141 with 2.2 or higher, OR 2 yrs. of high school algebra AND placement exam within the last 3 yrs.).

MATH& 141 (5) C | N | S
Precalculus I

The sequence Math& 141 and Math& 142 covers polynomial, rational, exponential and logarithmic functions; related functional and algebraic topics; topics in analytic geometry; systems of equations; trig and inverse trig functions; right triangle and oblique triangle trig; polar coordinates; vectors; and related trig applications. Fulfills the QSR requirement for A.A. degree. Prereq: Math 095 or Math 098 with a 2.5 or higher; Math 102 with a 2.0 or higher (S); or Placement test.

MATH& 142 (5) C | N | S
Precalculus II

The sequence Math& 141 and Math& 142 covers polynomial, rational, exponential and logarithmic functions; related functional and algebraic topics; topics in analytic geometry; systems of equations; trig and inverse trig functions; right triangle and oblique triangle trig; polar coordinates; vectors; and related trig applications. Fulfills the QSR requirement for A.A. degree. Prereq: Math 095 or Math 098 with a 2.5 or higher; Math 102 with a 2.0 or higher (S); or Placement test.

MATH& 146 (5) C | N | S
Introduction to Statistics

(Formerly MATH 109) Covers descriptive methods, probability and probability distributions, samples, decisions, hypothesis testing and statistical inferences. Fulfills QSR requirement for A.A. degree. Prereq: MATH 095, 098 or placement.

MATH& 148 (5) C | N | S
Business Calculus

Explores introductory topics in differential and integral calculus, with particular emphasis on understanding the principal concepts and their applications to business.

MATH& 151 (5) C | N | S
Calculus I

The sequence MATH&151, &152 and &163 covers limits, differential calculus and its applications, integral calculus and its applications, intro to differential equations, series including Taylor series, vector geometry in three dimensions, multivariable calculus, partial differentiation, double integrals in Cartesian and polar coordinates and applications. Fulfills QSR requirement for A.A. degree. Prereq: MATH&142 or placement test or MATH 120 (N).

MATH& 152 (5) C | N | S
Calculus II

The sequence MATH&151, &152 and &163 covers limits, differential calculus and its applications, integral calculus and its applications, intro to differential equations, series including Taylor series, vector geometry in three dimensions, multivariable calculus, partial differentiation, double integrals in Cartesian and polar coordinates and applications. Fulfills QSR requirement for A.A. degree. Prereq: MATH&151.

MATH& 163 (5) C | N | S
Calculus 3

The sequence MATH&151, &152 and &163 covers limits, differential calculus and its applications, integral calculus and its applications, intro to differential equations, series including Taylor series, vector geometry in three dimensions, multivariable calculus, partial differentiation, double integrals in Cartesian and polar coordinates and applications. Fulfills QSR requirement for A.A. degree. Prereq: MATH& 152.

MATH 198 (1-5) S
Mathematics Workshop

A problem-solving workshop using math topics considered appropriate by the instructor. May include study skills, note-taking systems, test-taking strategies and group problem-solving approaches.

MATH 211 (5) N
Elements of Statistical Methods

The course will examine numerical and categorical data, analyze sampling distributions, perform inference on numerical and categorical data, and explore relationship between quantitative variables. A statistical programming language will be used for statistical computation and graphics.

MATH 220 (5) C | N | S
Linear Algebra

Intro to linear algebra and its implications. Includes systems of linear equations, matrices, determinants, vector spaces, inner product spaces, eigenvalue problems, and similarity transformations. Prerequisite: MATH& 163 with a 2.0 or higher or permission. .

MATH 224 (5) C | N | S
Vector Calculus

Continuation of MATH& 163. Includes vector-valued functions, vector fields, line and surface integrals and the theorems of Green, Gauss and Stokes, vector operators and the extension of the calculus to the vectors in 2-D and 3-D space. Prereq: MATH& 163 with a 2.0 or higher or permission.

MATH 238 (5) C | N | S
Differential Equations

Covers first order differential equations, second order differential equations, their applications, and Laplace transforms. Covers the elementary theory of differential equations and the interrelationship between pure mathematics and applied mathematics.

MATH 239 (5) N
Linear Systems of Differential Equations and Bou

Continuation of MAT 220 and 238. Includes analysis of systems of ordinary differential equations using eigenvalues and eigenvectors, and using the phase plane. Also includes solving partial differential equations and boundary value problems using the method of separation of variables and Fourier series. Fulfills QSR requirement for A.A. degree. Prerequisite: MATH 220 & 238.

MATH 298 (1-5) S
Special Topics in Math

Problem-solving for special math topics. Prereq: Permission.

MATH 299 (1-5) C | N
Independent Study

Independent study of problems or topics of special interest. Prereq: Permission.

Mechanical Engineering Technology**MET 102 (4) S**
Creative Technical Problem Solving

Intro to systematic procedures for engineering problem-solving. Review of basic math principles, geometry, algebra, trigonometry and basic physical principles related to analysis of technical engineering problems.

Medical Assisting**AMA 100 (5) N**
Introduction to Healthcare

An overview of the various medical specialties, types of practices, and members of the healthcare team. Personal characteristics, certification, professional organizations and career opportunities, and the role of managed care are explored. Includes a brief history of medicine and the effects of attitudes and culture in healthcare delivery. Emphasizes critical thinking for the Medical Assistant, HIV/AIDS education, and emergency preparedness.

AMA 101 (3) N
Intercultural Communication in Patient Care

Students will be introduced to various methods of effective communication, both oral and written. Basic psychology related to communication in healthcare is addressed and also includes cultural perspectives on illness, life threatening illness, stress and burnout. The intent of this course is to focus on effective communication skills required in a medical setting in order to recognize individual needs and adapt communication accordingly to insure accuracy and quality of information.

AMA 102 (2) N
Medical Law and Ethics

This course introduces the student to legal and ethical terms and concepts related to ambulatory healthcare. Topics include but are not limited to medical ethical and bioethical issues, AAMA Code of Ethics, AMA Ethical Guidelines, death and dying, civil and criminal law, consent and physician directives.

AMA 103 (1) N
Ethical Concepts

Intro to ethical terms and concepts related to ambulatory health care. Includes medical, ethical and bioethical issues, AAMA Code of Ethics, AMA Ethical Guidelines, allocation of scarce resources, abortion and fetal tissue research, genetic engineering, artificial insemination and surrogacy and dying and death.

AMA 104 (2) N
Office Emergencies

Provides knowledge of various emergency situations that may occur in a medical office or clinic and the related equipment and actions required of the health care team. Does not qualify for first aid certification, nor does it include practice in CPR.

AMA 105 (1) N
Asepsis and Infection Control

Provides information vital to all health care workers in infection control in the ambulatory care setting. Includes the process and chain of infection, inflammatory and immune responses, stages of infectious disease, standard (and other) precautions, state and federal laws and regulations, medical and surgical asepsis, sterilization of instruments and equipment. Prereq: Health requirements.

AMA 106 (1) N
Patient History-Documentation and Physical Exam

Covers first patient contact, including the patient history and important information and initiating the patient medical record and charting methods. Presents the components of a physical examination from the assistant's and physician's perspectives. Prereq: Health requirements.

AMA 107 (1) N
Vital Signs and Measurements

Take a patient's temperature, pulse and respirations, blood pressure, height and weight. Practice in a simulated ambulatory care setting. Includes normal ranges and abnormalities, factors that affect the vital signs, the physiology of the vital signs and related material. Prereq: Health requirements.

AMA 108 (1) N
Nutrition and Developmental Basics

Intro to nutrition and digestion through studying types of nutrients, how to read food labels, various life stages and nutrition, therapeutic diets and culture in relation to diet and nutrition.

AMA 109 (1) N
Pharmacology

Explores principles of pharmacology, including history, origin, sources, properties, uses and effects of drugs on living organisms. Covers uses and names of drugs, regulations and legal classifications, the PDR and other drug reference sources. Examines drug actions, routes of administration and forms of drugs, as well as the storage and handling of medications and controlled substances and emergency medications.

AMA 110 (1) N
Introduction to Lab Safety

Focuses on safety, laws and regulations concerning the physician's office laboratory as well as an intro to the lab's departments, personnel and testing procedures. Covers quality control, lab requisitions and reports, specimen collection and the use of the microscope.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

AMA 112 (1) N
Credentials and Employment

Preparation for obtaining appropriate credentials, certification and registration, and for the examination. Focuses on the medical assistant and offers information on credentialing of various allied health professionals such as limited x-ray technician, lab assistant, medical transcriptionist, medical office manager and EKG technician. Develop a job search strategy, prepare a résumé and cover letter, complete an employment application and learn about interviews.

AMA 114 (1) N
Basic Psychology Principles

Covers principles of psychology as well as the various theories of Jung, Erickson and others. Studies influences on behavior including heredity, culture and environment. Prereq: 2.0 GPA and permission.

AMA 115 (1) N
HIV/AIDS

Includes curriculum topics for a 7-hour HIV/AIDS education program as outlined by the Washington State Department of Health. Includes the etiology and epidemiology of HIV, transmission and infection control, testing and counseling, clinical manifestations and treatment, legal and ethical issues and psychosocial issues.

AMA 116 (1) N
Principles of IV Therapy

Presents the theory of intravenous (IV) therapy and its application in ambulatory care. Includes related anatomy and site selection, equipment and supplies, ongoing maintenance, calculations, risks and complications. Also covers professional standards, national and state laws and the role of the medical assistant. Prereq: 2.0 GPA and permission.

AMA 117 (5) N
Medical Terminology

This course covers the terminology surrounding anatomy, physiology, pathology, tests, and treatments by body systems. The student will learn basic medical word structure and language. An overview of the body including cavities and regions, anatomical planes and directional terms, divisions of the spine, and individual body systems. Spelling, pronunciation, and listening are practiced. Open to all students in healthcare professions.

AMA 118 (5) N
Disease and Pathology for Medical Assistants

The course begins with a review of basic terminology, structure and anatomy. Includes cavities, regions, anatomical planes, and directional terms. This course covers diseases, pathology, related tests and procedures of all body systems. Prerequisite: Instructor Permission.

AMA 119 (5) N
Anatomy and Physiology for Medical Assistants

Anatomy and Physiology for Medical Assistants covers the structure and function of the human body as they complement each other in a normal healthy human body in Homeostasis. Students learn to integrate isolated factual information into a cohesive and understandable whole. Prerequisite: instructor permission.

AMA 120 (4) N
Front Office Basics

Introduction to medical front office responsibilities and functions. Covers the office environment as well as computer basics, their medical applications, and telephone techniques. Also covers medical scheduling, medical records and filing, business correspondence, and daily financial tasks in the medical office.

AMA 121 (1) N
Patient Scheduling

Learn patient scheduling in an ambulatory care setting. Includes basic triage skills in gathering patient information verbally.

AMA 122 (1) N
Medical Records and Correspondence

Addresses the scope of medical records procedures, from how to initiate a new patient chart to entering data in the chart. Covers legal aspects, various types of filing systems and types of reports filed in a medical record. Intro to types of business correspondence, computer applications, USPS rates and regulations and faxing.

AMA 123 (1) N
Daily Financial Management

Learn medical practice daily financial tasks including both manual and computerized bookkeeping, banking documents and functions. Covers common tasks such as using petty cash and purchasing, accounts receivable and working with credit procedures.

AMA 125 (5) N
Introduction to Medical Insurance and Coding

Provides knowledge of medical insurance and the terminology necessary to understand and submit claims. Compares various types of medical insurance including PPOs, HMOs, Medicare, Medicaid, Tricare. Teaches basic skills in CPT, ICD9/10, and HCPC coding. Also discusses DRGs, RBRVS, drug formularies, referrals, use of a fee schedule, and legal and ethical issues.

AMA 140 (5) N
Patient Care

Students will learn the theory and practice of patient care including vital signs and the practices of charting, initiating patient records, and electronic medical records. Includes study of how to screen and evaluate the urinary, digestive, sensory, musculoskeletal, and neurological systems in a physical exam. Course covers aspects of prenatal, infant, child, and adult care.

AMA 170 (2) N
Ap/Terminology/Pathology 1 - Introduction

Cavities and regions of the body, anatomical planes and directional terms and divisions of the spine.

AMA 171 (1) N
Ap/Terminology/Pathology 2 - Skin/Senses

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 172 (1) N
Ap/Terminology/Pathology 3 - Digestive System

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 173 (1) N
Ap/Terminology/Pathology 4 - Male/Urological System

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 174 (1) N
Ap/Terminology/Pathology 5 - Female Reproductive

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 175 (1) N
Ap/Terminology/Pathology 6 - Nervous System

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 176 (1) N
Ap/Terminology/Pathology 7 - Endocrine System

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 177 (1) N
Ap/Terminology/Pathology 8 - Musculoskeletal Sys

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 178 (1) N
Ap/Terminology/Pathology 9 - Cardiovascular Syst

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 179 (1) N
Ap/Terminology/Pathology 10 - Respiratory System

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 180 (1) N
Ap/Terminology/Pathology 11 - Blood/Lymph System

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 181 (1) N
Ap/Terminology/Pathology 12 - Specialties

AMA 170-181 is a series of individual 1-unit courses which introduce anatomy, physiology, pathology, tests and treatments. Study basic medical word structure and language and practice spelling and pronunciation in each course.

AMA 226 (1) N
Medical Insurance Coding I

Provides practice in performing various medical insurance coding projects utilizing knowledge and skills obtained in AMA 125. Practice performing primarily ICD-9 and CPT coding, but includes all aspects of coding to simulate the process in an ambulatory health care setting. Prereq: AMA 125.

AMA 227 (2) N
Medical Insurance Billing

Provides advanced practice in performing medical insurance billing using skills obtained in AMA 125. Practice more complex medical insurance billing to build coding skill and accuracy. Prereq: AMA 125 and AMA 226 (AMA 226 may be taken concurrently) or permission.

AMA 230 (3) N
Medical Office Management

Introduction to managing a medical office. Explore management styles, teamwork, supervision, time management, marketing, financial management, facility management and liability coverage. Create a procedure manual. Covers HR policies, hiring, training, evaluating, dismissing employees, personnel records and laws.

AMA 231 (3) N
Pharmacology

Presented are the principles of pharmacology, which include history, origin, sources, properties, uses and effects of drugs on patients. Uses and names of drugs, regulations and legal classifications, the PDR and other drug reference sources will be covered. Includes drug actions, routes of administration and forms of drugs, the storage and handling of medications (including controlled substances), and emergency medications.

AMA 232 (4) N
Sterile Procedures

The student will learn theory and procedures for assisting a physician with minor surgery. Included are asepsis and sterile principles, surgical methods and common procedures, instruments, equipment, supplies, sterile field setup, and the process of sterile procedure. The vital areas of patient education and consent, preparation and post-procedure follow-up care are also a focus. Includes information on the roles of the CDC and OSHA.

AMA 233 (4) N
Diagnostic Procedures

Introduction to diagnostic imaging radiation therapy and nuclear medicine. Includes safety, contrast media, patient preparation and positioning. Students learn theory and practical procedures in performing a standard electrocardiogram including equipment, lead placement, basic interpretation of emergency conditions, the cardiac cycle and its relation to the tracing, and artifacts. Covers basic theory of a stress EKG and Holter monitor exams related to spirometry.

AMA 234 (3) N
Phlebotomy for the Medical Assistant

The student will learn theory and practical procedures for blood collection by venipuncture and capillary puncture. The anatomy and physiology of the cardiovascular system, equipment needed for venipuncture and technique are covered. This course also includes patient interaction, selecting the proper site, safety, evacuated tube vs. syringe method, the use of a butterfly collection system, capillary puncture and troubleshooting the unsuccessful venipuncture.

AMA 235 (4) N**Laboratory Skills**

Covers safety and regulations concerning the physician's office laboratory, the importance of urinalysis in the diagnosis and treatment of various diseases and how to correctly perform a urinalysis. Students are introduced to the basics of microbiology/chemistry as related to the medical assistant in a physician's office laboratory. Also includes CLIA waived lab testing theory, procedures and values, as well as the practical application of skills.

AMA 236 (2) N**Credentials & Employment**

Prepares Medical Assisting students for the CMA exam and applying for Washington State credentials. Includes job search and professional skills such as writing a resume and cover letter, completing applications, interviewing, and professionalism. Students will learn to develop a job search strategy and prepare for externships. Mock interviews are done to prepare the student for a real interview and a portfolio is created to show at interviews.

AMA 240 (1) N**GYN/Pediatrics**

Learn the theory and practice of assisting with typical OB/GYN and pediatric office visits and procedures. Includes prenatal visits, pregnancy complications, parturition and postpartum, GYN exam, measuring, vital signs, collecting specimens, screening hearing and vision and common childhood disorders.

AMA 241 (1) N**Male Reproductive/Gerontology**

Presents various disorders, exams and procedures of the male reproductive system. Covers gerontology, including facts and biases about aging, physiological and psychological changes in each body system. Also addressed are memory- or visually-impaired elderly patients and the issue of elder abuse. Prereq: Health requirements.

AMA 242 (2) N**Exams by Body Systems**

Theory and practice in various examinations and procedures grouped by body system. Includes urinary catheterization, spirometry, visual acuity, irrigations, casting and cast removal, sputum collection and oxygen administration. Presents signs and symptoms of diseases in each system. Prereq: Health requirements.

AMA 243 (1) N**Rehabilitation**

Intro to using physical and mechanical agents to aid patients. Covers the principles of body mechanics for the health care worker as well as transferring patients, assisting with ambulation and using assistive devices, therapeutic exercises and modalities. Emphasizes safety. Prereq: Health requirements.

AMA 244 (1) N**Introduction to Imaging**

Intro to diagnostic imaging with an emphasis on radiology. Includes ultrasound, PET and CT scans, as well as MRI, radiation therapy and nuclear medicine. Radiology includes safety, contrast media, patient preparation and positioning.

AMA 245 (2) N**Minor Surgery**

Learn theory and procedures for assisting a physician with minor surgery. Includes asepsis and sterile principles, surgical methods, common procedures, instruments, equipment, supplies, sterile field setup and the process. Focuses on the vital areas of patient education and consent, preparation and post-procedure follow-up care. Prereq: Health requirements.

AMA 246 (1) N**Patient Prioritizing and Instruction**

Covers accurate prioritizing of patients and good patient instruction. Using effective oral and written communication, learn to prioritize a patient's needs by phone or in-person and to interview them. Explain general office policies and general information, instruct in health maintenance, teach about disease prevention and locate community resources.

AMA 250 (5) N**Medication Administration**

Learn theory and practical procedures in calculating medication dosages and administering medications. Includes legal and ethical factors, the medication order or prescription, dosages, drug labels, calculating dosages, the six rights of drug administration, and various routes to deliver medications. Practice giving oral medications, various parenteral routes and injections intradermally, subcutaneously and intramuscularly.

AMA 251 (1) N**EKG**

Learn theory and practical procedures for performing a standard electrocardiogram. Includes the equipment, lead placement, basic interpretation of emergency conditions, the cardiac cycle and its relation to the tracing and artifacts. Includes the basic theory of a stress EKG and Holter monitor, although not practiced. Prereq: Health requirements.

AMA 252 (2) N**Phlebotomy**

Learn theory and practical experience in procedures for blood collection by venipuncture and capillary puncture. Covers the anatomy and physiology of the cardiovascular system, equipment needed and technique. Includes patient interaction, site selection, safety, evacuated tube vs. syringe method, use of a butterfly collection system, capillary puncture and troubleshooting the unsuccessful venipuncture. Prereq: Health requirements.

AMA 253 (1) N**Hematology**

Learn the theory and practical procedures in hematology testing for the physician's office laboratory. Tests include white and red blood cell counts, white cell differential, erythrocyte indices, erythrocyte sedimentation rate and automated hematology. Also covers specimen preparation, testing, quality assurance, normal ranges of results and documentation. Prereq: Health requirements.

AMA 254 (1) N**Urinalysis**

Covers the importance of urinalysis in the diagnosis and treatment of various diseases and how to correctly perform a urinalysis. Includes safety, quality control, equipment and supplies, collection methods and the examination of urine physically, chemically and microscopically. Prereq: Health requirements.

AMA 255 (1) N**Basic Microbiology**

Intro to the basics of microbiology as related to the medical assistant in a physician's office laboratory. Includes classification, cell structure, equipment, safety, specimens, collection procedures and the microscopic examination of bacteria. Covers culture media and the microbiological culture, biochemical tests, identification systems, sensitivity testing, parasitology and mycology. Prereq: Health requirements.

**AMA 256 (1) N
Specialty Lab Tests and Chemistry**

Includes a variety of lab tests not covered elsewhere including pregnancy testing, infectious mononucleosis, blood typing, semen analysis, phenylketonuria, tuberculosis, blood glucose, cholesterol, triglycerides and blood urea nitrogen (BUN) testing. Learn theory, procedure, equipment, supplies, values and safety. Perform the tests in the classroom laboratory. Prereq: Health requirements.

**AMA 290 (9) N
Medical Assisting Externship & Cma Review**

Provides the opportunity to practice Medical Assisting skills and gain valuable experience in the ambulatory health care setting. Share experiences and information with peers and instructors. On site, the student is guided by the externship site supervisor in performing various administrative and clinical tasks as expected of an entry-level medical assistant. Requires 198 unpaid hours in the clinical setting. Includes review and preparation for the CMA exam.

Medical Vocabulary**AHI 100 (3) N
Introduction to Medical Vocabulary**

General survey of medical terminology introducing health service workers to the basic rules and fundamentals in medical vocabulary-building.

Meteorology**MEY 100 (5) C | N
Meteorology**

Intro to the composition, structure, motions and origin of the atmosphere; forecasting; climates and how they have changed through time; and effects of human activities on weather and climate.

**Microcomputer Mgmt. /
Computer Info. Systems****CIS 197 (1-5) C
Work Experience-Computer Information
Systems**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply computer information systems knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

**CIS 290 (1-5) C
Independent Studies or Internship**

Provides advanced students with research opportunities or work experience in computer information systems. Variable credits. Prereq: Advanced standing and permission.

**MIC 098 (3) C
Computing Essentials**

Presents common concepts and principles for effective use of current technologies. Covers basic technology vocabulary, general uses and functions of computers, mobile devices, software applications and the Internet. Designed for students with little or no experience using computers and/or the Internet for academic and professional purposes. Prereq: Placement into ENGL 092/ESL 093 or equivalent and basic keyboarding skills (United States keyboard).

**MIC 101 (4) C
Introduction to Microcomputer Applications**

Intro to microcomputer applications for Windows. Includes an overview of Windows, the Microsoft Office System featuring Word, Excel, Access, PowerPoint, Internet Browsers, email, along with emerging software application topics and concepts.

**MIC 102 (1) C
Using Computers I**

A series of one-credit short classes which provide a brief hands-on intro to one type of commonly used industry software using both PC and Macintosh. Attendance mandatory and additional 2-4 hours per week required during Computer Center hours.

**MIC 103 (3) C
Computer Applications for Builders**

Intro to basic personal computer hardware and software concepts as they apply to business transactions and the building trades. Prereq: Permission.

**MIC 120 (4) C
Database Applications & Design with MS Access**

Develop database application and design skills through use of MS Access. Emphasizes planning, creating and revising a database system. Prereq: MIC 101 or equivalent experience.

**MIC 151 (5) C
HTML and Web Page Development**

Intro to Hypertext Markup Language (HTML) and web page development. Includes implementing HTML tags and files; learning common web page formats and functions; and developing and installing comprehensive websites. Prereq: MIC 101 or MIC 150, or equivalent experience.

**MIC 175 (4) C
Computer User Support**

Designed to introduce students to the fundamentals of help desk operations. Emphasizes the basic components of a successful help desk, provide students with working knowledge of software to process and track calls, and present hands-on experience with problem analysis.

**MIC 190 (1-5) C
Special Topics: Microcomputer Management**

Series of offerings for the business community. Credit varies according to time requirements. Formats range from self-paced to intensive, hands-on workshops. Content flexible to keep up with rapid changes in industry standards.

**MIC 203 (3) C
Introduction to Computer Aided Drafting &
Design**

Intro to drafting and design using the cross-platform program Vectorworks. Offered at the Wood Construction Center. Prereq: MIC 103 or permission.

**MIC 215 (4) C
Introduction to Dreamweaver**

Online course. Access online discussion board, lecture board, quiz and file sharing tools. Intro to Macromedia Dreamweaver, the most widely used software for web page development used by professionals and hobbyists. Create simple web pages as well as dynamic and comprehensive websites. Prereq: MIC 101 or equivalent.

**MIC 298 (1-5) C
Microcomputers Special Topics**

Designed to allow for special course offerings and new course development on topics relevant to new and emerging computer and technology applications and industry needs. Prerequisite: Permission.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN Watch Technology

NAME TO PREFIX
Watch Technology HIN

Common Course Numbering explanation is on page 202.

Music

MUSC 100 (5) C | S

Music in the Western World

Intro to classical music. Provides an understanding of musical expression through works of the great composers. Emphasizes music listening through recordings, films and special performances.

MUSC& 105 (5) C | N

Music Appreciation

Explores the elements, forms, styles, and genres of music in Western Culture, including Classical, Rock, Pop, Rap, Hip Hop and Jazz. Students will develop listening perception to increase their enjoyment and understanding of various musical styles, and discover commonalities among various styles of music.

MUSC 109 (5) S

World Beat: Global Studies Through Music

Examines societal beliefs, identity, history, world view, values and aspirations expressed by selected non-Western cultures (or groups within these cultures) through music. Features both traditional and contemporary popular music.

MUSC 110 (5) C | N | S

Introduction to World Music

Covers the music of selected societies of the world within their cultural context. Using musical concepts on a cross-cultural basis, examine various cultural areas and societies.

MUSC 113 (5) C | N

Music in the United States

Overview of musical developments in the United States from Colonial times to the present, using live performances, videotapes and recordings. Examines contributions of ethnic/minority groups and the relevant social issues connected with these musical experiences.

MUSC 116 (5) C | S

Rock Music - History and Perspectives I

Examines rock music as a musical, social, cultural, economic and political force in the United States. Emphasizes early rock music development.

MUSC 117 (5) S

Rock Music II

Examines rock music as a musical, social, cultural, economic and political force in the United States. Emphasis on the later decades of rock music development.

MUSC 119 (1-2) C | N | S

Beginning Group Instruction: Voice

Students explore and strengthen their individual singing voice. Technique and repertoire are major focuses. Expressivity and overall musicianship are fostered. Students learn about the wide variety of communication tools available to them. Importance of lyric analysis, awareness of melodic shapes, and overall interpretation is stressed. Pieces are chosen based on student's needs as well as tastes. Open to all levels.

MUSC 120 (2) C

Intermediate Group Instruction: Voice

Continuation of MUSC 119. Students continue to explore and strengthen their individual singing voice, develop greater technique, choose voice-specific repertoire, and memorize musical literature. Importance of lyric analysis, awareness of melodic shapes, and overall interpretation continue to be stressed. Students will select pieces based on current skill level and personal preference. Prerequisite: Satisfactory completion of MUSC119.

MUSC 125 (5) N

Fundamentals of Music

Intro to reading and writing music for non-majors. Builds musical knowledge and skills to complement student's natural music ability.

MUSC 126 (2) C | S

Beginning Group Piano - 1st Quarter

Class piano for general student to develop reading skills and technical proficiency.

MUSC 127 (2) C | S

Beginning Group Piano - 2nd Quarter

Piano class for students with previous keyboard experience. Prerequisite: Successful completion of MUSC 126, or Instructor's permission.

MUSC 128 (2) C | S

Beginning Group Piano - 3rd Quarter

A continuation of MUSC 127. Prerequisite: Satisfactory completion of MUSC 127.

MUSC 130 (1-2) C | N

Individual Instruction Series: Voice

Instructor and student co-create curriculum based on student's needs and goals with a primary focus on technique, repertoire, and expressive musicianship. Pieces are chosen based on student's needs and individual preferences. Weekly individualized guidance and feedback are provided. MUSC 130 is open to all levels and may be repeated. Credit hours vary. An additional fee is charged for all individual instruction. Prereq: Instructor's permission.

MUSC 134 (1-2) C | N

Individual Instruction: Woodwinds

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

MUSC 135 (1-2) C | N

Individual Instruction: Percussion

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

MUSC 136 (1-2) C

Individual Instruction: Composition

Instructor & student co-create curriculum based on student's needs and goals with a focus on reading, notational skills and a working knowledge of melody, harmony, rhythm & a diverse palette of compositional techniques used throughout music history. Assignments are chosen based on student's needs and tastes. Weekly individualized guidance and feedback are provided. Open to all levels, may be repeated. Credit hours vary. Additional fee charged for all individual instruction. Prereq: Permission.

MUSC 138 (1-2) C | N

Individual Instruction: Guitar

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

MUSC 139 (1-2) N

Individual Instruction: Harp

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

MUSC 140 (1-5) N | S
College Choir

Focus on musicianship, vocal techniques and performance skills for the large choral ensemble through study of literature from all stylistic periods. Present one concert per quarter in various musical styles and cultures. Daily attendance required. May be repeated for up to 15 credits. Prereq: Ability to match pitch.

MUSC& 141 (5) C
Music Theory I

Covers rudiments of music notation, scales, intervals and triads. Development of aural skills rhythmic, melodic and harmonic, through sight-reading and dictation. Includes simple music composition analysis and correlated keyboard exercises. For music majors and minors.

MUSC 145 (2) C
Pop Vocal Ensemble

Open to singers of all abilities and levels. Opportunities to perform pop, rock, jazz, rap, R&B, ballads, spoken word, Broadway, Americana, experimental, and free improvisational songs. Instruction in vocal techniques, choral techniques, stage presence, and creating harmonies. This class has an optional fee for access to piano practice rooms.

MUSC 146 (5) C
Popular Music Ensemble I

Introduces how to read a lead sheet, chord charts, and rhythm patterns to gain the skills needed as instrumentalists and vocalists to perform in today's commercial music world. Students practice and perform classic songs from a variety of genres within the commercial music field: Pop, Rock, Soul, Folk, Jazz, Rap & Hip Hop. Students cover current hits and compose original music. Open to all students and all levels of musicianship.

MUSC 147 (5) C
Popular Music Ensemble II

Continues the learning & performance activities of the MUSC 146 (Popular Music Ensemble I). Provides students an opportunity to write, perform original songs, lead an ensemble, & perform covers of current popular music hits. Focuses on interaction of instrumental & vocal performance groups in a variety of musical genres, & provides opportunities for students to design their own solo performances in concert & the recording studio. Prereq: MUSC 146 with a 2.0 or higher, or Instructor's permission.

MUSC 148 (5) C
Popular Music Ensemble III

Continues the performance activities of the Popular Music Ensemble II. Provides students an opportunity to write and perform original songs, lead an ensemble, and perform covers of current popular music hits. Students will record their original music in the recording studio to create a portfolio for academic or professional music career opportunities.

MUSC 151 (2) C | N
Performance Experience

Students will have the opportunity to develop music performance skills and techniques, working toward a more engaging and vibrant stage presence. Students will have the opportunity to work in solo, duet, trio, and small ensemble settings and learn to effectively collaborate. Students will develop current marketing skills for performers. Open to all levels of instrumentalists, singers, composers, songwriters, dancers, actors, and comedians who want to (further) incorporate music into their acts.

MUSC 154 (1-2) N
Symphonic Band

Features the finest in Wind band literature, both contemporary and traditional. Membership by audition.

MUSC 160 (5) S
the Blues and Its Influence

Explores the development of the blues and its influence on jazz, rock, classical music and literature. Covers the social, economic and political forces that shaped African-American experiences in the U.S. as chronicled in blues music.

MUSC 161 (5) C
History of American Popular Music

History of American popular music from colonial times to contemporary styles. Analysis of musical characteristics, as well as social/cultural contexts of development.

MUSC 171 (1-2) C | N
Individual Instruction: Piano

Individual piano instruction. Credit hours vary. May be repeated. Additional fees are required. Prereq: Instructor's permission.

MUSC 172 (1-2) N
Individual Instruction: Strings

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

MUSC 173 (1-2) C | N
Individual Instruction: Brass

Credit hours vary. May be repeated. An additional fee is charged for all individual instruction in this series. Prereq: Permission.

MUSC 185 (5) C
Computer Music and Recording

Intro to the technical skills of electronic music production and recording. Covers the basic elements of music including listening, improvising, recording, arranging, mixing and digital editing. Create original music using stimuli. Learn mixing and audio production, including sound shaping, effects use and midi sequencing. Open to all students.

MUSC 186 (5) C
Digital Music Production and Sonwriting

Sequel to Music 185. Expands knowledge of digital music production through learning intermediate level techniques for composing, producing, and performing songs. Covers computer-based recording, synthesis, and notation for the composer/arranger. Focuses on fundamentals of MIDI, sequencing, sampling, basic signal processing, and practical production skills using current digital technology. Includes writing of original material during lab sessions. Prereq: Musc 185 minimum passing grade 2.0.

MUSC 204 (5) C | N
History of Jazz

Traces the roots of jazz in America, through films, lectures, recordings and live performances. Includes Rag, New Orleans, New York, Chicago, Kansas City, the Big Band era, Blues, Be-bop, Hard Bop, the New Thing, Free Form, Electric and Fusion Styles.

MUSC 205 (5) C
Jazz Masters of the 20th Century

A music literature course for the general student who wishes to study jazz music in more depth. Lectures, selected readings and major recordings by each artist.

MUSC 221 (2) C | S
Group Piano - 4th Quarter

Continuation of MUSC128. Technique, repertoire, and theory, with emphasis on classical compositions.

MUSC 222 (2) C | S
Group Piano - 5th Quarter

Continuation of MUSC221. Prerequisite: Successful completion of MUSC221, or permission.

MUSC 223 (2) C | S**Group Piano - 6th Quarter**

Continuation of MUSC222. Prerequisite: Successful completion of MUSC222, or permission.

MUSC 298 (5) C**Practicum in Music**

Practicum in various skills in music, such as tutorial assistant in piano theory, coaching vocal students or apprenticeship in use of electronic equipment (Broadway Performance Hall).

MUSC 299 (1-5) C | N | S**Practicum in Music**

Research musical performance in an area of interest determined by student and instructor. Prereq: Permission.

Nanotechnology**NANO 101 (5) N****Introduction to Nanotechnology**

Intro to nanotechnology principles, applications, industry, ethics and careers. Includes basic concepts, properties and applications of relations between nano/microelectronics-mechanical materials, electronics, magnetism, mechanics, fluidics, optics, photonics and smart biological materials. Covers processing, fabrication, modeling and testing used in the field. Prereq: MATH 098. Recommend: one quarter of college-level chemistry.

NANO 220 (5) N**Micro/Nanofabrication**

Course covers the fabrication technologies used in the nano/micro fabrication laboratory and production environments. Includes cleanroom basics and proper technique: lithography: methods of physical and chemical materials deposition and etching. Prereq: NANO 101 (with a 2.0 or higher), MATH& 098, CHEM& 121, and MSC 101; or instructor permission.

NANO 230 (5) N**Nano/Micro Characterization Packaging & Testing**

Intro to nano/micro device and material characterization testing and packaging. Covers surface and bulk material characterization methods, including composition and property analysis of nano/micro devices materials, and structures.. Prereq: NANO 220, CHEM& 131 with a 2.0 or higher and MATH 098 with 2.0 or higher or permission. Recommend PHYS& 121.

NANO 250 (5) N**Capstone/Practicum II**

Provides direct experience in a nano/micro-fabrication facility. Complete a design and fabrication project related to a nano/micro-device, document and report on the project. Prereq: Permission.

Network Infrastructure**NTI 300 (5) C****Linux and Enterprise Scripting Technologies**

Covers basic understanding of the command line to automation of administrative tasks and configuration across a large environment. Learn to cron, armor, and log administrative scripts and translate them into high level scripting languages. Also includes regex, stream editing, remote admin, change management, databases and web. Prereq: ITC 110 and ITC 136 with grade of 2.0 or higher or instructor permission.

NTI 310 (5) C**Linux Application**

Builds on existing Linux automation and configuration skills by introducing Product Data/Product Lifecycle Management tools, custom code compilation and package creation. Includes administering, patching, and updating various development, testing, and production versions of server services and configuring internally facing services for Windows compatibility. Prereq: NTI-300 with a 2.0 or higher, or equivalent Linux automation experience (permission).

NTI 320 (5) C**Monitoring and Trending of Enterprise Networks**

Define optimization and monitoring techniques for enterprise networks and applications. Analyze deployment, implementation and configuration for availability, capacity, performance, security, reporting, storage, alerts, recovery, backup, and archival. Demonstrate optimization and monitoring by implementation techniques. Prereq: NTI 300 and NTI 310, each with a 2.0 or higher; or Instructor's permission.

NTI 340 (5) C**Software Defined Networking 1**

Introduces knowledge and skills needed to plan, implement, and monitor a scalable routed network. Focuses on routing protocols for both IPv4 and IPv6: Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) for an enterprise; and, Border Gateway Protocol (BGP) for enterprise Internet connectivity. Includes learning how to redistribute routes, implement path control, and secure Cisco routers. Prereq: Instructor's permission.

NTI 350 (5) C**Software Defined Networking 2**

Covers the knowledge and skills needed to create an efficient and expandable enterprise network. Focuses on Layer 2 and multi-layer switch functions including VLANs, trunks, inter-VLAN routing, port aggregation, spanning tree, first hop redundancy, as well as network security and high availability features. Prereq: NET 146 with 2.5 or higher, or Instructor's permission.

NTI 360 (5) C**Software Defined Networking 3**

Focuses on techniques to monitor and troubleshoot routed and switched networks through extensive hands-on lab exercises. Explore troubleshooting methods, approaches, procedures, and tools. Introduction of a series of different organizations for troubleshooting scenarios. Solve troubleshooting tickets, debrief, and review info that will help further understanding of the specific issues raised. PREREQ: NTI 340 with 2.5 or higher; or, Instructor's permission.

NTI 400 (5) C**Identity & Information/Content Security**

Explores architectures & technology to enhance the security & trustworthiness of information delivery processes. Examines: identity management in a global marketplace; key laws managing content/data; & methods of risk management & risk control. Explores brand management & continuous delivery/content management for cloudcentric business models, & methods for information governance when working with enterprise & cloud content. PREREQ: ITC 110, or NET120, with 2.0 or higher; or Instructor's OK.

NTI 410 (5) C**Network Security for the Enterprise**

Introduces the tools and techniques of penetration testing for the persistent threat environment of the cloud enabled world. Details the elements of an application, app, or database exploit. Examines the configuration of penetration tools for use in the cloud and the enterprise. Demonstrates processes for managing coding errors. Explores case studies to examine penetration tools as applied to the DevOps process. PREREQ: ITC 110 or ITC 151 w/ 2.0 or higher or instructor permission.

NTI 430 (5) C**Big Data and Collaboration Management**

Investigates the dynamics of data, & examines the marketplace for data. Explores diverse data storage environments, tools, and systems to provide secure or insecure access to that data. Covers enterprise, cloud, and hybrid environments. Delves into security processes to manage collaboration for a variety of business models that use data natively and/or for analytics. PREREQ: ITC 110 OR ITC 151 with a 2.0 or higher, OR Instructor's permission.

NTI 440 (5) C**Devops and Enterprise Admin for the Cloud (Sre)**

Focuses on DevOps and SRE (Site Reliability Engineering) administration practices for Internet Services. Examine techniques to design, build, & run cloud services. Use core skills: UNIX/Linux system administration, networking, & hardware-based operating systems maintenance. Not a coding class. Investigate highly available, fast, & secure scalable services. Evaluate cloud systems against performance metrics. PREREQ: ITC136 or NET124, either with 2.0 or higher; or Instructor's permission.

NTI 460 (5) C**Devops Practicum, BAS IT Networking**

Develop and deploy DevOps tools for either an external client/approved project. Determine suitability, cost benefit analysis, ongoing maintenance needs in deploying DevOps. For example: develop/implement a deployment plan to orchestrate infrastructure builds programmatically in the public cloud, use configuration management, & work with cloud native templates. Prereqs: Must be in the last qtr of program; completed all other BAS-IT Networking courses with 2.0 or higher; & Instructor's permission.

NTI 470 (5) C**Internship / Capstone Project, BAS IT Networking**

For the IT Networking (Bachelor of Applied Science) program. Students complete an internship or arrange to complete a capstone project, applying the skills learned in the classroom to the workplace. Students write a culminating paper, reflecting on their experience and integrating it with their classroom learning. Prereq: Must be in the last qtr of program; completed all other BAS-IT Networking courses with 2.0 or higher; & Instructor's permission.

Network Technology**NET 120 (5) C****Network Essentials - Comptia Network +**

Intro to networking technologies for local area networks (LANs), wide area networks (WANs) and the Internet. Prereq: MIC 101 or ability to use MS Office.

NET 122 (5) C**Network Operating Systems 1 - Client**

Covers the installation and configuration a managed enterprise client operating system on stand-alone clients/computers that are part of a workgroup, domain, or cloud infrastructure. Includes configuration and implementation skills for creating a client for a LAN/WAN server structure using a directory based network. IaC (Infrastructure as Code) from the client perspective is introduced. Prereq: NET 120 with a 2.0 or higher, or similar work-experience. Co-requisite: NET 124.

NET 124 (5) C**Network Operating Systems 2 - Win2k Server**

Learn to install Windows Server and various file systems and to administer and manage Active Directory services and objects. Use Microsoft Management Console to monitor system performance and to administer Internet Information Services and user accounts, group accounts and group policies. Study print services, network protocols, virtual private networking, Routing and Remote Access Service, DHCP, WINS and DNS. Learn to back up data, implement disaster protection and recover from a disaster. Prereq: NET 122 with 2.0 or higher or concurrent enrollment in NET 122.

NET 126 (5) C**Network Operating Systems 3 - Sysop Applications**

Focuses on administering enterprise class servers. Investigates IaC (Infrastructure as Code). Learn to deploy advanced directory services. Explore enterprise server tools using PowerShell & Python. Develop a foundation in the use & manipulation of enterprise systems operation applications. Specific attention to Authentication, Authorization, and Access to enterprise/Cloud objects. Prereq: NET 124 with 2.0 or higher, similar work experience, or Instructor's permission. Co-requisite: NET 134.

NET 134 (5) C**Network IaC (Infrastructure As Code) & Design**

Analyze and construct a networked application environment. Examine network path availability, fault tolerance, and cost in homogenous and diverse environments on many scales. Evaluate tool selection for best-of-breed and monolithic system environments. Perform maintenance, deployment, and auditing using PowerShell and Python. Prerequisite: NET124 with a 2.0 or higher, or Instructor's permission (who evaluates previous work experience, etc.). Co-requisite: NET126.

NET 138 (5) C**UNIX for Network Administration**

Covers the organization of UNIX-based hardware components and software tools used by the host administrator to control access, tune the system, and account for system resources used. Covers advanced concepts with multi-user, multi-tasking, time-sharing networked communications, UNIX tools, network schedulers, security, remote access, performance monitoring and networking aspects of UNIX. Examines operational considerations including host initialization, suspension and termination and the system's physical environment. Prereq: ITC 136.

NET 142 (5) C**Network Management - CISCO I**

First of three sequential courses teaching current and emerging network technology. Covers safety, network terminology and protocols, LANs, OSI model, cabling, cabling tools, IT addressing and network standards. Emphasizes decision-making and problem-solving techniques and proper use, care and maintenance of networking software, tools and equipment. PREREQ: Completion of ITC 140 with a minimum grade of 2.0 or permission.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN **Watch Technology**

NAME TO PREFIX

Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

NET 144 (5) C**Network Management - CISCO II**

Continuation of NET 142. Covers safety, networking, network protocols, LANs, WANs, Ethernet, LAN switching, router IOS, TCP/IP addressing, router configuration, dynamic routing, static routing and the network administrator's role and function. Emphasis on techniques to solve networking problems. Prereq: Completion of NET 142 with a minimum grade of 2.0 or permission.

NET 146 (5) C**Network Management - CISCO III**

Third of three courses designed to expand knowledge & previously learned networking skills. Introduces & extends the configuration ability of Border Gateway Protocol (BGP), Layer 3 Switching, and Hot Standby Router Protocol (HSRP). Covers Enhanced Interior Gateway Routing Protocol (EIGRP), Wide Area Networks (WANs), & network troubleshooting. Includes Point-to-Point Protocols (PPP) & frame relay design, configuration, & maintenance. Prereq: NET 144 with a 2.0 or higher.

NET 200 (10) C**Enterprise Applications**

Capstone course for network infrastructure students. Simulate a small business environment in hardware and software from a case study and apply the skills from the foundation networking courses. Further explore enterprise applications and server needs of businesses as directed by industry standards and trends. Prereq: NET 126 with 2.0 or better or permission.

New Media**NME 110 (6) C****New Media I**

Use authentic tasks and projects to prepare for real-world work demands encountered in respective fields. Work collaboratively in projects, exploring the role of communications in the context of New Media and society.

NME 120 (6) C**New Media II**

Use authentic tasks and projects to prepare for real-world work demands encountered in respective fields. Work collaboratively in projects, exploring the role of communications in the context of New Media and society.

NME 130 (6) C**New Media III**

Use authentic tasks and projects to prepare for real-world work demands encountered in respective fields. Work collaboratively in projects, exploring the role of communications in the context of New Media and society.

Nursing**NUR 096 (1-5) S****Intro to Applying Academic Study Strategies**

Intro to learning strategies, thinking and metacognitive skills needed to succeed in the Healthcare Pathway and Nursing. Apply skills in class while being mentored. Coreqs: enrollment in LPN prereqs.

NUR 097 (1-5) S**Pplying Academic Study Strategies**

Continue developing learning strategies, thinking and metacognitive skills while being mentored. Coreqs: enrollment in LPN prereqs.

NUR 098 (1-5) S**Integrating Academic Study Strategies**

Consolidate and extend learning strategies, thinking and metacognitive skills while being mentored. Coreqs: enrollment in LPN prereqs.

NUR 101 (5) C**Nursing I: Fundamentals of Nursing**

Intro to core nursing concepts, organized around the individual as a biopsychosocial being, constantly interacting with and adapting to a changing environment. Covers principles of critical thinking, the nursing process, the role of the nurse, cultural views of health and principles of growth and development with emphasis on the aging process. Addresses images and impressions of nursing, current trends in health care delivery and legal and ethical issues in nursing. Coreq: NUR 111, 122 and MATH& 107.

NUR 102 (3) C**Nursing II: Medical-Surgical Nursing**

First of 4 medical-surgical theory courses. Develop a comprehensive understanding of homeostasis and the adaptation of clients to the complex processes of the physiologic mode. Emphasis on alterations in fluid and electrolyte balance, acid-base balance, endocrine functions, compromise in wound healing and peripheral vascular circulation. Prereq: Completion of 1st quarter with 2.5 or higher. Coreq: NUR 112, 123 & NTR 150.

NUR 103 (4) C**Nursing III: Medical Surgical Nursing**

Second of 4 medical-surgical theory courses. Develop a comprehensive understanding of homeostasis and adaptation with emphasis on alterations in neurologic, musculoskeletal, chronic respiratory and chronic cardiovascular systems. Covers key concepts of adaptation to the complex processes of movement and cognition, oxygenation and circulation. Prereq: Completion of 2nd quarter with 2.5 or higher. Coreq: NUR 113, 185 and PSYC& 200 or PSY 206.

NUR 105 (2) N**CPR and First Aid for Healthcare Providers**

Provides support for ESL and Adult Basic Education students. Covers American Red Cross (ARC) or equivalent CPR/AED for the Professional Rescuer and Healthcare Provider, with 2-year valid certification; and First Aid Certificates required to work in skilled nursing facilities, adult family homes and hospitals. Co-req: NUR 107.

NUR 107 (8) N**Nursing Assistant - Theory & Concepts**

Introduction to basic nursing care theory and concepts including HIV/AIDS education. Corequisite: NUR 109. Students without CPR and first aid certification may also need to enroll in NUR 105.

NUR 108 (3) N
Clinical Hospital Experience for NAC

This course is for Nursing Assistants-Certified who wish to increase their hospital-based skills for employment in an acute care facility or emergency department. Successful completion of this course requires mastery of a list of skills that were developed by Acute Care Facilities. After certification or after successful completion students will be eligible to apply for employment with Acute Care Facilities if other conditions of employment are met.

NUR 109 (4) N
Nursing Assistant - Lab and Clinical Experience

Fifty hours in a clinical setting. Provides practice in skills and use of concepts taught in NUR 107 and opportunities to learn skills not offered in class and laboratory facilities.

NUR 111 (3) C
Nursing Practice I

Apply nursing concepts from NUR 101. Assess four adaptive modes in the clinical setting: physiologic-physical, self-concept-group identity, role function and interdependence. Covers basic assessment and, care planning. Apply principled application of nursing skills in practice lab and clinical setting. Coreq: NUR 101, 122 & MATH& 107.

NUR 112 (3) C
Nursing Practice II

Builds on NUR 111. Apply concepts relevant to adaptation in the basic physiological and psychosocial modes, client response and administration of medications. Assess the four adaptive modes. Gain experience in complete assessment, care planning and principled application of nursing skills in practice lab and clinical setting. Prereq: Completion of 1st quarter with 2.5 or higher. Coreq: NUR 102, 123 and NTR 150.

NUR 113 (4) C
Nursing Practice III

Builds on NUR 112. Emphasizes integrating nursing theory, clinical data, skills in providing nursing care and developing priorities. Assess the four adaptive modes, gain experience in individualized assessment and care planning and apply nursing skills in practice lab and clinical setting. Prereq: Successful completion of 2nd quarter. Coreq: NUR 103, 185 & PSYC& 200.

NUR 115 (2) N
Introduction to Patient Care

Intro to supervised clinical experience in a long-term care environment. Includes communication and documentation skills. Coreqs: NUR 116, 117 & 130.

NUR 116 (6) N
Nursing Fundamentals

Provides the theoretical background for basic nursing skills, including intro to nursing process, microbiology, nutrition, medical terminology and math equivalents. Coreqs: NUR 115, 117, & 130.

NUR 117 (2) N
Nursing Fundamentals Lab

This is an introductory course in nursing skills and procedures. The course includes demonstration of basic skills and laboratory practice. Beginning communication skills are also included. Coreqs: NUR 115, 116, & 130.

NUR 118 (2) N
Clinical Nursing Skills I

Covers laboratory content linked to NUR 127 and 131. Intermediate level nursing practice. Prereq: 1st quarter NUR courses. Coreq: NUR 127 & 131.

NUR 119 (1) N
Clinical Nursing Skills II

Continuation of NUR 118; theory and labs linked with NUR 128 and 141. Prereq: First two quarters NUR courses. Coreq: NUR 128 & NUR 141.

NUR 122 (2) C
Psychosocial Nursing I

First of 2 psychosocial nursing courses. Focuses on communication pertinent to the care of clients in various health care settings throughout the lifespan. Practice therapeutic and professional communication techniques. Assess adaptation in self-concept, role function and independence of clients who are coping with acute and chronic illness. Learn group process. Coreqs: NUR 101, 111 and MATH& 107.

NUR 123 (4) C
Pharmacology for Nursing

Intro to basic concepts of drug therapy, roles and responsibilities of nurses, and applying critical thinking and the nursing process for safe medication administration. Includes terminology, resources and regulations related to drug therapy and principles of pharmacokinetics, pharmacodynamics and pharmacotherapeutics. Major classifications of drugs include autonomic nervous system agents; parenteral fluids; electrolytes; vitamins and minerals; endocrine, neurologic, respiratory and selected cardiovascular agents; anesthetic, immune system and gastrointestinal agents. Coreqs: NUR 102, 112 & NTR 150.

NUR 126 (3) N
Role of the LPN

Assist the student to further understand the role of the LPN and legal issues related to practical nursing. Prereq: First three quarters NUR courses. Coreq: NUR 139 & 154.

NUR 127 (7) N
Medical/Surgical Nursing - Child/Adult I

Covers common conditions of illness throughout the life span. Prereq: All first-quarter NUR courses. Coreq: NUR 118 & 131.

NUR 128 (6) N
Medical/Surgical Nursing - Child/Adult II

Continuation of NUR 127. Prereq: First two quarters NUR courses. Coreq: NUR 119 & 141 and permission.

NUR 130 (2) N
Critical Thinking in Nursing Practice

Intro to critical thinking skills in nursing and the nursing process with practice applying theory and skills. coreqs: NUR 115, 116, & 117.

NUR 131 (4) N
Clinical Nursing Practice I

Supervised hospital and nursing home practice in medical/surgical care of the child/adult and chronic and convalescent patients. Includes communication and documentation skills. Prereq: All first-quarter NUR courses. Coreq: NUR 118 & NUR 127

NUR 133 (2) N
Family Nursing Theory

Study of the care of families, perinatal clients and their partners, infants and children. Nursing care for children will center on health promotion and wellness maintenance as well as parenting. Coreq: NUR 134.

NUR 134 (2) N
Family Nursing Clinical

Application of practical nursing care of families, including perinatal clients and their partners, infants and children in a childbirth center and pediatric setting. Nursing care for children will center on health promotion and wellness as well as parenting. Coreq: NUR 133.

NUR 139 (4) N
Transition to LPN Practice

Provides experience in full-shift nursing care on a work-like schedule. Expands medical/surgical nursing experience. Coreqs: NUR 126 & 154.

NUR 141 (2) N**Clinical Nursing Practice II**

Supervised hospital and nursing home practice with related ward conferences, to expand basic nursing care skills for the convalescent and chronically ill patient, medical/surgical patient, child or adult. Includes communication and documentation skills. Prereq: First two quarters NUR classes. Coreq: NUR 119 & 128.

NUR 154 (1) N**Intravenous Therapy Skills**

Intermediate course in intravenous therapy which provides theoretical background for intravenous infusion and clinical application skills using the nursing process. Prereq: First three quarters NUR courses. Coreq: NUR 126 & 139.

NUR 155 (1-6) N**Special Topics: Adult Family Home**

Assists foreign students, pre-nursing and advanced placement students to meet special needs for licensure or other student interests. Tailored to meet State Board (LPN) or faculty recommendations to accomplish student/program objectives. Prereq: Permission.

NUR 170 (12) S**Na-C Basic Health Care**

Covers basic health care concepts needed to provide nursing care to adults, including maintaining and monitoring patient's health status while covering the nurse's role in aspects of aging and disability. The course provides clinical experience in a long term care setting. Prereq: CASAS reading score of 235, 5/10 on basic math test, CASAS listening score of 220 (for ESL) and attend NAC orientation. CPR Cert and immunizations required.

NUR 171 (12) S**LPN I - Fundamentals of Nursing**

Covers concepts of health and wellness, foundations, history, legal ethical principles, and professional and personal boundaries of nursing. Includes medical terminology, total body assessment, nursing process, care plan, critical thinking and communication techniques. Covers health assessment of the body systems, promotion of health across the life span, basic needs of patients, and grief; loss and dying. Studies integumentary, gastrointestinal and urinary systems. Prereq: CNA certificate and all program prerequisites.

NUR 172 (12) S**LPN II Medical Surgical Nursing I**

Analysis and integration of cross-cultural concepts into the nursing process. Covers the pathophysiological concepts of medical surgical nursing, causation of illness and response of the body to current treatment and healing processes of many common illnesses. Includes aging and pharmacological and nutritional concepts. Lab skills correlate to the systems studied. Clinical rotations in long term care facilities. Prereq: NUR 171.

NUR 173 (12) S**LPN III - Medical Surgical Nursing II**

Foundations of medical surgical nursing, including pathophysiological principles, the body's attempt to heal and maintain itself, current treatment and promotion of healing. Integrates pharmacological understanding of classes of drugs and the nursing principles of administration and monitoring of medication. Practice in lab and in an acute setting. Prereq: NUR 172.

NUR 174 (10) S**LPN IV - Maternal Child Health Pediatric Nursing**

Learn skills, and attitudes for providing nursing care in maternal, newborn, pediatric, and infant care settings. Covers psychiatric nursing concepts and principles. Clinical experiences focus on labor, delivery, and pediatric care in inpatient and clinical facilities. Prereq: NUR 173.

NUR 179 (2) S**LPN V Mentorship**

Introduces medical terminology which will apply to the entering LPN student. Reviews ANP study skills, and CNA skills. Prereq: Permission.

NUR 185 (2) C**Gerontology for Nurses**

Study adaptations of normal aging, differentiating these adaptations from disease and learn the implications for nursing care. Covers psychosocial, legal and ethical issues common in gerontological nursing practice. Prereq: Completion of 2nd quarter with a 2.5 or higher. Coreq: NUR 103, 113 and PSYC& 200.

NUR 190 (2) C**Adn Program Study Group I**

Enhances the lecture material presented in required core nursing courses each quarter. Focuses on understanding concepts relevant to adaptation in the basic physiological and psychosocial modes. Emphasizes the nursing process as the scientific basis for practice. Coreqs: Enrollment in all concurrent Nursing courses for the quarter specified.

NUR 201 (2) C**Nursing IVA: Psychosocial Nursing II**

Second of 2 psychosocial nursing courses. Builds on NUR 122 (or NUR 106). Focuses on caring for clients with mental illness using a system with cognator and regulator subsystems to maintain adaptation in the four adaptive modes. Covers psychosocial assessment and therapeutic interventions in psychiatric disorders at three levels: integrated, compensatory and compromised. Prereq: Completion of 3rd quarter or LPN/RN Transition courses with 2.5 or higher. Coreq: NUR 211, 206, 216.

NUR 206 (3) C**Nursing IVB: Medical-Surgical Nursing**

Third of 4 medical-surgical courses. Builds on NUR 101, 102 & 103. Develop a comprehensive understanding of homeostasis and the adaptation of clients to the complex processes of the physiologic mode. Emphasizes alterations in select integumentary and immune or protective responses and surgical therapies. Prereq: Completion of 3rd quarter or LPN/RN Transition courses with 2.5 or higher. Coreq: NUR 201, 211, 216.

NUR 207 (4) C**Nursing V: Medical-Surgical Nursing**

Fourth of 4 medical surgical courses. Builds on NUR 101, 102, 103 & 206. Develop a comprehensive understanding of homeostasis and the adaptation of clients to the complex processes of the physiologic mode. Emphasizes acute respiratory, acute cardiovascular, gastrointestinal and renal alterations. Prereq: Completion of 4th quarter with 2.5 or higher. Coreq: NUR 217, 220.

NUR 208 (6) C**Nursing VI: Developing Family Nursing**

Develop a comprehensive understanding of homeostasis and the adaptation of maternal, newborn and pediatric clients to the complex processes of the physiologic mode. Emphasizes learning and promoting normal family development and understanding adaptive and maladaptive physiologic and psychosocial responses to childbearing, childrearing and illness in childhood. Prereq: Completion of 5th quarter with 2.5 or higher. Coreq: NUR 218, 230.

NUR 211 (3) C**Nursing Practice IVA**

In a psychiatric setting focus on adaptation in the basic physiological and psychosocial modes and client response. Integrates nursing theory, clinical data and skills in nursing care and developing priorities. Assess the four adaptive modes in clinical setting, gain experience in individualized assessment and care planning and apply therapeutic skills in practice lab and clinical setting. Prereq: Completion of 3rd quarter LPN/RN Transition courses with 2.5 or higher. Coreq: NUR 201, 206, 216.

NUR 216 (3) C**Nursing Practice IVB**

Focuses on concepts relevant to adaptation in the basic physiological and psychosocial modes and client response. Emphasizes comprehensive care and the relationships of the various components of client data and health care interventions. Assess the four adaptive modes, gain experience in individualized assessment and care planning and apply nursing skills in practice lab and clinical setting. Prereq: Completion of 3rd quarter Nursing or LPN/RN Transition with 2.5 or higher. Coreq: NUR 201, 206, 211.

NUR 217 (5) C**Nursing Practice V**

Study adaptation in the basic physiological and psychosocial modes and client response. Emphasizes analysis of client data and health care interventions, initiating nursing assessments and interventions, health promotions and education and developing leadership skills. Assess the four adaptive modes, gain experience in individualized assessment and care planning and apply nursing skills in a variety of clinical settings. Prereq: Completion of all 4th quarter with 2.5 or higher. Coreq: NUR 207 & 220.

NUR 218 (3) C**Nursing Practice VI**

Emphasis on adaptation in the developing family. Apply concepts from NUR 208 relevant to adaptation in the basic physiological and psychosocial modes and client response. Assess the four adaptive modes in the clinical setting. Obtain experience in individualized assessment, care planning, and principled application of nursing skills in a variety of clinical settings. Coreqs: NUR 208, 230.

NUR 220 (2) C**Health Promotions and Managing Care**

Intro to theoretical foundations of health promotion, education and wellness maintenance across the lifespan and to the leadership role in Nursing. Emphasizes planning health promotions and managing care in a variety of settings. Addresses leadership in nursing: traits, styles, problem-solving, change, team communication, conflict management, delegation, time management and the implications of health care trends. Linked to final medical-surgical rotation. Prereq: Completion of 4th quarter with a 2.5 or higher. Coreq: NUR 207 & 217.

NUR 223 (2) N**Advanced Nursing Skills**

With NUR 225 and 231 provides laboratory practice of advanced nursing skills, to prepare for employment as an RN. Prereq: WA state LPN license.

NUR 224 (2) N**Health Promotion and Education in Nursing**

Provides theoretical knowledge related to planning and implementing educational processes in a health care setting. Prereq: WA state LPN license. Coreq: NUR 226, 227 & 228.

NUR 225 (6) N**Family Nursing**

With NUR 231, develops theoretical knowledge of the continuum of wellness and complex health conditions related to family nursing, to prepare for employment as an RN. Prereq: WA state LPN license. Coreq: NUR 223 & 231.

NUR 226 (2) N**Care Management and Leadership**

Intro to theoretical foundations of leadership in nursing. Emphasizes leadership, change and motivational theories, conflict management, problem-solving and group dynamics. Includes principles of time management and delegation. Prereq: WA state LPN license. Coreq: NUR 224, 237 & 238.

NUR 227 (7) N**Complex Medical Surgical Psychiatric Nursing**

Expands theoretical knowledge and nursing care related to various complex medical/surgical and psychiatric health conditions throughout the life span. Prereq: WA state LPN license. Coreq: NUR 228.

NUR 228 (5) N**Complex Nurg Medical Surgical Psychiatric Clinic**

Covers supervised ambulatory, community-based, acute or long-term care practice (medical-surgical) which enhances nursing skills in order to plan and implement care for patients with acute medical/surgical illnesses and psychiatric disorders. Promotes health through the life span. Prereq: WA state LPN license. Coreq: NUR 227.

NUR 230 (2) C**Transition to Professional Nursing Role**

Covers the transition from the role of student to Registered Nurse. Focuses on the role of the RN in health care, the community and organizations. Emphasizes professional and legal obligations, obtaining and maintaining licensure, professional organizations, continuing education and job searching. Includes preparation for the NCLEX/RN exam. Prereq: Completion of 5th quarter with a 2.5 or higher. Coreq: NUR 208 & 218.

NUR 231 (4) N**Family Nursing Clinical**

With NUR 223 and 225, prepare for work as an RN. Clinical hours focus on family nursing, normal growth and development, and adaptation of children and families to illness. In a supervised pediatric setting, practice assessment, planning, implementing care, and gain clinical experience with childbearing. Prereq: WA state LPN license.

NUR 237 (3) N**Advanced Medical Surgical Nursing Care**

Covers theory needed to plan and implement culturally competent care for diverse populations related to various complex conditions of illness throughout the lifespan. Study how this care may impact treatment modalities. Prereq: LPN license in Washington state. Coreq: NUR 224, NUR 226and 238.

NUR 238 (5) N**Transition to Registered Nursing Practice**

Provides supervised ambulatory, community-based, acute, critical, long-term care practice medical/-surgical. Develop further skills in assessment, analysis, planning, implementation and evaluation. Prereq: WA state LPN license. Coreq: NUR 224, 226 & 237.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

NUR 290 (2) C
Adn Program Study Group IV

Enhances the lecture material presented in required core nursing courses each quarter. Focuses on understanding concepts relevant to adaptation in the basic physiological and psychosocial modes. Emphasizes the nursing process as the scientific basis for practice. Coreqs: Enrollment in all concurrent Nursing courses for the quarter specified.

NUR 299 (1-5) C
Independent Study in Nursing

Independent study in selected nursing topics under faculty supervision. Prereq: Permission.

Associate in Nursing DTA/MRP

NURS 101 (4) C | N | S
Fundamentals of Nursing

Introduction to the profession of nursing and core nursing concepts organized around the framework of Gordon's Functional Health Patterns. Covers principles of critical thinking, use of the nursing process, the role of the nurse in health care, cultural views of health, and principles of growth and development.

NURS 102 (3) C | N | S
Medical-Surgical Nursing I

Focuses on comprehensive understanding of the physiology of homeostasis and the effects of patient self-efficacy, culture, environment, and illness. Covers alterations of fluid and electrolyte balance, acid-base balance, chronic neurological conditions, sensory deficits, diabetes, and wound care from the perspective of Gordon's Functional Health Patterns.

NURS 103 (3) C | N | S
Medical-Surgical Nursing II

Focuses on the application of the nursing process to patients from the perspective of Gordon's functional health patterns. Emphasizes the care of adult patients with nutrition-metabolic, activity-exercise, and elimination functional health patterns. Pharmacology related to the course content and patient responses to cultural practices and beliefs are integrated.

NURS 111 (2) C | N | S
Skills Lab I

Builds upon the application of foundational nursing concepts and skills in the laboratory environment. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care planning for patients with risk for or actual dysfunctional health patterns.

NURS 112 (3) C | N | S
Nursing Practice I

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for adult and gerontologic patients. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for patients at risk for or with alterations in functional health patterns.

NURS 113 (1) C | N | S
Skills Lab II

Builds upon and provides in-depth and advanced application of foundational nursing concepts and skills in a laboratory or simulated environment. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care planning for patients with risk for or actual dysfunctional health patterns.

NURS 121 (3) C | N | S
Nursing Practice

Focuses on the application of foundational nursing concepts and skills in supervised direct or simulated care for adult and gerontologic patients in long term care settings. Gordon's Functional Health Patterns and the nursing process are used as the organizing framework for assessment and patient-centered care planning.

NURS 123 (4) C | N | S
Nursing Practice II

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for adult patients with medical-surgical conditions. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for patients at risk for or actual dysfunctional health patterns.

NURS 132 (3) C | N | S
Behavioral Health Nursing

Focuses on application of the nursing process to patients from the perspective of Gordon's functional health patterns. Emphasizes care of patients with cognitive-perceptual, self-perception/self-concept, role-relationship, coping/stress-tolerance and sexuality-reproductive dysfunctional health patterns. Nurse/patient relationships, therapeutic communication, safety, related pharmacology, identification of barriers to care and the impact of cultural practices/beliefs are integrated.

NURS 142 (3) C | N | S
Behavioral Health Practice

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for patients with behavioral health conditions. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for patients at risk for or actual dysfunctional health patterns.

NURS 204 (5) C
Medical-Surgical Nursing III

Focuses on the application of the nursing process to patients from the perspective of Gordon's functional health patterns. Emphasizes the care of adult patients with nutrition-metabolic, activity-exercise, and health perception-health management dysfunctional health patterns. Pharmacology related to the course content and patient responses to cultural practices and beliefs are integrated.

NURS 205 (4) C**Medical-Surgical Nursing IV**

Focuses on the application of the nursing process to patients from the perspective of Gordon's functional health patterns. Emphasizes the care of adult patients with nutrition-metabolic, activity-exercise, cognitive-perceptual, health-perception/health-management, and self-perception/self-concept dysfunctional health patterns. Pharmacology related to the course content and patient responses to cultural practices and beliefs are integrated.

NURS 206 (3) C**Health Promotion and Managing Care in Nursing**

Overview of the major theories and models that guide health promotion interventions including environmental, sociocultural, and economic factors that influence health care practices. Emphasis is placed on evidence-based strategies to promote individual, family, and community health for diverse populations. Gordon's Functional Health Patterns serve as the organizing framework for assessing the health of individuals, families, and communities.

NURS 214 (3) C**Nursing Practice III**

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for adult patients with medical-surgical conditions. Emphasis is on nursing skills, communication, and clinical judgment in order to plan and implement evidence-based care for patients at risk for or actual dysfunctional health patterns.

NURS 215 (3) C**Maternal Nursing**

Focuses on application of the nursing process to maternal-newborn patients from the perspective of Gordon's Functional Health patterns. Emphasizes care of maternal-newborn patients at risk for or with actual nutritional-metabolic, activity-exercise, role-relationship, and cognitive-perceptual dysfunctional health patterns and adult patients with sexuality-reproductive dysfunctional health patterns. Related pharmacology and cultural practices and beliefs are integrated.

NURS 216 (5) C**Nursing Practice IV**

Expands upon the application of concepts discussed in prior and current nursing courses in a supervised or simulated care setting. Emphasis on nursing skills, communication, and clinical judgment in order to plan and implement evidence-based care for patients experiencing alterations in multiple dysfunctional health patterns.

NURS 224 (3) C**Pediatric Nursing**

Focuses upon application of the nursing process to pediatric patients from the perspective of Gordon's Functional Health Patterns. Emphasizes care of pediatric patients with risk for or actual alteration in nutritional-metabolic, activity-exercise, elimination, health-perception/health management, cognitive-perceptual, and self-perception/self-concept dysfunctional health patterns. Related pharmacology and specific cultural practices and beliefs are integrated.

NURS 225 (1) C**Maternal Practice**

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for maternity and newborn patients. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for patients at risk for or with alterations in functional health patterns.

NURS 226 (3) C**Transitions to Professional Nursing Role**

Focuses on leadership, management of care, and professionalism as the student transitions into the healthcare system as a professional nurse. Legal obligations, licensure requirements, organizational culture, self-care, healthcare informatics, and evidenced-based practice are emphasized.

NURS 234 (1) C**Pediatric Practice**

Builds upon the application of foundational nursing concepts discussed in prior and current nursing courses in supervised direct or simulated care for pediatric patients. Gordon's Functional Health Patterns and the nursing process are used as the framework for assessment and patient-centered care for pediatric patients at risk for or with alterations in functional health patterns.

Nutrition**NTR 150 (5) C | N | S****Human Nutrition**

Intro to nutrition, with an emphasis on the relationship of nutrition to growth, development, health, physical and mental functioning. Examines sources, functions, interrelationships and human requirements of proteins, carbohydrates, fat, minerals, vitamins and water. Includes changes in energy and nutrient requirements throughout the life cycle. Prereq: Eligible for MATH 084 and ENGL& 101 (C).

NTR 155 (5) C**Advanced Human Nutrition**

Covers contemporary topics in nutrition. Emphasis on origins of the American diet, nutrition's role in disease and behavior and the safety of the food supply. Prereq: NTR 150.

NUTR& 101 (5) C | N | S**Nutrition**

Introduction to human nutrition with an emphasis on the relationship of nutrition to growth, development, health, and physical and mental functioning across the lifespan. Sources, functions, interrelationships, and human requirements of proteins, carbohydrates, fat, minerals, vitamins and water will be examined. Topics also include analysis of personal dietary habits, public health issues such as obesity and access to food and food security, and the role of nutrition in chronic disease.

Oceanography**OCEA& 100 (5) C | N****Introduction to Oceanography**

Explores the basic fields of ocean science: geological, biological, chemical and physical oceanography. Investigates challenges related to the ocean such as natural disasters, climate change, whaling, and fisheries decline. Lab science. Eligibility for ENGL& 101 and Math 098 or Math 136, or Completion of Math 088 with a grade of 2.0 or higher. Non-lab science.

OCEA& 101 (5) C | N
Introduction to Oceanography with Lab

Explores the basic fields of ocean science: geological, biological, chemical and physical oceanography. Investigates challenges related to the ocean such as natural disaster potential, climate change, whaling, and fisheries decline. Lab science. Eligibility ENGL& 101 and Math 098 or Math 136 or Completion of Math 088 with a grade of 2.0 or higher.

OCEA 299 (1-5) C
Independent Study in Oceanography

Study of selected topics in oceanography. This course is an agreement between the student(s) and a faculty adviser who will guide the student(s) through the course work. Prerequisite: Instructor's permission.

Parent Ed/Senior Ed
Parent-Child Study Laboratory**FAM 012 (3) C,N**
Life Enrichment for Seniors

Provides opportunities for seniors to stay informed on current social issues and meet the challenge of continual learning. Includes subjects in the fine arts, social sciences, humanities, and sciences.

FAM 013 (3) C,N
Living Skills for Seniors

Covers information, resources, and skills, helping seniors to live healthy, independent lives. Includes topics in health, nutrition, consumer education, community resources, exercise, crime prevention, lip-reading, and memory improvement.

FAM 014 (1-3) C,N
Personal Growth/Seniors

Includes classes in self-image, writing your life story, decision-making, widowhood, interpersonal communication, and similar topics.

FAM 045 (3) C,N
Parent Education Childstudy/Lab

Parent/infant, parent/pre-three, father/infant, parent cooperative preschools. Parents participate in planning and leading learning activities for children and adults. Classes are located in campus Parent-Child Centers and local neighborhood locations. Parents manage preschools, and instructors function as resource persons, facilitators, and early childhood educators.

FAM 046 (3) C,N
2nd Parent Childstudy /Lab

Parent/infant, parent/pre-three, father/infant, parent cooperative preschools. Parents participate in planning and leading learning activities for children and adults. Classes are located in campus Parent-Child Centers and local neighborhood locations. Parents manage preschools, and instructors function as resource persons, facilitators, and early childhood educators.

FAM 047,048,049 (3) S
Classes are for Parents of Infants

Classes meet on campus for parents with their infant. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class while developing a network of support.

FAM 053,054,055 (3) S
Classes are for Parents of One Year Olds

Classes meet on campus in a parent cooperative preschool for one year olds. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class while developing a network of support. Parents work in the classroom as assistant teachers under the guidance of the preschool teacher and parenting education instructor.

FAM 063,064,065 (3) S
Classes are for Parents of Two Year Olds

Classes meet in local neighborhood locations in a parent cooperative preschool for two year olds. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class. Parents work in the classroom one class session per week as an assistant teacher, manage preschool business, develop a network of support and parenting instructors function as resource persons, facilitators, and early childhood educators.

FAM 073,074,075 (3) S
Classes are for Parents of Three Year Olds

Classes meet in local neighborhood locations in a parent cooperative preschool for three year olds. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class. Parents work in the classroom one class session per week as an assistant teacher, manage preschool business, develop a network of support and parenting instructors function as resource persons, facilitators, and early childhood educators.

FAM 083,084,085 (3) S
Classes are for Parents of Four Year Olds

Classes meet in local neighborhood locations in a pre-K parent cooperative preschool for four year olds. In small and large group discussion, parenting education seminars, individual consultation, parents gain practical knowledge and skills they utilize at home as well as with the children in class. Parents work in the classroom one class session per week as an assistant teacher, manage preschool business, develop a network of support and parenting instructors function as resource persons, facilitators, and early childhood educators.

FAM 093,094,095 (3) S
Classes are for parents with multi-age children in one class.**FAM 145,146,147,148 (3) N**
Parent Education 0-12 Months

Students with children, birth through 12 months of age, enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

FAM 149 (3) N
Parent Education/Child Study Lab: 2nd Parent

Students are parents of children, birth through 6 years of age, who enroll in Parent Education/Child Study Laboratory. Students participate in the laboratory and attend parent education opportunities as scheduled. The class is intended primarily for a second parent of a child in a Parent Education/Child Study Laboratory class, with the first parent enrolled in a FAM 145-146-147-148, 155-156-157-158, 165-166-167-168, 175-176-177-178, 185-186-187-188 course.

FAM 155,156,157,158 (?) N**Parent Education 12-24 Months**

Students with children 12-24 months of age enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

FAM 165,166,167,168 N**Parent Education 24-36 Months**

Students with children 24-36 months of age enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

FAM 175,176,177,178 N**Parent Education 36-60 Months**

Students with children 36-60 months of age enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

FAM 180 (1-3) C,N**Effective Black Parenting**

Covers cognitive-behavioral principles and techniques to foster effective family communication, healthy African American identity, extended family values, child growth and development, and healthy self-esteem. Includes prevention and treatment roles in community efforts to address learning disorders, behavioral problems, and emotional disturbance.

FAM 181 (1-6) C,N**Star Parenting**

Online class. The STAR process (Stop, Think, Act, Review) encourages those who work with children to investigate children's temperament and development and to focus on long-range goals. Use the child's current behavior to teach skills/values the adult wants. Guide by avoiding problems, responding to cooperation, acknowledging feelings, setting limits, and teaching new skills. May be repeated for credit.

FAM 182 (5) N**Special Topics Child Care**

Course for experienced family child care providers covering a variety of topics, such as working with parents, special needs children, multi-cultural curriculum, dealing with stress and burnout, and management and personnel issues. Students attend a weekly seminar and receive credit for development and completion of learning objectives to be accomplished in their family day care home. Completion of the learning objectives is supervised by a faculty mentor.

FAM 183 (5) N**Special Topics Child Care**

Special topics for childcare providers focusing on working with parents, special needs children, multi-cultural curriculum, dealing with stress and burnout, and management and personnel issues.

FAM 185,186,187,188 (?) N**Parent Education 48-72 Months**

Students with children 48-72 months of age enroll in Parent Education/Child Study Laboratory classes. Students attend the laboratory class one day a week with their child and one evening each month.

FAM 189 (2) N**Principles & Tools for Effective Parenting**

This course is designed for students with children 1 to 12 years of age in their care (parents, teachers, childcare workers). It introduces students to principles and tools they need to guide the children in their care. Students will apply the principles and tools to their own individual child or issue(s). A student may retake the class with a different child (or issue) in mind.

FAM 196 (1-3) C,N**Parent Education: Special Program**

This class is for students enrolled in Parent Education/Child Study Laboratory: Special Programs classes. The course format includes lectures, discussions, and laboratory experiences designed to explore current research as it applies to child development. Students also fulfill specific obligations of individual classes. The course enables students to extract and adopt principles applicable to parenting, teaching, and child development.

FAM 197 (1-3) N**Parent Education: Special Program**

Students in this class may include children's teachers, as well as parents and caregivers, who enroll in the Parent Education/Child Study Laboratory. Students participate in the laboratory as able and attend parent education opportunities as scheduled. Students are welcomed and encouraged to attend other related workshops or classes offered in Parent Education or Child Development.

FAM 198 (1-3) N**Parent Education: Special Programs**

Students in this class may include children's teachers, as well as parents and caregivers, who enroll in the Parent Education/Child Study Laboratory. Students participate in the laboratory as able, and attend parent education opportunities as scheduled. Students are welcomed and encouraged to attend other related workshops or classes offered in Parent Education or Child Development.

FAM 199 (1-3) N**Parent Education: Special Programs**

This class is for students enrolled in Parent Education/Child Study Laboratory: Special Programs classes. The course format includes lectures, discussions, and laboratory experiences designed to explore current research as applies to child development. Students also fulfill specific obligations of individual classes. The course enables students to extract and adopt principles applicable to parenting, teaching, and child development.

Pastry & Baking Arts**PST 101 (5) S****Pastry and Baking Orientation**

Learn trade terminology, scaling and measuring procedures, mixing methods, identification and proper use of hand tools and mechanized baking equipment, plus safety procedures and sanitation. Covers portion control, baking math and ingredient functions in baking. Prereq: Enrollment in program or permission.

PST 102 (5) S**Introduction to Baking Management**

Learn bakery and pastry production management, including procedures and organizational tools for day to day operations of a bakery or pastry shop. Study standardized formulas, cost control, AP and EP menu mix, purchasing, receiving, storeroom organization, formula cost analysis, safety and sanitation, trade terminology, professional and ethical behavior and attitude. Prereq: PST 101 or permission.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN **Watch Technology**

NAME TO PREFIX

Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

PST 103 (4) S
Decoration Theory 1

Covers theory and practical applications of decorative confectionary mediums. Learn techniques, ingredients and tools used in centerpiece, show piece and confectionary display production, including performance test and showpiece requirements. Includes rye dough, Royal icing flow, marzipan, macaronade, rose paste, and chocolate tempering. Prereq: PST 102 or permission.

PST 104 (4) S
Decoration Theory 2

Covers theory and practical applications of decorative confectionary mediums. Learn techniques, ingredients and tools used in centerpiece, show piece and confectionary display production, including performance test and showpiece requirements. Covers pastillage, gum paste, rolled fondant, modeling chocolate, rock sugar, and poured sugar. Prereq: PST 102 or permission.

PST 105 (4) S
Decoration Theory 3

Covers theory and practical applications of decorative confectionary mediums. Learn techniques, ingredients and tools used in centerpiece, show piece and confectionary display production, including performance test and showpiece requirements. Covers pulled sugar, flower piping, rice paper flowers, salt dough, and nougatine. Prereq: PST 102 or permission.

PST 111 (15) S
Baking 1

Covers production of cookies, cakes, and quick breads. Learn terms, ingredients and their functions, and techniques of basic baking. Prepare assorted doughs and batters using classic and modern mixing methods. Includes assessment of doughs and batters, product finishes, safety and sanitation procedures. Prereq: PST 101 or permission.

PST 112 (15) S
Pastry 1

Covers French pastry and beginning decorating and finishing. Make primary doughs and bases using classical techniques: Pate Feuilleté, pâte à choux, pâte sucrée and assorted pie doughs. Includes elementary assembling and finishing for cakes and tarts, pastry ingredients and their functions, baking methods, assessment of doughs and batters, sponges, safety and sanitation. Prereq: PST 111, FSD 100 and HOS 203 with 2.0 or better or permission.

PST 113 (15) S
Baking 2

Covers beginning and intermediate bread baking, terms and techniques of bread production including proper mixing, fermentation, shaping, proofing, baking and finishing. Prepare laminated and rich yeasted doughs (Viennoiserie). Deepen learning about bread ingredients and their functions, baking methods, lamination procedures, assessment, safety and sanitation. Prereq: PST 112 or permission.

PST 197 (1-5) S
Internship in Pastry and Baking Arts

Individual internship in Pastry and/or Baking Arts industries. Prereq: permission.

PST 211 (15) S
Pastry 2

French pastry and plated desserts. Make more complex pastry doughs and bases using classical techniques. Includes dessert ingredients and their functions, advanced product finishes and decorations, plated dessert design and production. Study dessert sauces and garnishes, flavor profiles and combinations, banquet desserts, safety and sanitation. Prereq: PST 113 or permission.

PST 212 (15) S
Pastry 3

Covers terms and techniques of chocolate work, seasonal baking and show pieces, including tempering, candy cooking, enrobing, piping and product finishes. Also covers use of local, sustainable, natural and organic dairy and seasonal produce in baked and dessert products. Learn storage and care, stock rotation, safety and sanitation. Produce a decorative display piece. Prereq: PST 211 or permission.

PST 213 (15) S
Pastry 4

Covers terms and techniques of advanced pastry decoration by making complicated desserts and highly decorated cakes, including advanced mousses, Bavarians and meringues. Learn practical management skills through student lead experiences: delegation, leadership, time management, conflict resolution, customer relations, inventory control, product receiving and rotation, safety and sanitation. Prereqs: PST 102 and 212 or permission.

PST 299 (1-15) S
Special Topics in Pastry and Baking

Special topics on an individual or group basis related to Pastry and Baking Arts industries.

Pathology of Medical Assisting

AHM 101 (1) N
Pathology 1

Series of 5 one-unit courses (to total 5 credits of Pathology) which cover a basic review of terminology, structure and basic anatomy, including cavities, regions, anatomical planes and directional terms for various systems and their related tests and procedures.

AHM 102 (1) N
Pathology 2

Series of 5 one-unit courses (to total 5 credits of Pathology) which cover a basic review of terminology, structure and basic anatomy, including cavities, regions, anatomical planes and directional terms for various systems and their related tests and procedures.

AHM 103 (1) N
Pathology 3

Series of 5 one-unit courses (to total 5 credits of Pathology) which cover a basic review of terminology, structure and basic anatomy, including cavities, regions, anatomical planes and directional terms for various systems and their related tests and procedures.

AHM 104 (1) N
Pathology 4

Series of 5 one-unit courses (to total 5 credits of Pathology) which cover a basic review of terminology, structure and basic anatomy, including cavities, regions, anatomical planes and directional terms for various systems and their related tests and procedures.

**AHM 105 (1) N
Pathology 5**

Series of 5 one-unit courses (to total 5 credits of Pathology) which cover a basic review of terminology, structure and basic anatomy, including cavities, regions, anatomical planes and directional terms for various systems and their related tests and procedures.

**AHM 124 (1) N
Introduction to Medical Transcription**

Intro to the career of medical transcription and the American Association for Medical Transcription. Covers transcription equipment and tools, basic guidelines, reports that are transcribed, turnaround time and correcting work. Presents the laws and ethics of medical transcription. Prereq: Successful completion of medical terminology or permission.

**AHM 140 (1) N
Phlebotomy 2**

Presents more advanced techniques and increased skills in phlebotomy and difficult blood draws. Builds on skills learned in AMA 252. Prereq: AMA 252; health requirements.

**AHM 141 (1) N
Lab Equipment and Measurements**

Intro to lab equipment, measurements and calculations related to lab specimen collection, processing and testing. Learn how math is used in collecting and preparing specimens, the use of military time, preparing reagents, dilution of specimens and calculating amount of preservative needed. Prereq: Assessment test score or placement into MATH 084/085 or 097 or higher; health requirements.

**AHM 142 (1) N
Non-Blood Specimen Collection**

Covers knowledge and skills required to obtain specimens of body fluids or tissues other than blood. Includes techniques for collecting stool, sputum, urine, wound cultures and the preparation and testing of such specimens. Practice with other students. Prereq: Health requirements.

Pharmacy Technician (AHI)**PHA 112 (2) N
Pharmacy Law**

Intro to federal and state laws regulating pharmacy practice. Emphasis on Washington state pharmacy law regulating pharmacy technicians.

**PHA 115 (3) N
Orientation to Pharmacy Practice**

Intro to pharmacy technician as a career. Includes history, pharmacy information resources and drug distribution control. Visit job to observe typical job tasks.

**PHA 116 (1) N
HIV/AIDS and Hipaarmacy Practice**

Intro to the basic concepts of HIV/AIDS including the treatment and prevention guidelines for patient care and a review of the HIPAA federal law as it pertains to the pharmacy technician.

**PHA 120 (3) N
Pharmacy Calculations**

Covers mathematics review and an intro to calculations encountered in pharmacy practice.

**PHA 130 (2) N
Over the Counter Drugs**

Overview and uses of drugs available without prescriptions (over-the-counter drugs).

**PHA 140 (3) N
Sterile Products and Aseptic Technique I**

Covers aseptic technique in preparing sterile solutions and pharmaceuticals. Learn laminar flow hood usage, preparation of intravenous fluids and hyperalimentation fluids. Practice filling unit dose carts and preparing IV fluid labels using hospital-based software.

**PHA 141 (3) N
Sterile Products and Aseptic Technique II**

Continuation of PHA 140. Focus on the preparation of cardiac and other iterable drips, IV antibiotics, chemotherapy, IVPs and TPNs. Introduction to hospital application software. Includes lab.

**PHA 145 (1) N
Pharmacy Ethics**

Focuses on commonly encountered ethical dilemmas from pharmacy practice. Intro to ethical decision-making models and problem-solving solutions.

**PHA 146 (2) N
Communications in Pharmacy Practice**

Examination of communication processes to see how they are influenced by the values, behaviors and beliefs that are defined by society and culture. Also explores communication within the pharmacy setting and how present laws influence this communication.

**PHA 150 (3) N
Pharmacology I**

Covers the principals of drug action including pharmaco-kinetics, anatomy and physiology of the nervous system and the drugs used in the treatment of disorders of the nervous system.

**PHA 151 (2) N
Pharmacology II**

Continuation of PHA 150. Covers the anatomy and physiology of the cardiovascular, gastrointestinal, endocrine and respiratory systems. Emphasis on the pharmacological treatment of diseases of cardiovascular, gastrointestinal, and respiratory systems.

**PHA 160 (3) N
Pharmacy Technology I**

Covers many uses of computers in pharmacy practice. Gain proficiency using two different pharmacy prescription-filling software programs. Fill real prescriptions in pharmacy lab.

**PHA 161 (3) N
Pharmacy Technology II**

Continuation of PHA 160. Intro to the top 200 drugs. Use pharmacy software to process real prescriptions in the pharmacy lab. Study computerized insurance billing and report generation. Intro to hospital and nursing home application software.

**PHA 170 (5) N
Pharmacy Records Management**

General overview of skills required to work in a retail pharmacy (ambulatory care). Introduces the skills to interpret prescriptions, such as Latin abbreviations, the top 200 drugs and apothecary symbols. Covers inventory control, third party insurance billing and pharmacy record-keeping.

**PHA 185 (3) N
Pharmacy Law and Ethics**

Pharmacy Law and Ethics covers the federal and state laws governing pharmacy practice and the commonly encountered ethical dilemmas in the field of pharmacy. Introduces ethical decision making models and practical problem solving solutions that are utilized in the pharmacy.

**PHA 190 (1-13) N
Pharmacy Technician Externship**

Gain pharmacy technician experience in participating agencies, classroom guidance in assimilating experience and classroom assistance with problems. (13 credits generally provided over two-quarters, 5 + 8 credits).

PHA 191 (1) N
Job Skills and National Exam Preparation

Covers job search skills, résumé and cover letter writing techniques and the interview process to prepare students to seek a job as a pharmacy technician. Also reviews the subjects and process for the national exam for pharmacy technician.

Philosophy**PHIL& 101 (5) C | N | S**
Introduction to Philosophy

Introduction to philosophical thought and issues, intellectual systems, and the writings of various philosophers. Covers the nature of philosophy, the meaning of knowledge, values, reality, and related subjects.

PHIL 102 (5) C | N
Contemporary Moral Problems

Covers philosophical consideration of some of the major moral problems of modern society and civilization, such as discrimination, abortion, euthanasia, animal rights, world hunger and homelessness. Examines the issue of what means are justified in trying to bring about social change.

PHIL 110 (5) N | S
Introduction to Social Ethics

Includes philosophical analysis of current or perennial issues in public affairs, such as the nature and scope of freedom in society, the justification of democratic government and the nature of social justice.

PHIL 111 (5) N
Introduction to Bioethics

Examines ethical questions surrounding clinical medical practice, ethical issues in biomedical research and more general ethical questions concerning the maintenance and improvement of the health and well-being of communities at local and global levels. Focuses on newly emerging infectious diseases (AIDS, drug-resistant tuberculosis) and on environmentally-induced diseases, such as asthma, cancers, chemical sensitivity and reproductive disorders.

PHIL 118 (5) S
Practical Reasoning and Decision Making

Emphasizes a non-symbolic approach to logic and critical thinking. Emphasis on analyzing and evaluating real life examples of reasoning.

PHIL& 120 (5) C | N | S
Symbolic Logic

Symbolic logic provides a tool for analyzing and evaluating statements and deductive arguments. This introductory course focuses on both sentence and quantificational logic. The meaning of language and its place in the reasoning process is discussed and analyzed. Prereq: MATH 098 with 2.0 or higher.

PHIL 131 (1) C | N | S
Ethics and Policy in Healthcare I

Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people. Introduces ethical and legal principles governing healthcare with a focus on nursing practice including historic milestones in nursing.

PHIL 132 (2) C | N | S
Ethics and Policy in Healthcare II

The Ethics and Policy in Healthcare series explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people. This second course in the three-course series presents organizational structures, legal considerations, policies, procedures, and ethical principles/theories related to healthcare.

PHIL 160 (5) C
Philosophy of Science

Covers the historical development of selected concepts from science and the philosophy of science.

PHIL 210 (5) C
Comparative Religion

This course introduces the academic study of religion by using a comparative approach to a variety of religious traditions. We'll ask, "What is religion?" We also will explore the ethical, metaphysical, and other philosophical stances found within and between various religions by examining their beliefs, rituals, texts, and practices. Prereq: ENGL& 101 eligibility.

PHIL 215 (5) C
Introduction to Ethics

Deals with questions: "What am I to do?" and "Why?"; "What am I to be?"; and "How can I be what I choose to be?" Examines ethical principles of Aristotle, Mill, Aquinas, Kant, existentialism and situation ethics. Includes current problems in medical ethics. Explores ideas of duty, justice, responsibility, virtue and human excellence.

PHIL 220 (5) N
Environment and Human Rights

Addresses ethics and human rights standards in general as well as the relevance of norms and instruments for environmental concerns. Examines ways ethical principles and international human rights norms apply to specific environmental and sustainability issues. Covers practical measures taken by human rights organizations to effect change.

PHIL 230 (2) C
Ethics and Policy in Healthcare III

The Ethics and Policy in Healthcare series explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people. This third course in the three-course series presents research, leadership, workplace issues, and ethical dilemmas in healthcare with an emphasis on nursing.

PHIL 255 (5) C
Marxist Philosophy Examined

Examines Marxist philosophy: What is the nature of capitalism? What is exploitation? What are some Marxist criticisms of capitalism? Does Marxism clarify or distort the phenomenon of racism? What reasons, if any, are there why lesbians, gays, or bisexuals should support Marxism? Is Marxism Eurocentric? Can a person consistently support both Marxism and feminism? Must a Marxist be opposed to religion? What is political freedom? Prereq: Eligibility for ENGL& 101.

PHIL 298 (1-5) C | N | S
Independent Study in Philosophy

Independent study in selected philosophical topics under faculty supervision. Prereq: Permission.

PHIL 299 (1-5) C
Seminar in Philosophy

Examines great philosophical questions and philosophers by instructor and student agreement.

Phlebotomy**PHL 110 (7) C**
Phlebotomy I

Phlebotomy 110 addresses the role of the Phlebotomist and daily functions performed in a variety of health care settings and includes live venipuncture procedures. Medical asepsis/hand washing, anatomy and physiology, medical terminology, patient reception, patient rights, consent, assessment, patient interaction and specimen custody are included in this course.

PHL 120 (7) C
Phlebotomy II

Phlebotomy 120 addresses the advanced role of the Phlebotomist and daily functions performed in a variety of health care settings and includes live venipuncture procedures. Accessioner duties, the theory of arterial blood gases, capillary puncture, microcollection, drug testing, point of care testing, advanced/critical patient assessment, dehydration, anticoagulation therapy, lymphedema, edema, obesity, intravenous therapy, hemoconcentration and hemolysis are included in this course.

Photography**PHO 110 (4) C**
Survey of Photography

Explores the varied career paths found in professional photography. Emphasis is placed on the creative styles and trends in image making, from the first Daguerreotypes to the HDSLR storytellers of today. Entry-level issues such as working conditions, time management, organizational strategies and professional ethics will also be examined. Prereq: Permission.

PHO 111 (4) C
Digital Capture Techniques

Addresses the terminology and ethics of capturing digital images. Covers the functions and operation of HDSLR cameras. Introduces techniques for determining optimum exposures and basic compositional aesthetics. Includes development of an organized file management system utilizing Adobe Lightroom and parametric editing in Capture One. Prereq: Permission.

PHO 112 (4) C
Lighting Techniques I

Covers the basic methods of commercial lighting; the laws, principles, and practices of light; the qualities of direct/indirect sunlight and tungsten light sources; lighting for form, texture. Introduces standards for the safe operation of lighting equipment in a studio environment. Prereq: Permission.

PHO 113 (4) C
Audio Production I

Covers sound theory and the best practices for sound recording and audio editing to develop skills as effective audio storytellers. Includes use of various microphones and audio recorders to effectively record sound or voice on location and in a controlled environment. Introduces use of Adobe Audition and Premiere to layer sounds to create audio narratives. Includes development of skills to become more critical in hearing sound. Prereq: Permission.

PHO 120 (4) C
Conceptual Development

Introduces visual conceptualization skills required in commercial photography. Includes attention to techniques and processes that support creative and aesthetic development. Explores approaches to critique and the art market. Fosters creativity and aesthetic development. Prereq: Successful completion of first quarter commercial photography program courses with a minimum grade of 2.0 in each course.

PHO 121 (4) C
Digital Imaging I

Covers the creative and technical requirements of digital image optimization using Adobe Photoshop Creative Cloud. Includes interface navigation, tools, layers and filters, creation and manipulation of image selections, adjustments of color and contrast, use of retouching, masking, cropping, and basic image compositing, and the export of images for print and web. Prereq: Successful completion of first quarter commercial photography program courses with a minimum grade of 2.0 in each course.

PHO 122 (4) C
Lighting Techniques II

Covers studio techniques for lighting people. Addresses safe operation of studio equipment for portrait lighting setups. Introduces three-dimensional contrast in a traditional portrait studio setting. Includes subject rapport, subject posing and development of a theme-based narrative using advanced lighting techniques while demonstrating set construction skills. Prereq: Successful completion of first quarter commercial photography program courses with a minimum grade of 2.0 in each course.

PHO 123 (4) C
Video Production I

Introduces basic video capture techniques including HDSLR camera operation. Includes an overview of Adobe Premiere's interface, tools, features, and a basic production workflow. Covers working in production teams, environmental aesthetics, establishing a point of view, capturing the decisive moments? in short clips, and assembling final video in the editing process. Prereq: Successful completion of first quarter commercial photography program courses with a minimum grade of 2.0 in each course.

PHO 130 (4) C
Studio Techniques I

Introduces e-retail/catalog photography. Covers the production of imagery that conforms to a client's requirements for designed layouts in print or online. Includes defining and solving image production issues for a catalog, lookbook, or website. Prereq: Permission.

PHO 131 (4) C
Digital Imaging II

Introduces advanced image editing techniques and production workflows in Adobe Photoshop. Focuses on precise color correction, refined selections, and multiple image compositing. Includes advanced retouching and image output and evaluation. Requires creation of a cohesive final project of professional quality utilizing these advanced image editing tools and techniques. Prereq: Permission.

PHO 132 (4) C
Location Techniques

Explores the logistical planning and technical skills required to shoot on location. Focuses on the strategies required for constructing and shooting small to large sets on location. Includes application of skill sets required of the location photographer, assistant, and location scout. Integrates technical and creative problem solving. Prereq: Permission.

PHO 133 (4) C
Video Production II

Covers advanced on-location video techniques and advanced editing video techniques. Includes location techniques of setup and breakdown, procurement of permits, and location lighting. Also covers advanced post-production techniques. Requires participation as producers, directors, talent, and crew. Includes web ads, lookbooks, or music video productions. Prerequisite: Permission.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

PHO 141 (3) C
Survey of Photography

Examines the multiple opportunities and challenges of professional photography as a career. Covers technical history from Daguerreotypes to HDSLR storytellers, and master photographers of many styles. Additional emphasis on business practices: working conditions; time management; organizational strategies; and professional ethics.

PHO 142 (4) C
Digital Imaging

Intro to Photoshop software for creating and manipulating bitmapped graphics. Develop non-destructive, image-editing workflows for digital image processing and enhancement, color management, image selection, compositing, burning, dodging, retouching, tonal or color correction and modification. Adapt print resolution, size and format for print, video and web.

PHO 143 (3) C
Digital Media Production

Learn multimedia storytelling, narrative forms and techniques. Develop a better understanding of using images and audio to advocate, communicate or address a specific subject or Issue.

PHO 197 (1-5) C
Work Experience-Photography

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply photography knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

PHO 214 (4) C
Catalogue Production

Create professional quality images for a multiple-page catalog layout, by producing a mini-catalog using traditional and digital photographic techniques. Explore personal photographic style. Collaborate on advertising assignments.

PHO 215 (4) C
Advertising Production

Working with a local, community-based non-profit organization, develop and produce an advertising campaign. Learn all aspects of advertising production, including business components such as negotiating fees and expenses. Present completed campaigns to a panel of industry professionals.

PHO 224 (4) C
Communication Production

Intro to shooting motion/video with a DSLR camera. Research, plan, direct and produce a completed video project. Learn techniques for writing treatments, scripts and storyboards. Covers video shooting techniques and use of video production equipment.

PHO 225 (3) C
Conceptual Development

Intro to visual conceptualization skills, elements and principles of 2-D design. Study techniques and processes that support creativity and aesthetic development. Explore the critique process. Focus on developing individual creativity and photographic style.

PHO 234 (3) C
Professional Business Practices I

Intro to small business development and management for the professional photographer. Learn to write a business plan for commercial or retail markets. Covers retirement planning, insurance, taxes, copywriting, budgeting, accounting, estimating, pricing and negotiating. Follow an assignment from first phone call to invoice. Acquire business licenses and join professional organization(s).

PHO 235 (3) C
Professional Business Practices II

Focuses on marketing practices. Write and implement a marketing plan, create self-promotion materials for mail, web, social media and in-person presentations. Present final marketing plan to industry professionals for critique.

PHO 244 (3) C
Visual Narrative

Learn to use industry standard video editing software for post-production, non-linear editing of digital video. Covers basic digital video and audio editing workflows. Learn to support a narrative by incorporating continuity and logical sequencing of both video and audio clips.

PHO 245 (3) C
New Media

Broaden understanding of image editing techniques including advanced retouching, layering, masking and color adjustments for basic web design. Learn to use templates to build sites. Create and publish online a basic website using image editing and design software.

PHO 254 (4) C
Portfolio I

Intro to the processes of creating a professional-level portfolio as a marketing and job search tool. Includes various presentation methods, including electronic portfolios. Create marketing materials: business card, stationery and self-promotion pieces.

PHO 255 (4) C
Portfolio II

Continuation of PHO 254. Produce portfolio-quality images and computer-generated portfolio pages. Investigate traditional and electronic alternatives for portfolios. Create a résumé and an information page for a website. Meet with industry professionals to discuss tools needed after graduation.

PHO 256 (4) C
Portfolio III

Assemble a final portfolio of images that represents the student's creative voice and professional direction, for presentation to multiple clients, representatives and agencies. Continue learning about production stages of multiple, complex location shoots.

PHO 266 (3) C
New Media Workshop

Edit, sequence and prepare images for the website project from previous quarter. Finalize the website and all promotional materials. Complete a printed portfolio. Create a shot list and shot plan for the week-long Pt. Townsend Portfolio Shoot-out.

PHO 276 (3) C**Portfolio Workshop**

Prepare materials for the annual Portfolio Show. Design individual show stations and work with committees to plan the two-day event. Work with faculty to edit and select images. Meet with industry professionals in one-on-one interviews and portfolio reviews.

PHO 286 (3) C**Special Projects**

Focus on career entry and development by studying various projects such as employment strategies, technological innovations and global marketplace opportunities. Seek critical feedback on portfolios from professionals and develop professional relationships.

Physical Education**PEC 050 (5) S****Career Link Physical Education**

Introductory fitness class designed to increase students' awareness of the importance of fitness. We plan to empower students to have the knowledge to design their own fitness programs and understanding of health based topics. Includes a variety of physical activities and exercise that may be adapted to your personal fitness performance. For all fitness levels.

PEC 090 (5) S**Physical Education**

Physical Education students will be involved in a variety of activities, designed to improve physical fitness, coordination and sport specific skills. Students may also develop content knowledge pertaining to nutrition, dieting, mental health, the development of fitness plans, and the ability to link the importance of physical activity with life-long endeavors. This course is designed for students to earn high school credit.

PEC 104 (2) C | N**Beginning Martial Arts**

Learn the practical self-defense techniques and philosophies of Goju Ryu Karate-do including fundamentals of stances, blocks, strikes, kicks, movement and offensive and defensive strategies.

PEC 105 (2) C | N**Intermediate Martial Arts**

For individuals at intermediate skill level. Adjust to the type of self-discipline and interaction required in the Goju Ryu Karate. Prereq: PEC 104, or formal rank up to and including green belt.

PEC 106 (2) C | N**Advanced Martial Arts**

For advanced skill levels. Foster self-improvement and appreciation of Karate as an art, sport, physical conditioning and self-defense tool. Prereq: Intermediate skills, successful completion of PEC 105 or formal rank of brown belt or higher.

PEC 110 (2) S**Cardio-Fitness**

Improve cardio respiratory fitness through rhythmic, dynamic, large-muscle exercise performed to music. Includes information relevant to current fitness-related issues, trends and topics.

PEC 113 (2) C**Beginning Badminton**

Intro to basic skills of badminton: clears, serves and drives. Covers rules of play and basic singles and doubles strategies. Opportunity for game play and tournament play.

PEC 130 (2) C**Beginning Basketball**

Covers basic individual skills of dribbling, passing and shooting, team skills and strategies. Includes in-class drills, modified game play, structured scrimmage and tournament play.

PEC 131 (2) C | N**Beginning Weight Training**

Beginning Weight Training develops muscular fitness through resistance training, using free weights and weight machines. Workouts consist of individualized programs developed to align with student goals and established weight training principles. In-time instructional feedback and assistance is provided to correct form and technique, and to answer student questions. Related information may include muscle anatomy & physiology, training tactics and supplementation, fitness trends & myths.

PEC 132 (2) N**Intermediate Weight Training**

Designed for students with previous weight training experience and knowledge, Intermediate Weight Training develops muscular fitness through resistance training, using free weights and weight machines. Workouts consist of individualized and instructor-driven programs that align with student goals, proper technique, and weight training principles. Intermediate skills & workout designs are presented, advanced exercise assistance is provided, and nutrition & fitness information are included.

PEC 136 (2) C | N | S**Yoga**

This course covers Yoga postures, breathing and meditation practices for physical and mental health. The history, philosophy, benefits and holistic nature of Yoga will be explored as well as the development of a personal practice. All fitness levels are welcome, and all poses can be modified to accommodate physical limitations.

PEC 137 (2) C**Yoga II**

Builds on PEC 136 with stronger asana/postures and further discussion of Yoga principles and philosophy. Prereq: PEC 136 or permission.

PEC 139 (2) N**Yoga Pilates**

Yoga poses and Pilates matwork exercises are integrated into an exercise training program to improve posture, strength, flexibility, coordination, and balance. Breathing and relaxation practice are added to connect body-centered activity with mind-centered activity. Other topics of interest include movement mechanics, fundamental yoga and Pilates principles, nutrition, and other fitness- and health-related themes.

PEC 143 (2) S**Walking for Fitness**

Develops cardio-respiratory fitness through progressive workouts including warm-ups, walking sessions and cool-downs. Covers safety, walking technique and issues and trends related to walking and physical fitness.

PEC 145 (2) S**Jogging**

Develop cardio-respiratory fitness through progressive workouts including warm-ups, walking sessions and cool-downs. Covers safety, jogging technique and issues and trends in jogging and physical fitness.

PEC 150 (1-3) C | N | S**Beginning Physical Fitness**

Beginning Physical Fitness includes instruction in developing, executing, and maintaining individualized fitness programs that highlight cardiorespiratory endurance, muscular strength & endurance, and flexibility. Students learn to use cardio & weight machines, free weights, and other equipment, as well as participate in a variety of activities, to help meet personal goals. Information about anatomy & physiology, nutrition, injury prevention, and fitness trends are also included.

PEC 151 (1-3) N | S**Intermediate Physical Fitness**

For students with previous fitness training experience, Intermediate Physical Fitness develops cardiorespiratory endurance through walking, jogging or aerobic machines, and muscular fitness via free weights, weight machines, and stretching activities. Individualized and instructor-driven workouts align with student goals, best practices, and established training principles. Intermediate level skills and workout designs are presented, and supplemental fitness information is provided.

PEC 155 (3) N**First Aid and Personal Safety**

American Heart Association Heartsaver First Aid CPR AED certification (adult, child, infant). Basic Life Support (BLS) for Healthcare Providers certification is available as an option. Provides instruction in advanced rescue skills including two-person CPR, pocket mask, and bag-valve-mask.

PEC 165 (2) C | N**Body Conditioning**

Body Conditioning uses hand-held weights, resistance bands, kettlebells, and/or similar equipment to improve muscular strength, muscular endurance, and flexibility in all of the body's major muscle groups. A variety of exercises and activities are practiced, and particular attention is given to proper technique, safety, and fitness progression. Wellness-related information, such as nutrition, proper hydration, and fitness trends are also included.

PEC 170 (2) N**Introduction to Jazz Dance**

Covers fundamentals of dance technique while improving strength, flexibility and anaerobic capacity. Builds postural awareness and develops motor skills through jazz style, which borrows from ballet and contemporary street dance. Includes safety, injury prevention, spinal health and nutrition.

PEC 171 (2) N**Introduction to Dance**

Introduction to Dance teaches the fundamentals of dance technique while increasing levels of strength, flexibility and anaerobic capacity. A brief history of each style and how it has evolved, as well as vocabulary synonymous with dance will also be introduced. Topics include ballet, modern, and hip-hop styles of dance along with basic composition of dance. The class will be taught in four sections; a brief lecture, dance technique and warm-up, traveling motor skills, and a movement combination.

PEC 172 (2) C**Intro to Salsa and Latin Dance**

Students learn dance posture, rhythm, and the techniques of leading and following for four styles of dance from Latin America, including Salsa. The class includes an introduction to Latin music theory and emphasizes the rich history and culture that surrounds these dances. No partner necessary.

PEC 173 (2) C**Intro to Swing Dancing And Lindy Hop**

Students learn dance posture, rhythm, and the techniques of leading and following for four styles of dance from the United States, including East Coast Swing, Lindy Hop, Charleston, and Shim Sham jazz steps. This class includes an introduction to Jazz music and emphasizes the rich history and culture that surrounds these dances. No partner necessary.

PEC 175 (2) N**Ballet Basics**

Covers fundamentals of ballet style. Stresses proper technique and body mechanics to avoid dance-related injury. Emphasis on flexibility and strength, focusing on basic movements (plie, tendu, developpe and battement), joint stability and range of motion. Includes kinesthetic memory, basic nutrition, rest and the application of ballet to other dance and movement styles.

PEC 177 (1-2) N**Introduction to Ballroom Dance**

An introduction to the most popular social dances, such as Rumba, Waltz, Swing, Cha Cha, Fox Trot, Tango, and Salsa. Lead and Follow principles, partnering technique, footwork, basic patterns, spins and turns, and traditional dance etiquette will be presented and practiced.

PEC 179 (2) N**Dance Fusion**

Learn various dance genre (hip hop, contemporary, modern, classical, ballroom, and Latin) basics in a fast-paced, cardio dance environment with choreography performed to contemporary, hip-hop, Latin and pop music. Students should plan to sweat, burn calories, learn more about cardiovascular training and aerobic exercise, as well as meet others with similar fitness goals.

PEC 181 (3) C**Wellness Management**

Covers the fundamentals of a complete wellness program. Principles of fitness, healthy eating, stress management, goal setting, positive lifestyle choices, and application of these components. Includes physical activity, self-monitoring, on-line and in-person lecture, and group interaction. Class requires participation online and in-person, on-campus.

PEC 182 (2) N**Fusion Fitness**

Fusion Fitness incorporates a three-component conditioning plan to challenge and improve aerobic stamina, muscular strength and endurance, power, and flexibility. The three components include: "Turbo" (kickboxing, running, interval training, stair climbing, and similar aerobic activities.), "Pump" (body weight training, sculpting, core training, circuits, and similar muscular training activities), and "Power" (boot camp, Tabata, burpees, mountain climbers, and similar power activities).

PEC 183 (2) C**Mindfulness for Success in School, Work & Beyond**

An introduction to Mindfulness training. Covers scientific research as it relates to measurable changes in the brain and the rest of the body. Emphasizes the impact of Mindfulness training on studying, job success, and positive personal life management. Group Mindfulness experiences in class and assigned online.

PEC 298 (1-5) C | N**Special Topics**

Seminar on selected topics and/or activities in physical education. Prereq: Variable, depends on topic.

PEC 299 (1-5) N | S**Independent Study**

Independent study of approved topics in physical education. Prereq: Permission.

Physics**PHYS& 100 (5) C****Physics for Non-Science Majors**

Basic laws of physics, such as motion, sound, gravitation, energy, heat and temperature, electricity and magnetism, light, relativity, quantum theory, and nuclear physics. For non-majors. Non-lab course.

PHYS& 114 (5) C | N | S
General Physics I with Lab

First of three algebra-based courses covering the field of physics. Includes kinematics, vectors, forces, dynamics, work, energy, momentum, torque and gravitation. Lab included.

PHYS& 115 (5) C | N | S
General Physics II with Lab

Continuation of PHYS& 114. Includes fluids, heat, gas laws, electricity, magnetism and electrical circuits. Lab included.

PHYS 116 (5) C | N | S
General Physics III with Lab

Continuation of series. Covers mechanical oscillations, sound, optics, atomic and nuclear physics. Lab included.

PHYS 221 (5) C | N | S
Engineering Physics I

Development of the basic principles of classical mechanics—kinematics, Newton's laws and the conservation laws using calculus. Lab included.

PHYS& 222 (5) C | N | S
Engineering Physics II

Covers Maxwell's classical laws of electricity and magnetism which developed from the study of the Laws of Coulomb, Ampere, Gauss and Faraday. Lab included.

PHYS& 223 (5) C | N | S
Engineering Physics III

Introduction to waves and oscillations and the study of sound, geometric and physical optics. Covers the dualistic particle-wave nature of microscopic phenomena as an intro to modern physics. Lab included.

PHYS 298 (1-5) C
Special Topics

Independent work in physics laboratory and/or library. Prereq: Permission.

PHYS 299 (1-5) C | N | S
Independent Study

Independent study of physics problems or topics. Prereq: Permission.

Political Science**POLS 090 (5) S**
Contemporary World Problems

This Contemporary World Problems course is designed to provide a study of the critical issues and areas in the world, specifically the United States, throughout the 1900's to today. The study of the current world starts in the past, so a large emphasis is placed on historical background and perspective is developed in each area studied. Students will be asked to learn world geography and have a basic understanding of the main world religions and forms of government.

POLS& 101 (5) C | N
Introduction to Political Science

Explores the origin and development of the study of political science. Examines the origins of government systems, political theory, comparative systems, political socialization, public administration, political parties and elections, technology, political economy, globalization, and international relations. Foundation course for political science studies.

POLS 105 (5) C
the War On Drug: Addiction & Mass Incarceration

An in-depth examination of the history and future of the drug war, and its role in inequality and mass incarceration. The course begins by studying substance use in the 1800s, alcohol prohibition, drug prohibition, and the ongoing criminalization of addiction, including the "War on Drugs" launched by the Nixon Administration. The course analyzes political policies through a lens of racial, political, and economic factors.

POLS 111 (5) C
the American Presidency

Explores the evolution of the American presidency. Includes the presidents' personalities, character, leadership and public relations. Examines presidential campaigns and the roles of the president as Chief Diplomat, Chief Executive, Chief of State, Commander-In-Chief and Chief Bureaucrat.

POLS 112 (5) C
Contemporary World

Intro to the nation-state system, elements of power and major problems facing nation-states today including demographics, hunger and disease, nuclear proliferation, energy, nationalism and North-South/East-West relations. May be taken for international studies credit as ISP 112.

POLS 170 (5) C
Minority Politics in America

Focuses on socio-political developments leading to current status of minorities in America. Surveys U.S. legislative history and citizenship. Covers critical review of proposed solutions to minority tensions.

POLS& 202 (5) C | N | S
American Government

Survey of the origin and functions of the U.S. government. Examines the Articles of Confederation, the Constitution and the creation of the federal system as well as the three branches of American Government. Analyzes the functions of institutions through the lens of political history and through analysis of current events. Topics include political culture, elections and campaigns, interest groups, the media, and public policies.

POLS& 203 (5) C | N | S
International Relations

Introduction to international relations and governmental organizations. Examines major issues in the international arena including nationalism, national sovereignty, globalization, international law, economics, security, environmentalism and foreign policy. Emphasis on issues that foster or frustrate world peace and prosperity. Transfer class.

POLS 213 (5) C | N
Women and Politics

Intro to concepts of power and policy issues as they relate to women. Covers theoretical, historical and empirical studies of women's participation in social and political movements nationally and internationally. Studies women's diverse roles in relation to family, economics, labor, government and law.

POLS 220 (5) C
Comparative Political Systems (W)

Covers democratic and authoritarian governments. Includes political and economic systems of wealthier nations and less-developed nations. Examines supranational governments like the United Nations, European and African Unions and transnational trade groups like OPEC, NATO and IMF.

POLS 255 (5) C
Government and Politics of the Middle East

Problems of traditional society versus construction of a modern state. Emphasis on Arab-Israeli relations and impact on international affairs.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME

HIN Watch Technology

NAME TO PREFIX

Watch Technology HIN

Common Course Numbering explanation is on page 202.

POLS 298 (1-5) C
Independent Study in Political Science
 Independent research and writing on selected political science topics under faculty supervision. Prereq: Permission.

Professional Technical Education and Instructional Design Bachelor of Applied Science

PTE 301 (3) S
Workforce Instructional Methods and Materials

Provides an overview of established training principles and practices for aspiring instructors or trainers. A variety of instructional methods will be focused on, including: lecture, discussion, demonstration, and small group work. Different learning options will be addressed, including: Prior learning assessment (PLA), competency-based, project-based, and apprenticeship. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 302 (3) S
Course Development Design

This course presents models and processes for curriculum design appropriate to the adult setting. Content includes: scope and sequence, competency-based models, syllabus development, writing course objectives, and creating assignments. Program planning, technical advisory boards, industry standards, and accreditation standards will be discussed. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 310 (3) S
Managing the Learning Environment

This course is designed to help students develop a management plan for instructional materials and supplies. Emphasis is on shop, laboratory, and classroom safety practices. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 311 (3) S
Technology in Learning

This course covers how to identify, evaluate, and implement new and emerging technologies relevant to instruction. A variety of applications will be covered to include in student-created curriculum. The focus will be on current curriculum development practices. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 312 (3) S
American Community College

This course explores the history, present status, student diversity, student services, ethical issues, and future directions of the American community college. Students will research and develop at least one grant proposal relevant to their discipline. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 313 (3) S
Online Teaching Methods

Provides an overview of best practices for creating online content, teaching online, and student management of online courses. Students will practice skills during class and will begin to create an online course using the Canvas LMS. This course is intended for Professional Technical instructors who would like to teach online. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 314 (3) S
Professional Portfolio

This course will require students to document prior work experience by developing a portfolio and will culminate in receiving Workforce Experience Practicum credit. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 315 (1-10) S
Workforce Experience Practicum

Credits earned will be based on the successful completion of the Professional Portfolio course (PTE 314). Students must have demonstrated 2 or more years of relevant work experience in their area of interest. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 325 (2) S
Organizational Leadership

Develop leadership skills in a technical environment. Evaluate various leadership theories

PTE 345 (5) S
Adult Learning

This course introduces students to adult learning theory, learning styles, learning processes, learning development, and student motivation. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 401 (3) S
Student Support and Guidance

Evaluate student completion theories and develop the skills necessary to respond to student needs, including scheduling and holding office hours, providing multiple modes of communication, and understanding professional obligations regarding student contact. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 402 (3) S
Assessment of Learning Performance

Students will learn how to design and develop evaluation processes to be integrated into classroom learning. Course content will include prior learning assessment, formative assessment, summative assessment, and will be linked to learning outcomes. Accreditation standards and processes will be addressed. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 420 (3) S
Legal Issues and Ethics in Education

An introduction to how legal implications from local, state, and federal sources guide professional practice. Evaluate social, economic, and political issues that influence professional ethics and practice. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 460 (3) S**Diversity and Globalism in Education**

Examine cultural competence and the effects of globalism in the educational setting. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 468 (3) S**Program Management and Recruitment**

Learn all aspects of program management and leadership, including student recruitment. Covers program budgets, staffing, facilities, and scheduling. Develop a recruiting plan for a current program or intended area of instruction. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 489 (1) S**Professional Development Certification**

Develop a professional development plan per WAC 131-16-92 and attain an Initial Washington State Professional Technical Teacher Certification. Additional requirements for certification include CPR and First Aid. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 490 (1-10) S**Teaching Internship**

Observe, reflect, and practice teaching adult learners in a technical, post-secondary environment. Find a technical teaching placement in their field of interest and work with an adult educator (site supervisor) to develop and deliver relevant curriculum. Both the site supervisor and college faculty advisor will evaluate the internship. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 495 (3) S**Capstone**

Project-based course offered during the student's last quarter of study. Draws on all previous classes and internship experiences. Prerequisite: Current enrollment in Professional Technical Teacher Education BAS program or instructor permission.

PTE 498 (1-10) S**Special Topics**

Special topics in teaching or leadership as agreed upon by the student and a faculty member.

Psychology**PSG 110 (2) C****Behavioral Psychology**

This course addresses the psychological aspects of the health professional relative to work environment, patient care/interactions and daily living. Throughout the course aspects of hierarchy of needs, effective communication, death and dying, the grieving process, conflict resolution, verbal and non-verbal communication, spatial separation, cultural diversity, managing stress, motivation, the need to belong, and achievement motivation are discussed. Prereq: Permission.

PSYC& 100 (5) C | N | S**General Psychology**

Introduction to the scientific study of human behavior including research methods, brain and behavior, learning, cognitive psychology, development, personality, abnormal psychology, and social thinking and behavior. Additional topics may include: emotions, perception, motivation, intelligence, genes and evolution, and health.

PSYC 120 (1-5) C**Psychology of Adjustment**

Covers the study of personality within the framework of the social system and the application of proven psychological principles to problems of adjustment and conflict faced in daily living.

PSYC 132 (2) C | N | S**Psychosocial Issues in Healthcare I**

Explores the influence of culture on psychosocial issues in healthcare for diverse patient populations. Focuses on the application of the nursing process to patients experiencing Self-Perception/Self-Concept and Coping/Stress-Tolerance dysfunctional health patterns related to a substance-related or addictive disorder. Safety, pharmacologic management, and health promotion/maintenance are emphasized.

PSYC& 200 (5) C | N | S**Lifespan Psychology**

Survey of human physical, psychological, and sociocultural development from conception through death. Emphasis on major developmental theories, research and research methods of studying lifespan development. Prereq: PSYC& 100 or permission.

PSYC 07 (5) C**Developmental Psychology**

Analysis of psychological development of the child in relation to biological, physical and sociological antecedent conditions from conception through adolescence. Prereq: PSYC& 100 or permission.

PSYC 209 (5) C | N | S**Fundamentals of Psychological Research**

Examines the scientific method, hypothesis testing and designs of qualitative and quantitative research. Covers the search for and evaluation of research literature in psychology, descriptive statistical analysis, fundamentals of scientific writing, ethical issues and cross-cultural considerations in psychological research. Includes a research project. Pre-req: PSYC& 100 or equivalent.

PSYC 210 (5) C | N**Personality and Individual Differences**

Introduces the study of personality and individual differences, including theory, measurement, and research. Application of psychological principles to problems of everyday living. Prerequisite: PSYC 100 with a 2.0 or higher, and eligibility for ENGL 101.

PSYC 217 (5) N**Introduction to Probability and Statistics**

Focuses on an introduction to descriptive statistics, probability theory, distributions including the normal distribution, sampling, experiments, hypothesis testing, t-tests, and correlations. Prereq: MATH 098.

PSYC& 220 (5) C | N | S**Abnormal Psychology**

Provides students with an overview of research and theories in abnormal psychology. Emphasis on the psychological, social, historical, cultural, and physiological research into abnormal psychology. Addresses ethical issues of diagnosis and treatment and major diagnostic categories such as anxiety, mood, psychotic, dissociative, eating, and personality disorders, and disorders of childhood and older adulthood.

PSYC 222 (5) C | N | S**Survey of Physiological Psychology**

Covers workings of the nervous system. Explores the brain's capacity in language, hunger and thirst, learning and memory, emotions, sexual behavior, depression, schizophrenia and repair after injury. Recommended: PSYC& 100 or a biological science course.

PSYC 225 (5) S**Psychology of Addiction**

Psychology of addiction, a critical examination of the behavior and mental processes associated with addiction. Systemic approaches to investigation through psychosocial, biological, cognitive and sociobehavioral areas in psychology. Lecture, research, presentation and critical examination. 5 credit class. 200 level course. Prerequisite: PSYC 100 General Psychology or SOC 101 Intro to Sociology This is a dual PSYC/SOC course.

PSYC 230 (5) C | N | S
Human Sexuality

Provides an overview of research and theories in the broad field of human sexuality. Emphasis on the psychological, social, historical, cultural, and physiological research into human sexuality. May be taken as SOC 230.

PSYC 231 (2) C
Psychosocial Issues in Healthcare II

Focuses on the application of the nursing process to patients experiencing Self-Perception/Self-Concept, Cognitive-Perceptual, and Role-Relationship dysfunctional health patterns related to behavioral health disorders affecting maternal, pediatric, and diverse sexual identity patients. Safety, pharmacologic management, cultural practices, and health promotion/maintenance are emphasized.

PSYC 232 (1) C
Psychosocial Issues in Healthcare III

Focuses on psychiatric crisis and common interventions in dealing with violence, anger, aggression, suicide, homicide, domestic violence, and elder abuse. At-risk populations with tremendous poverty, physical, and social needs will be identified and strategies for early detection through screening will be examined. Individualized treatment plans for moving into self-management, relapse prevention, and bridging systems will be discussed.

PSYC 240 (3) C | S
Psychology of Human Relations

Covers dynamics of organizations and human resources in the workplace: motivational theory, leadership, group processes, organizational theory, participatory management, conflict management and counseling. Primarily for professional-technical students. Prereq: Satisfactory performance on placement test (S).

PSYC 245 (5) C | N | S
Social Psychology

Explores how social settings influence the individual. Examines the effect of others on self-concept, social cognition, aggression, conformity, helping, loving and liking, competition and cooperation, and prejudice and discrimination. Research on contemporary issues around race, gender, and other social identities will be covered and discussed.

PSYC 250 (5) C
Psychology of African Americans

Provides an in-depth look at contemporary psychological research and issues involving African Americans. Includes Black personality, institutional racism and the educational system, counseling African Americans and methods of dealing with racism in daily life.

PSYC 255 (5) C
Cognitive Psychology

Overview of the field of cognitive psychology. Addresses current theory and research in the areas of attention, perception, learning, memory, decision-making, language, problem-solving and creativity in both clinical and real world contexts. Prereq: PSYC 100 with a 2.0 or higher; or, Instructor's permission.

PSYC 257 (5) C | N
Psychology of Gender

Explores major psychological theories of sex differences. Examines studies of sex-role development and biological and environmental influences that may determine and maintain sex differences in aggression, cognitive abilities, achievement, motivation, affiliation and sexuality. May be taken as WMN 257.

PSYC 260 (5) C
Psychology of Racism

Overview of theories and research concerning factors and contexts that contribute to racial/ethnic discrimination in the U.S. and the multilevel consequences for minority groups and the broader U.S. society. Covers socioeconomic, political, and historical structures and their consequences on racial/ethnic identity. Emphasizes how multiculturalism can have a positive impact and provide a safe space for discussion.

PSYC 298 (1-5) C | N
Independent Study in Psychology

Independent study in selected psychology topics under faculty supervision. Prereq: Permission.

PSYC 299 (1-5) C | N
Psychology Seminar

Small group seminar for study and discussion of selected psychology topics. Prereq: Permission.

Real Estate**RES 100 (5) N****Real Estate Fundamentals**

Covers fundamentals of real estate industry, including sales and listing practices, financing, appraising, title, real estate law, escrow and property management. With RES 140 prepares students for the WA State Real Estate Broker Licensing Exam. (60 DOL clock hours)

RES 101 (5) N**Technology for Real Estate**

Learn Microsoft's Word, Excel, Outlook, Publisher and the internet to create marketing materials, manage time and contacts, communicate, create spreadsheets, and professional letters. Learn internet resources specifically for Real Estate Industry. Some computer experience highly recommended. (50 DOL clock hours)

RES 106 (1) N**Real Estate Fraud**

Covers real estate fraud in the sales, finance and appraisal industries. Study fraud cases, the local and national extent of the problem, and the impact on the market place. Learn to avoid potential fraudulent acts. Recommend RES 100 or concurrent. (10 DOL clock hour 1 RES 107 1 Learn about the foreclosure process. Examine the legal issues professionals and investors should consider before being part of a foreclosure or short-sale/mortgage elimination. (10 DOL hours)

RES 107 (1) N**Foreclosures Short Sales and Mortgage Elimination**

Learn the foreclosure process. Examine the legal issues professionals and investors should consider before being part of a foreclosure or short sale/mortgage elimination. (10 DOL clock hours)

RES 110 (3) N**Introduction to Commercial Real Estate**

Learn about the opportunities in commercial real estate, and how to list, sell and lease various types of investment properties. Use finance as a tool to increase profits. Learn to establish market value and return for investments in office buildings, industrial properties, apartments, shopping centers and retail stores. (30 DOL clock hours)

RES 120 (2) N
Real Estate Principles of Maintenance and Repair

Study maintenance and repair for residential and commercial properties. Learn to recognize maintenance problems and schedule preventative maintenance and repairs. Explore HVAC, roofing, landscaping, and janitorial services. Analyze maintenance and service contracts. (15 DOL clock hours)

RES 125 (2) N
Applications of Real Estate Math

Develop skills in basic real estate mathematics using the HP12C programmable calculator. Apply principles for real estate transactions, valuation, finance and other investment analysis. Students bring HP12C calculator to first class or borrow HP12C from the Real Estate Program while supplies last. Recommend RES 100 concurrently. (20 DOL clock hours)

RES 130 (3) N
Green Real Estate

Learn how sustainability and green building are transforming the real estate market. Focus on basic building science to value green strategies related to water, energy, design, materials, site development. Recognize emerging demographics of green-minded consumers. Distinguish between traditional and the spectrum of green building. WA licensed real estate broker prep course for BUILT GREEN® RE Pro Certification. (30 DOL clock hours)

RES 131 (2) N
Green Building Materials

Learn how material choices affect real estate home sales and listings. Includes smart material choices affecting indoor air quality and occupant health, energy efficiency and water conservation products that enhance comfort and increase utility savings. Learn how to talk to green home buyers about material choices and how to work with clients preparing for sales and listing. Prereq: Recommend RES 130. (DOL clock hours).

RES 132 (3) N
Marketing, Education and Ethics in Sustainable D

Understand needs of green clients and communicate effectively. Covers marketing green projects through traditional strategies, new technologies, and creative approaches. Emphasizes education of clients and ethical responsibilities of agents in selling green properties. Intro to greenwashing. Prereq: Recommend RES 130. (30 DOL clock hours)

RES 140 (3) N
Real Estate Sales and Practice

Pre-license course for the Washington Real Estate Broker's License Exam and to enter the residential real estate sales industry. Includes sales techniques and practices; evaluating, pricing and showing property; listing and purchase/sale agreements; obtaining and servicing listings; qualifying the buyer; negotiating and servicing the sale, agency, planning and budgeting.) Prereq: RES 100 or RES 210 or concurrent enrollment or real estate experience or permission. (30 DOL clock hours)

RES 141 (3) N
Land Use Principles and Practice

Introduces federal and state laws and regulations governing land use and environmental issues. Includes in-depth study of local (King County) regulations. Provides practical land use knowledge including the permit process. (30 DOL clock hours)

RES 142 (3) N
Inspecting the Condition of Real Estate

Find deficiencies in residential and commercial buildings including site drainage, weatherproofing, structure, heating, plumbing and electrical systems. Emphasizes inspection techniques and handling the identified problems. (30 DOL clock hours)

RES 150 (2) N
Residential Sales and Leasing Documentation

Covers Washington real estate broker and agent practices, emphasizing agency law, contracts, torts, and Multiple Listing forms. Prereqs: RES 100, 110, 170 or 210 or concurrent enrollment, or 6 months experience in real estate. (15 DOL clock hours).

RES 164 (5) N
Real Estate Finance Residential

Explore various financing programs for residential real estate. Learn to prequalify borrowers and generate closing cost worksheets. Gain knowledge about credit reports and credit scoring. Discover how underwriters determine who gets mortgages. Recommend RES 100 and/or RES 125 or concurrent. (50 DOL clock hours)

RES 170 (3) N
Real Estate Law

Review the principles of real estate law, including acquisition, encumbrance, transfer, rights and obligations of parties, and WA State regulations. Prereq: RES 100 or 110 or real estate experience or permission. (30 DOL clock hours).

RES 175 (3) N
Introduction to Title

For those in real estate sales, finance, escrow, or title insurance fields. Covers fundamentals of title insurance, various types of liens, methods of clearing title, and other items of record and off-record that affect real property. (30 DOL clock hours)

RES 177 (2) N
Real Estate Taxes

Covers U.S. income taxes pertaining to real estate. Learn what constantly changing federal income tax laws affect residential, business, and investment properties. (15 DOL clock hours)

RES 180 (3) N
Basic Appraisal Principles

Revised to meet the January 1, 2008 Real Property Appraiser Qualification Criteria. Intro to the appraisal process. Investigate influences on the types of real estate values. Overview of real estate markets and analysis. Recommend RES 100 concurrently. (30 DOL clock hours)

RES 183 (3) N
Basic Appraisal Procedures

Revised to meet the January 1, 2008 Real Property Appraiser Qualification Criteria. Presents methodologies used in valuation procedures. Understand property descriptions for appraisal reporting and apply these to residential and commercial appraisal applications. Prereq: RES 180 or appraisal experience or permission. (30 DOL clock hours)

RES 190 (3) N
Real Estate Escrow I

Intro to escrow principles and procedures covering laws, real estate and escrow documents, escrow closings, and title exceptions. (30 DOL clock hours)

RES 197 (5) N
Real Estate Taxes, Title, & Escrow

Covers US income taxes pertaining to real estate. Learn how changing federal income tax laws affect residential, business, and investment properties. Covers methods of clearing title. Provides a foundation in title insurance, various types of liens, encumbrances and other items of that affect real property. Presents escrow principles and procedures covering laws that govern and control escrow closing. Learn to work with real estate and escrow documents, escrow closings, and title exceptions.

FINDING COURSES

Course names and course prefixes are cross-referenced in an index beginning on page 203. For example:

PREFIX TO NAME
HIN **Watch Technology**

NAME TO PREFIX
Watch Technology **HIN**

Common Course Numbering explanation is on page 202.

RES 201 (3) N
Principles of Real Estate Management

Intro to basic principles of commercial and residential property management including property analysis, management and planning, marketing, staffing and maintenance of real estate. (30 DOL clock hours)

RES 202 (3) N
Multi-Family Property Management

Learn important functions in residential property management, property analysis, rental policies, rental surveys, lease provisions, inspection, building codes, tenant relations, operating policies and financial result analysis. (30 DOL clock hours)

RES 203 (3) N
Property Management-Commercial

Covers commercial property management, including personnel policies, marketing, tenant management, property maintenance, security, collection, lease provisions, and record-keeping systems. (30 DOL clock hours)

RES 204 (3) N
Community Association Management

Learn how successful associations are established, operated, and managed. Explore the fundamental principles and procedures of various types of community associations, such as Home Owners Associations, Resort Association, and more. Applicable for property managers, association Boards, developers, condo sales agents, loan officers, escrow officers, and paralegals. (30 DOL clock hours)

RES 210 (3) N
Residential Property Investments

Learn to invest in different types of residential properties, including the principles and techniques used to determine the advantages and disadvantages of buying, selling and renting investments. Study financing options for various residential investments. Recommend RES 100 or concurrent. (30 DOL clock hours)

RES 217 (3) N
Real Estate Development and Sustainability

Explore the fundamental principles and procedures in developing residential, commercial and industrial real estate, including all development stages of a project. Oriented to developers, but appropriate to investors. Focus on how sustainable development is applied. (30 DOL clock hours)

RES 220 (3) N
Real Estate Economics

Use economic principles to analyze the impact that national, regional, community, and neighborhood trends have on real estate values. Study trends in the money market, community growth patterns, land use controls, and taxations in the Puget Sound region. Prereq: RES 100 or 110 or 180 or 210 or concurrently, or real estate experience or real estate license or permission. (30 DOL clock hours)

RES 235 (3) N
Sales and Marketing

Increase business and/or market share by incorporating sales and marketing techniques, including an action plan. Learn to differentiate yourself/business from your competition and generate effective marketing media strategy. Recommend RES 100 or RES 110 or RES 180 or concurrent enrollment. (30 DOL clock hours)

RES 260 (5) N
Real Estate Finance-Commercial

Gain an understanding of commercial real estate investment. Course outline includes the real estate lending environment, borrowing and lending decisions, and loan underwriting and processing. Determine the value of commercial real estate property with tools that include operating statements and discounted cash flow analysis. (Fulfills 50 DOL continuing education clock hours.) Recommended: RES100, RES125 and BUS124, or real estate experience.

RES 281 (2) N
National Usapap Course

Focus on ethical behavior and competent performance set forth in the USPAP and Washington Regulations. Prereq: RES 183 or 6 months appraisal experience or permission. (15 DOL clock hours)

RES 290 (3) N
Commercial Sales and Leasing

Study the opportunities and responsibilities of representing commercial property owners, buyers, tenants and landlords. Learn to list, sell and lease various commercial properties. Explore basic evaluation and marketing tools. Learn to complete market surveys, commercial listing, sales and leasing agreements. Prereq: RES 100 or 110, or Washington Real Estate License or permission. Coreq: RES 125 recommended. (30 DOL clock hours and initial license renewal under RCW 18.85.095(2)(a))

RES 295 (2) N
Commercial Real Estate Investment Analysis

Learn commercial real estate investment analysis, including fundamentals of commercial leases, pro forma analysis, use and selection of discount and capitalization rates, tax laws and applications of decision-making tools. Bring programmable financial calculator to class. Prereq: RES 110 and 125, and RES 290 or concurrently or real estate experience or permission. (20 DOL clock hours)

RES 298 (1-6) N
Special Projects, Internships in Real Estate

Provides research opportunities or unpaid work experience in real estate applications similar to actual job environment. Do independent study on special projects. May complete Green RE courses, RES 133, 134, 135, as independent study with weekly lab. Prereq: permission. (20-60 DOL clock hours)

**Residential / Commercial
Property Management**

RCPM 301 (3) N
Principles of Residential Property Management

Introduction to Property Management and management of residential property. Employees, management tools, government involvement, client acquisition and tax requirements, leasing and managing property, and understanding agents' pre-licensing and brokerage requirements.

RCPM 304 (2) N**Principles of Commercial Property Management**

Examine and practice management of four types of commercial properties, learning the necessary competencies such as time management, relationship building (owner, staff, tenant, customer and public), problem identification and solving, operations and maintenance management, sustainability, budgeting, leasing and lease administration, safety, security and emergency procedures.

RCPM 310 (2) N**Specialty and Affordable Housing**

Contemporary issues affecting residential property management including student, senior, military, tax credit housing, Real Estate Investment Trust (REIT), and Accessory Dwelling Units (ADU).

RCPM 311 (2) N**Marketing & Leasing of Residential Real Estate**

Effective marketing practices, leasing strategies and tactics designed to attract and retain qualified residential tenants to income producing properties. Students will learn how to gather market data, develop marketing plans, formulate leasing workflows and utilize metrics to improve their marketing and leasing process.

RCPM 313 (3) N**Marketing and Leasing of Commercial Real Estate**

Gain an understanding of effective commercial real estate marketing strategies and the leasing processes for commercial real estate. Create a marketing plan to set rental rates, secure new tenants, and effectively position the property to meet the owner's project requirements. Identify technology and social media as tools utilized to market commercial real estate. Understand lease processes, contract components and negotiation.

RCPM 315 (2) N**Introduction to Negotiations**

Introduction to negotiation techniques and styles. How to structure agreements to meet your goals. Practice dealing with common challenges in property management field.

RCPM 320 (4) N**Financial Accounting for Property Management**

Introduces students to the software used by asset management and real estate investment companies.

RCPM 330 (3) N**Leadership and Team Building**

Examine the foundational elements of leadership and team building. Review current management thought. Examine and practice the application of current and emerging management topics emphasizing leadership, inspiration, communication, relationship building, team dynamics, organizational development and management of a diverse workforce. Introduces leadership, culture, service, brand and innovation as essential to sustained business excellence.

RCPM 401 (5) N**Project Management for Property Management**

This course is an overview of project management from a business perspective with a focus on activities common in property management. Topics will include project estimation, project feasibility, planning, risk management, communication and responsibility planning, scheduling, and project control.

RCPM 403 (4) N**Real Estate and Fair Housing Law**

Examines the concepts & goals of real estate laws & fair housing laws at the federal, state, & local levels. Attention will be given to how fair housing laws are designed to prevent discrimination in housing. The class will look at the Civil Rights Act of 1964, key court decisions involving fair housing laws & the 1968 Fair Housing Act & applicable state & local laws. Real estate law principles of transfer of interests, contracts, sustainability, agency, & escrow will be analyzed.

RCPM 410 (2) N**Professional Ethics in Property Management**

Analysis of ethical decisions in property management and case studies affecting property management codes of ethics.

RCPM 420 (5) N**Sustainable Facilities Management**

Fundamental theory and application of sustainable facilities management including building envelope, heating, ventilation, air conditioning, plumbing, indoor air quality, and fire suppression systems for buildings. Emphasis on system integration and sustainable topics as related to design, construction and management of mechanical construction scope of work. Basic understanding of high performance building and energy efficiency, including fundamentals of residential operations and maintenance.

Respiratory Care Bachelor of Applied Science in Allied Health**RCP 101 (1) C****Respiratory Care Orientation**

Intro to concepts and principles of the Respiratory Care program. Emphasizes preparation for school, college resources, financial assistance, classroom, study and communication skills, strategies for taking exams, time management, stress and anger management.

RCP 110 (2) C**Introduction to Respiratory Care**

Explores the respiratory care profession. Focuses on historical development as well as current overview of the respiratory care practitioner role. Emphasis on professionalism, ethical thought, death and dying, and working in a multicultural environment.

RCP 240 (4) C**Clinical Practice III**

Respiratory care practicum. Continues the development of skills with emphasis on respiratory care in the intensive care setting. Apply skills in real clinical situations at partner facilities around Puget Sound area.

RCP 241 (2) C**Respiratory Care for Critically Ill Adults**

An exploration of respiratory care in the intensive care environment. Emphasis on the application of respiratory care for patients with traumatic injury and critical illness. Covers trauma, burns, shock, and Adult Respiratory Distress Syndrome.

RCP 243 (1) C**Pathophysiology for Respiratory Care III**

Continuation of RCP 133. Study of concepts and principles by which disease alters the normal function of the cardiopulmonary system with emphasis on the pathophysiology of critical illness.

RCP 244 (3) C**Respiratory Care Fundamentals IV**

Continuation of RCP 134. Emphasis on intensive care monitoring techniques. Covers electrocardiogram interpretation, hemodynamic monitoring, and advanced cardiac life support.

RCP 245 (1) C
Pharmacology for Respiratory Care IV

Continuation of RCP 135. Emphasis on drugs used to treat the cardiac system as well as medications used in pediatric/neonatal respiratory care. Covers antihypertensive, medications to treat shock, antiarrhythmics, surfactant, nitric oxide and other medications used in critical care.

RCP 250 (6) C
Clinical Practice IV

Respiratory care practicum. Continues the development of skills in the intensive care and emergency settings. Apply skills in real clinical situations at partner facilities around the Puget Sound area.

RCP 251 (2) C
Respiratory Care for Infants and Children

An in-depth study of neonatal and pediatric respiratory care. Focuses on diseases specific to caring for our smallest patients. Covers fetal growth and development, labor and delivery, resuscitation, disease processes, assessment and therapy.

RCP 253 (1) C
Pathophysiology for Respiratory Care IV

A continuation of RCP 243. Study of concepts and principles by which disease alters the normal function of the cardiopulmonary system with emphasis on the pathophysiology of cardiovascular, neuromuscular, fibrotic diseases and sleep-disordered breathing.

RCP 254 (5) C
Respiratory Care Fundamentals V

Continuation of RCP 244. Emphasis on advanced concepts and skills needed to care for neonatal and pediatric patients. Covers techniques and equipment to manage neonatal and pediatric patients in the acute care environment, including oxygen therapy, bronchial hygiene, airway care, Continuous Positive Airway Pressure and mechanical ventilation.

RCP 260 (6) C
Clinical Practice V

Respiratory care practicum. Continues the development of skills with pediatric or adult critical care patients. Apply skills in real clinical situations at partner facilities around the Puget Sound area.

RCP 262 (1) C
Entry Level Exam Review

Survey of material on the National Board for Respiratory Care's (NBRC) Certified Respiratory Therapist (CRT) exam. Emphasis on test taking and exam content.

RCP 264 (3) C
Respiratory Care Fundamentals VI

Continuation of RCP 254 exploring the equipment and techniques of respiratory care. Emphasis on Cardiopulmonary diagnostic studies. Covers pulmonary function testing, exercise physiology and testing, bronchoscopy and polysomnography.

RCP 267 (2) C
Advanced Mechanical Ventilation

In-depth exploration of the application of mechanical ventilation across the age spectrum. Emphasis on the clinical application of mechanical ventilators and advanced modes of mechanical ventilation.

RCP 270 (6) C
Clinical Practice VI

Respiratory care practicum. Continues the development of skills with pediatric or adult critical care patients. Apply skills in real clinical situations at partner facilities around the Puget Sound area.

RCP 272 (4) C
Comprehensive Review of Respiratory Care

Survey of material on the National Board for Respiratory Care Advanced Practitioner exam, NBRC Written Registered Respiratory Therapist exam (WRRT).

RCP 274 (2) C
Pulmonary Rehabilitation and Home Care

Continuation of RCP 264. Explores the equipment and techniques of respiratory care. Emphasis on respiratory care in alternative settings. Covers pulmonary rehabilitation, home care, patient education and health promotion.

RCP 115 (1) C
Pharmacology for Respiratory Care I

Intro to the principals and practices of Respiratory Care Pharmacology with emphasis on the safe delivery of medications. Explores the basic concepts of pharmacology, aerosol delivery, dosage calculations and bronchodilator therapies for treatment.

RCP 120 (4) C
Clinical Practice I

Respiratory care practicum. Continues the development of skills in real clinical situations at partner facilities around the Puget Sound area. Emphasis on hospital safety, patient assessment, and the application of therapeutic procedures.

RCP 130 (5) C
Clinical Practice II

Respiratory care practicum. Continues the development of skills in real clinical situations at partner facilities around the Puget Sound area. Emphasis on more advanced techniques and diagnostics in acute care.

RCP 276 (3) C
Advanced Patient Assessment

Develop further critical thinking skills for assessing patients through history, physical examination, lab data, chest x-rays, pulmonary function tests and EKG data. Use clinical reasoning skills to develop and implement plans of care for the cardiopulmonary patients presented and discuss equipment, modifying treatment and evaluating patient progress. Practice with the National Board for Respiratory Care's (NBRC) Clinical Simulation Exam.

RCP 299 (1-3) C
Independent Study in Respiratory Care

Independent study in selected respiratory care topics under the supervision of the program director. Topics coincide with the quarter's curriculum.

RCP 320 (4) C
Acute Care Clinical I

Covers direct application of respiratory care skills in the hospital setting. Focuses on skills for respiratory care practice in acute care. Students treat patients using basic respiratory care techniques and perform physical assessments, chart review, hand washing, and bronchial hygiene techniques. Builds on respiratory care knowledge and skills established in the classroom, lab and clinical setting. Prereq: Successful completion of courses from 1st quarter with a minimum GPA of 2.0.

RCP 323 (2) C
Pathophysiology for Respiratory Care

Encompasses a study of the concepts and principles by which disease alters the normal function of the cardiopulmonary system. Emphasis will be on development of the respiratory care plan in the context of Respiratory Failure, Asthma, Chronic Obstructive Pulmonary Disease, Cystic Fibrosis, Postoperative Atelectasis, Interstitial Lung Disease, Neuromuscular disease, Bacterial Pneumonia, Tuberculosis, and Sleep Disordered Breathing. Prereq: Completion of 1st quarter courses with minimum GPA of 2.0.

RCP 328 (4) C**Advanced Therapeutic Approaches**

The second course in the therapeutic approaches series, this course builds upon concepts, knowledge, and skills acquired in AHE 218. Emphasis is on the knowledge and skills necessary to safely and effectively provide artificial airway care, Arterial Blood Gas (ABG) drawing and analysis, bedside monitoring techniques and non-invasive positive pressure ventilation. Prereq: Completion of 1st quarter Respiratory Care program courses with minimum GPA of 2.0.

RCP 329 (1) C**Advanced Therapeutic Approaches Equip and Tech**

Covers the application of Respiratory Care therapeutics learned in RCP 328. Learners will apply theory acquired in RCP 328 using models, simulation and laboratory partners for practice. Focuses on the safe and effective application of artificial airway care, Arterial Blood Gas drawing and analysis, bedside monitoring techniques and non-invasive positive pressure ventilation. Prereq: Completion of 1st quarter Respiratory Care program courses with a minimum GPA of 2.0.

RCP 330 (5) C**Acute Care Clinical II**

Further familiarizes students with hospital-based respiratory care. Students practice direct patient care, treat patients using basic respiratory care techniques, & perform physical assessments. Chart review, hand washing, & bronchial hygiene techniques emphasized. Students use techniques learned in lab & on-site, & build on the foundation of respiratory care knowledge & skills established in the classroom setting. Prereq: 2.0 or higher in previous SCC Resp. Care program courses.

RCP 338 (4) C**Fundamentals of Mechanical Ventilation**

The third course in the Respiratory Care Fundamentals series, this course builds upon concepts, knowledge, and skills acquired in RCP 328. Emphasis will be placed on the knowledge and skills necessary to safely prepare, institute, monitor and modify mechanical ventilation in the care of the critically ill adult patient. Successful completion of 2nd quarter Respiratory Care Program courses with a 2.0 or higher GPA.

RCP 339 (1) C**Mechanical Ventilation Equipment and Techniques**

Covers the application of Respiratory Care therapeutics learned in RCP 338. Learners will apply theory acquired in RCP 338 using models, simulation and laboratory partners for practice. Focuses on safe and effective application of basic, adult mechanical ventilation. Prereq: Successful completion of 2nd quarter Respiratory Care Program courses with a 2.0 or higher GPA.

RCP 340 (4) C**Adult Critical Care Clinical I**

RCP 340 is the third course in the Respiratory Care clinical series. Emphasis will be placed on integrating respiratory theory knowledge with skills performance by providing the student therapist with the opportunity to practice direct patient care. The learner will be assigned to the Critical Care Unit and will perform the duties associated with the management of the critically ill patient on mechanical ventilation.

RCP 347 (2) C**Cardiology for Respiratory Care**

Emphasis will be placed on the integration of hemodynamic measurements in the care of the critically ill patient. Various clinical applications and critical care monitoring will be covered in depth. Further emphasis will be placed on the principles of Advanced Cardiac Life Support (ACLS) and the interpretation of electrocardiogram (ECG) data.

RCP 348 (2) C**Advanced Mechanical Ventilation**

In-depth exploration of the application of mechanical ventilation across the age spectrum. Emphasis on the clinical application of mechanical ventilators and advanced modes of mechanical ventilation. Prereq: Successful completion of 2nd quarter BAS Respiratory Care Program courses with a 2.0 or higher GPA.

RCP 349 (1) C**Adv Mechanical Ventilation Equipment & Technique**

Covers the application of Respiratory Care therapeutics learned in RCP 348. Learners will apply theory acquired in RCP 348 using models, simulation and laboratory partners for practice. Focuses on safe and effective application of advanced mechanical ventilation across the age spectrum. Prereq: Successful completion of 2nd quarter BAS Respiratory Care Program courses with a 2.0 or higher GPA.

RCP 450 (6) C**Adult Critical Care Clinical II**

RCP 450 is the fourth course in the Respiratory Care clinical series. Emphasis will be placed on integrating respiratory theory knowledge with skills performance by providing the student therapist with the opportunity to practice direct patient care. The learner will be assigned to the Critical Care Unit and will perform the duties associated with the management of the critically ill patient on mechanical ventilation.

RCP 51 (2) C**Neonatal/Pediatric Pathophysiology**

An in-depth study of neonatal and pediatric respiratory care. Focuses on diseases specific to caring for our smallest patients. Covers fetal growth and development, labor and delivery, resuscitation, disease processes, assessment and therapy. Prereq: Successful completion of the previous quarter's Respiratory Care Program courses with a minimum GPA of 2.0.

RCP 455 (2) C**Advanced Pharmacology (Respiratory Care)**

Continues the study of medications in the critical care setting and introduces the learner to medications used in the pediatric/perinatal disciplines. Emphasis is on drugs used to treat emergent cardiac abnormalities, common critical care medications, pediatric/perinatal medications and resuscitation products. Prereq: Completion of previous quarter Respiratory Care classes with 2.0 or above.

RCP 458 (4) C**Neonatal/Pediatric Respiratory Care**

Emphasis on advanced concepts and skills needed to care for neonatal and pediatric patients. Covers techniques and equipment to manage neonatal and pediatric patients in the acute care environment, including oxygen therapy, bronchial hygiene, airway care, Continuous Positive Airway Pressure and mechanical ventilation. Prereq: Successful completion of prior quarter's coursework with a GPA of 2.0 or greater.

RCP 459 (1) C**Neonatal/Pediatric Equipment and Techniques**

Covers the application of Respiratory Care therapeutics in the neonatal/pediatric population learned in RCP 458. In this class learners will apply theory acquired in RCP 458 using models, simulation and laboratory partners for practice. Focuses on safe and effective application of mechanical ventilation and respiratory care therapeutics in the neonatal/pediatric age population. Prereq: Successful completion of the prior quarter's courses with a 2.0 or better.

RCP 460 (6) C**Neonatal/Pediatric Clinical**

Clinical Practice V (RCP 460) is a continuation of prior clinical experience and is designed to build on the foundation of respiratory care knowledge and skills established in the previous five quarters of the program. This course is designed to provide the student with the knowledge, skills and techniques necessary to safely and effectively treat newborn infants and children suffering from various cardiopulmonary disorders through hands-on experience with the neonatal and/or pediatric patient.

RCP 463 (2) C
Advanced Pathophysiology for Respiratory Care

A study of the concepts and principles by which disease alters the normal function of the cardiopulmonary system in critically ill patients. Covers cardiopulmonary assessment and development of the respiratory care plan in the context of: Shock, Pulmonary Thromboembolic disease, Heart Failure, Smoke Inhalation and Burns, Trauma, Near Drowning, Acute Respiratory Distress Syndrome, Chest Trauma, Pneumonia in the critically ill patient, and Lung Cancer.

RCP 464 (2) C**Pulmonary Rehabilitation and Home Care**

Pulmonary Rehabilitation and Home Care is designed to give the advanced practitioner the knowledge and skills to successfully integrate the technical aspects of Respiratory Care into challenging alternate care settings ethically and safely. Focuses on the concepts, knowledge, and procedures specific to the respiratory care of adults and children with chronic cardiopulmonary disorders, receiving care in the alternative care setting. Emphasis is placed on patient education and health promotion.

RCP 467 (2) C**Advanced Cardiopulmonary Physiology**

Builds on the topics covered in AHE 217. Covers the interrelationship of cardiopulmonary systems and how the application of therapeutic procedures can alter those normal relationships. Topics include the immunology and fluid transport of the lung, hemodynamics and pulmonary circulation, and additional concepts of acid base physiology. Provides in-depth study of the cardiopulmonary system in the context of critically ill patients.

RCP 468 (3) C**Adv Cardiopulmonary Diagnostics**

Emphasis will be placed on the theory, application and interpretation of pulmonary function regimens, exercise testing, bronchoscopy, blood gas sampling and analysis, indirect calorimetry and polysomnography. Further emphasis will be placed on the equipment utilized for the aforementioned tests as well as their calibration and quality control.

RCP 469 (1) C
Diagnostic Equipment and Techniques

Covers the application of cardiopulmonary diagnostics learned in RCP 468. In this class learners will apply theory acquired in RCP 468 using models, simulation and laboratory partners for practice. Focuses on safe and effective application of diagnostic equipment and procedures across the age spectrum. Covers diagnostic equipment, spirometry, diffusion studies and lung volume determination, cardiopulmonary exercise testing, metabolic studies, bronchoscopy and polysomnography.

RCP 470 (6) C**Adult Critical Care Clinical III**

Culmination of all previous clinical experiences. Designed to build on the foundation of respiratory care knowledge and skills established in the previous six quarters of the program. Students will be assigned to the Critical Care Unit and will perform all of the required duties of a respiratory therapist in the critical care environment. Emphasis on gaining autonomy and independence in the care of the patient.

RCP 472 (1) C**Advanced Practitioner Exam Review**

Covers board exams from the National Board for Respiratory Care (NBRC). Emphasizes scope of practice in respiratory care, based on the NBRC exam matrix. Reviews exam format, content tips and techniques for successful completion of the NBRC board exams. Culminates in the mock Therapist Multiple Choice exam. Prereq: Successful completion of the previous quarter Respiratory Care classes with a minimum of 2.0 or greater.

RCP 476 (3) C**Advanced Patient Assessment**

Develops skills to make appropriate assessments of respiratory patients through utilizing and analyzing history, physical examination, lab data, Chest X-Rays, Pulmonary Function Tests, and EKG data. Uses a ?case-based? format requiring application of clinical reasoning skills to develop and implement plans of care for the cardiopulmonary patients presented. Prereq: Completion of prior quarters' BAS in Allied Health Respiratory Care track classes with a 2.0 or greater.

RCP 479 (4) C**Senior Capstone Project**

A capstone course in the respiratory care program representing the culmination of student learning throughout the program. Students will take on a project using a faculty and/or community mentor to showcase the work they have done in the respiratory care program. The content varies based on student projects and can take on many forms. Projects will be developed in collaboration with faculty and community mentors and are aligned with student interest.

Russian

See Languages & Literature, page 293.

Science**SCI 090 (5) S****General Science - Career Link**

Covers major concepts and ideas in science, exploring biology, physics, chemistry, geology, astronomy and ecology. Lab included. Satisfies science requirement of the high school completion program.

SCI 093 (5) S**Science 093 - Career Link**

Covers fundamental topics in biology including ecosystems, heredity, and evolution. Students will develop a framework for looking at contemporary issues such as climate change and GMOs through a scientific lens while building a basis of knowledge from which to pursue more in-depth study in a variety of medical or research related science fields.

SCI 107 (4) C**Applied Bioengineering**

Covers water-related issues in the developing world: availability, sanitation, food production and environmental degradation. Includes integrative resource management using local human and material resources combined with developing technologies that are safe, adaptable and affordable. Promotes scientific critical thinking and problem-solving.

SCI 111 (1) C | N**Geology Field Day**

Covers the best of the region's geology, including the Seattle Fault, ancient glaciers, fossil forests, landslides, Cascade Mountains and northeastern Oregon. Lab credit. May be taken as GEOL 111.

SCI 112 (1) N**NW Field Trip - Seashore Life**

Explores seashore life in the Pacific Ocean and Puget Sound.

SCI 113 (1) N**Marsh Ecology - Northwest Field Trips**

Explore local wetlands and the organisms that inhabit wetlands ecosystems with a focus on the local animals and plants. Field trips. Lab.

SCI 116 (1) N**Edible Plants - Northwest Field Trip**

Focuses on edible and medicinal plants of the Pacific Northwest. Lab credit.

SCI 118 (1) C**Volcano Field Day**

Intro to the origin and destruction of Cascade volcanoes such as Mount St. Helens, Mount Rainier and Glacier Peak. Lab credit. May be taken as GEOL 118.

SCI 119 (3) N**Natural History Through Field Studies**

Study aspects of biology, zoology, hydrology, meteorology, geology, botany, and/or soil and environmental sciences through field observation and lab work. Includes a multi-day trip or multiple single-day trips. Transportation fee will be assessed. Previous students should take SCI 129.

SCI 121 (5) N**Natural Disasters**

Investigate local and national earthquakes, volcanos, floods, tsunamis, mudflows, landslides, avalanches and forest fire natural disasters. Examine the science behind natural disasters, exploring the disciplines of geology, meteorology, oceanography and astronomy. Lab and field trip include fees.

SCI 122 (1) N**Zoo Science Field Trip**

A field trip-based short course that introduces the concept of zoos in general, and the running of Woodland Park Zoo in particular. Includes five hours of lecture and a one-day field trip. Lab science.

SCI 129 (3) N**the Cascades to Puget Sound: Field Studies**

Study aspects of biology, zoology, hydrology, meteorology, geology, botany, and/or soil and environmental sciences through field observation and lab work involving some aspect of the water cycle in the greater Puget Sound area. Includes a multi-day trip or multiple single-day trips. Lab and transportation fees will be assessed.

SCI 197 (1-5) C**Work Experience-Science**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply science knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

SCI 296 (1-10) C**Natural History: Tropical Ecosystems/Travel Crs**

Hands-on learning opportunities for undergraduates and others who undertake domestic and/or foreign travel. Learn outside the classroom and take advantage of cross cultural materials, flora and fauna, geographical locations, geologic formations, museums, terrestrial ecosystems, regional customs and foods, natural history, marine ecosystems, and field trips which are available only through travel.

SCI 297 (1-10) C**Natural History: Tropical Ecosystems/Travel**

Hands-on learning opportunities for undergraduates and others who undertake domestic and/or foreign travel. Learn outside the classroom and take advantage of cross cultural materials, flora and fauna, geographical locations, geologic formations, museums, terrestrial ecosystems, regional customs and foods, natural history, marine ecosystems, and field trips which are available only through travel.

SCI 298 (1-5) C | N**Special Topics**

Seminar of selected topics or activities in the sciences. Prereq: Variable, dependent on topic.

SCI 299 (1-5) N**Special Problems**

Independent study of approved topics in the sciences. Prereq: Permission.

Science, Technology, Engineering, & Math**STEM 101 (2) C****Orientation to Science & Engineering**

Intended for STEM majors. Gives STEM students the techniques to apply active learning strategies to further their personal and professional growth, study skills, critical and creative thinking, and career development. Focuses on identifying college resources, social justice in the sciences and implicit bias in the research field, the scientific method and how to be an ethical scientist, and helping students explore careers in STEM and build their professional network.

STEM 118 (2) C**Science, Equity, and Social Justice**

Examines the role of science in, and its application to, issues of equity and social justice through selected topics. Foundational history and a basic grasp of various topics in STEM introduced. These facts will provide a platform from which to launch an analysis of current issues of inequality in the United States (e.g., systemic oppression of peoples based on race, gender, sexual orientation, etc.). Prereq: ENGL&101 with 2.0 or higher.

Service Learning**SLN 101 (2) N****Service Learning and Leadership**

To support the values of citizenship and leadership, this course provides the opportunity for students to earn credit for service to the college and/or community. Includes class seminars and observations in addition to field work.

SLN 105 (1-2) C**Service Learning: Business**

The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

SLN 151 (1-2) C**Service Learning: Science**

The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

SLN 152 (1-2) C**Service Learning: Science**

The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

SLN 153 (1-2) C**Service Learning: Science**

The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

SLN 155 (1-2) C**Service Learning: Social Science**

The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

SLN 156 (1-2) C**Service Learning: Social Science**

The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

SLN 157 (1-2) C**Service Learning: Social Science**

The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

SLN 158 (1-2) C**Service Learning: Social Science**

The Service Learning course enables students to experience community involvement as a central component of life while enhancing course learning, social interaction and social responsibility. The course provides an opportunity for both personal growth and academic exploration, engages students in social action, structures opportunities for research and reflection of the experience, involves supervision, student centered learning, support, recognition, evaluation to meet course competencies and offers participation by and with diverse populations and social issues.

Social & Human Services**CDS 197 (3) C**
Field Practicum: Chemical Dependency

Supervised community-based field experience in which students apply knowledge and develop skills by working in public and private agencies and organizations. Prereq: Permission.

CDS 198 (3) C**Field Practicum: Chemical Dependency**

Supervised community-based field experience in which students apply knowledge and develop skills by working in public and private agencies and organizations. Prereq: Permission.

CDS 199 (4) C
Field Practicum: Chemical Dependency

Supervised community-based field experience in which students apply knowledge and develop skills by working in public and private agencies and organizations. Prereq: Permission.

CPP 101 (5) C**Introduction to Community Policing**

Overview of the Seattle Police Department's function and operational procedures. Focuses on policing philosophy, theory and procedure. Understand the different dynamics of the police profession and the progression of the policing philosophy.

SHS 100 (5) C
Introduction to Human Services

Provides an overview of the social and human services field from the perspective of the individual human services worker. Explores societal conditions, assumptions, and needs that impact delivery of services. Includes discussion of areas of knowledge, professional values, and skills. Examines the characteristics of the human services agency, including professional roles, career opportunities, and challenges. Prerequisite: eligibility for ENGL&099 and MATH087/091.

SHS 101 (2) C
Shs, Chemical Dependency, and Academics

Designed for the beginning social and human services student, this course provides basic academic, professional, and personal skills vital for academic success. Defines social and human services with a focus on critical thinking, professionalism, time management, learning communities, and the use of campus resources. Prerequisite: Eligibility for ENGL&099 and MATH087/MATH091. Co-req: SHS100.

SHS 103 (5) C
Social Welfare Policy

Introduction to social welfare policy, social justice, and systems. Emphasis on social welfare policies, systems, and services designed to respond to social issues: public welfare, child welfare, mental health, chemical dependency, aging, poverty, health, disabilities, and corrections. Prerequisites: SHS100 and SHS101 (each with 2.0 or higher); eligible for ENGL099; and eligible for MATH087 or MATH091.

SHS 106 (5) C**Principles of Interviewing and Counseling**

Intro to beginning-level interviewing and counseling skills in multicultural settings. Demonstration of human services values and knowledge of diverse populations' needs through counseling techniques: developing relationships; identifying problems, solutions, and goals; and evaluating progress. Prerequisites: SHS100 and SHS101, each with 2.0 or higher; eligible for ENGL099; and eligible for MATH087 or MATH091.

SHS 108 (5) C**Group Dynamics & Counseling**

Introduction to group work, including group processes, communication patterns, group and individual goal-setting, leadership, and decision-making. Includes group participation, role-playing, and simulations. Prerequisites: SHS100 and SHS101, each with 2.0 or higher; eligible for ENGL099; and eligible for MATH087 or MATH091.

SHS 120 (3) C**Introduction to Disabilities Study and Practice**

This course surveys the historical perspectives, cultural attitudes and stereotypes that create barriers to personal and collective empowerment for individuals with disabilities. The course covers the social-political aspects of the disability rights movement and examines laws governing civil rights of individuals with disabilities. Students explore the intersection of gender, class, race and the human body with emphasis on social justice and privilege. Prereq: Eligibility ENGL& 101 and Math 084.

SHS 121 (5) C**Introduction to Care Navigation**

Introduction to the knowledge, skills, and attitudes necessary to practice care navigation for the benefit of the client. Focus on human services and healthcare systems, social determinants of health, health literacy, chronic illness, risk and protective factors. The first of two courses leading to a certificate in care navigation. Prereq: eligible for ENGL 099; and eligible for MATH 087 or MATH 091; or instructor permission.

SHS 122 (5) C**Care Navigation: Systems of Care**

Explores at an advanced level: healthcare communication strategies, health insurance systems, population health management, transitions of care, risk and protective factors in wellness promotion, preventive care, information technology in healthcare, and care plans. Prereq: eligible for ENGL 099; and eligible for MATH 087 or MATH 091; completion of SHS 121 with minimum 2.0 GPA or instructor permission.

SHS 123 (5) C**Advanced Care Coordination and Navigation**

Third in a three-course certificate in Care Coordination and Navigation. Focuses on client characteristics, rehabilitation systems, care transitions, technology trends in healthcare, preventive care, resource identification and mapping, chronic illness in the context of population management strategies, and advanced care planning. Prereq: Eligibility ENGL& 101, MATH 084 or equivalent and SHS 121 and 122 or instructor permission.

SHS 124 (3) C**Navigating Behavioral Health Systems**

Explores navigation for populations with behavioral health needs. Overview of behavioral health systems, eligibility, and access issues are presented. Topics include: acute and chronic mental health diagnoses, health disparities, work with interdisciplinary teams, behavioral health resources, interventions, and referral, and integration of primary care, substance abuse treatment, and behavioral health. Prereq:ENGL& 101 and elig for MAT 084 or 087 or 091 or permission.

SHS 125 (3) C**Care Navigation for Older Adults**

Explores the role of the care coordinator and navigator with older adults. Presents theories of aging. Focuses on individual and family centered coordination, communication and health literacy specific to older adults, chronic diseases and preventive care, working with an interdisciplinary team, care transitions, resource and referral and end of life issues. Prereq: Eligibility for ENGL& 101, and eligibility for MATH 084 (or 087 or 091); or Instructor's permission.

SHS 150 (1) C**HIV/AIDS Brief Risk Intervention**

Includes history, trends, transmission, infection control, testing, counseling, BRI, and psychosocial issues. Meets requirements for human services and chemical dependency professionals. Approved by the WA State Division of Alcoholism and Substance Abuse.

SHS 197 (3) C**Field Placement: Social and Human Services**

Supervised community-based field experience in which students apply knowledge and develop skills by working in public and private agencies and organizations. Prereq: Permission

SHS 198 (1-5) C**Field Placement: Social and Human Services**

Work experience in human services agencies, with individual and group supervision provided by agency professionals to share experiences and further develop work-related skills. Prereq: Permission.

SHS 199 (1-5) C**Field Placement: Social and Human Services**

Work experience in human services agencies, with individual and group supervision provided by agency professionals to share experiences and further develop work-related skills. Prereq: Permission.

SHS 200 (4) C**Theories of Counseling**

Intro to psychopathology and assessment and counseling theories. Covers ethics, personality theory, counseling techniques and issues, and development of a personal style of assessment and counseling. Prereq: SHS 106.

SHS 205 (3) C**Crisis Intervention and Management**

Intro to crisis theory and techniques for the beginning mental health/human services professional. Students will develop assessment techniques and interviewing skills with high-stress populations presenting with psychiatric, health, drug and alcohol, sexual assault, intimate partner and domestic violence, bereavement, and suicide and homicide crises. Prereq: Eligible for ENGL& 101 and MAT 084.

SHS 209 (5) C**Grief and Loss in Social and Human Services**

Explores both the grief and loss experiences in the context of the helping professions. Analyzes models and types of grief and loss. Researches resources and interventions for clients in the social and human services. Examines transitions, situations, and circumstances that result in grief and loss, as well as cultural responses to them. Prereq: eligible for ENGL099; and eligible for MATH087 or MATH091.

SHS 210 (3) C**Intro to Diversity in Human Services Practice**

Examines U.S. society and the diversity within it, as well as the effects of societal structures on clients. Topics include an overview of general principles of cultural diversity and cross-cultural services delivery to individuals from many diverse backgrounds. Prereq: SHS100 and SHS101, each with 2.0 or higher; eligibility for ENGL099; and eligibility for MATH087 or MATH091.

SHS 215 (3) C**Adolescent Development and Treatment**

Overview of prevention, assessment and treatment, and recovery and relapse issues of addiction amongst adolescents. Also explores public policies regarding young adults with addiction. Prereq: Psych 200 with a 2.0 or higher; or Psych 207 with a 2.0 or higher.

SHS 222 (3) C**Conflict Management**

Intro to understanding and responding effectively to conflict situations. Assess real life conflict cases and design corresponding intervention strategies through video and case studies. Complete a conflict style inventory and practice conflict communication skills. Prereq: Eligible for ENGL& 101 and MATH 084.

SHS 224 (3) C**Leadership Theory and Skills**

Covers selected major theories of effective leadership and application of leadership skills in the work setting. Examines the characteristics of effective leaders, and evaluates students' professional strengths for potential leadership development. Prereq: ENGL& 101 and MATH 084.

SHS 225 (1) C**Relapse Prevention**

Defines behavioral and chemical characteristics of relapse and what relapse prevention involves. Focuses on relapse prevention categories, requirements of clients for a relapse prevention program, characteristics that have an impact on relapse, antecedents to relapse and some of the dysfunctional thinking patterns. Covers clinical and practical techniques and skills in an experiential environment. Prereq: SHS 235 and eligible for ENGL& 101 and MATH 084.

SHS 230 (3) C**Suicide Risk Assessment**

This class provides an introduction to suicide assessment and prevention. Students will be introduced to topics such as signs and symptoms of suicidal/self-harm behavior, facts and myths about suicidal behavior, conducting an assessment interview, risk factors and protective factors, the treatment of suicidal individuals, the contagion effect, and self-care for those working with suicidal/self-harm individuals. Prerequisite: eligible for ENGL& 101 and MAT 084.

SHS 231 (5) C**Pharmacology of Addictions**

Overview of the effects of drug use and chemical dependency on the body including physiological, emotional, and behavioral effects. Focuses on effects of various chemicals on body systems, drug interactions, and management of chronic and acute conditions of drug abuse. Prereq: SHS 235; Eligible for ENGL& 101 and MATH 084 or 087 or 091.

SHS 232 (3) C**Chemical Dependency and the Family**

Provides an overview of effects of drug addiction on the family system including family members' roles and patterns, transference and countertransference, cultural diversity, intimate Partner Violence, and Duty to Report. Assessment is through structured lectures, class discussions, role-playing, and completion of Addiction Genogram. Prerequisite: successful completion of SHS 235; and eligibility for ENGL&102 and Math087 .

SHS 233 (5) C**Chemical Dependency Counseling**

An overview of drug addiction counseling using evidence-based theories and assessments. Emphasis will be placed on cultural and social diversity, motivational interviewing/engagement, stages of change, S-BIRT and ASAM, ethical behavior, and harm-reduction. Prereq: Successful completion of SHS 106 and SHS 235.

SHS 235 (5) C**Drug Addiction and Society**

Overview of physiological, psychological, psycho-social, and systemic concerns related to drug addiction. Explores prevention, intervention and treatment. Prereq: Eligibility for ENGL 101 and Math 087 (or equivalent).

SHS 245 (3) C**Mental Health Overview**

Provides an overview of mental health and community mental health systems. Covers major psychiatric disorders and their common symptoms, examines evidence-based practices in mental health treatment, and reviews mental health resources.ack, meditation, psychosomatic diseases and sPrerequisite: ENGL& 101 with a minimum grade of 2.0.

SHS 250 (4) C**Client and Community Advocacy**

Covers the role of the advocate in a helping situation, use of community advocacy resources and effective use of the media, law, negotiation and political processes to achieve needed services for people. Prereq: Eligible for ENGL& 101 and MATH 084.

SHS 255 (5) C**Mental Health and Co-Occurring Disorders**

Overview of mental health and co-occurring disorders. Covers symptomatology of frequently diagnosed mental disorders; criteria for substance abuse and dependence; evidence-based practices for treatment and local services available for individuals, families, and the community. Prereq: ENGL 101, MATH 084 and SHS 100, all with a 2.0 or higher.

SHS 265 (5) C**Management and Supervision**

Covers management skills for first-line supervisors in alcohol, drug, mental health, correctional, youth and other human service programs. Includes supervision, time management, motivation, leadership, discipline, personnel management, performance appraisals, communications, training and self-development. Prereq: Eligible for ENGL& 101 and MATH 084.

SHS 270 (3) C**Ethics in Human Services and Chemical Dependency**

Explores the WA Administrative Code, federal codes, and professional codes of ethics that apply to human services and chemical dependency professionals. Examines ethical theory, ethical reasoning processes, and ethical analysis. Prereq: Eng 101, Math 87, and SHS 100, each with a 2.0 or higher.

SHS 275 (3) C
Chemical Dependency and Domestic Violence

Specifically designed for those working with chemically addicted, abusive clients and their interactions with family members. Study of treatment goals for domestic violence to foster client understanding of anger, making anger a useful tool, and using healthy and appropriate modes of communication. Prereq: Eligible for ENGL& 101 and MATH 084.

SHS 280 (3) C
Chemical Dependency Case Management

Emphasis on oral and written communication skills. Formulate up-to-date, accurate, and understandable case files and records. Learn federal and state confidentiality regulations in handling chemical dependent client records. Formulate concise treatment plans in accordance with legal requirements. Prereq: SHS 235; Eligible for ENGL& 101 and MATH 084.

SHS 296 (1) C
Special Topics

Receive credit for participation in approved human services professional workshops on topics such as stress management, welfare rights, aging, alcoholism, family therapy, depression, law and mental health.

SHS 297 (2) C
Special Topics

Receive credit for participation in approved human services professional workshops on topics such as stress management, welfare rights, aging, alcoholism, family therapy, depression, law and mental health.

SHS 298 (1-5) C
Special Topics

Receive credit for participation in approved human services professional workshops on topics such as, but not limited to, stress management, welfare rights, aging, alcoholism, family therapy, depression, law, and mental health. Prerequisites: Eligible for ENGL& 101 and MATH 084/091/087.

SHS 299 (1-5) C
Independent Study or Research

Individual or group research projects on human service programs and problems. May include field or library research. Prereq: Requires a learning contract.

Social Sciences

SSC 101 (3) N
Intro to Research Skills

Develop critical thinking as applied to the research process by examining strategies for locating, evaluating, and using information. Explore issues related to information ethics, such as plagiarism and copyright, in addition to issues related to our contemporary online information environment. Emphasis on developing proficiency using encyclopedias, databases, and the library catalog. Learn to write focused research questions and learn strategies for organizing research.

SSC 187 (5) C
Information Resources for Social Justice

Explores theories of mainstream and alternative cultures and their impact on information in a democratic society. Addresses concerns about the political and economic aspects of information related to the ongoing struggle for equality and human rights. Examines various research strategies for identifying, locating, evaluating and applying information resources for social justice.

SSC 197 (1-5) C
Work Experience-Social Science

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply social science knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring achievement through self-evaluation and faculty and supervisor evaluations. Prereq: Permission.

SSC 297 (1-10) C
Travel/Study Experience

Hands-on learning opportunity for students in domestic and/or foreign travel. Focuses on learning outside the classroom and taking advantage of cross-cultural opportunities. Includes historic sites, geographical locations, geological formations, museums, art centers, regional customs and foods, language enhancement, specialized research libraries, local universities and legislatures available only through travel.

SSC 330 (1-5) C
Information Literacy for Undergraduate Research

Explores strategies, topics, and concepts to develop research practices for Bachelor's level study. Focuses on in-depth investigation of the organization, retrieval, and evaluation of professional and discipline-specific digital and print information sources.

Sociology

SOC& 101 (5) C | N | S
Introduction to Sociology

Introduces students to the scientific study of society and to several sociological concepts, including socialization, stratification, research methods, social theory, group dynamics, social class, gender, sexuality, race, ethnicity, media, family, deviance, and social and cultural change. Students learn how to connect research to concepts and use the sociological imagination, the relationship between self and society, to deepen their understanding of social life.

SOC 102 (5) C
Introduction to American Culture

Examines American cultural values, beliefs, and practices. Students explore core social institutions, such as the family, politics, and the media and learn about patterns of inequality associated with race, ethnicity, social class, gender, and sexuality. Field trips, films, participation in campus events, and observation activities may support cultural learning and facilitate cross cultural analysis.

SOC 105 (5) S
Society of Black Americans

Evaluation of the sociological impact of the African-American experience in relation to various social systems in America.

SOC 106 (5) C | S
Sociology of Asian Americans

Examines Asian American experiences in the United States from a sociological perspective. It focuses on Asian-American racial/ethnic communities and social institutions and explores settlement patterns, education, employment, anti-Asian violence, media representations, family and gendered identities, and political empowerment. Patterns of inequality, including prejudice, discrimination, and the model minority myth, are core themes.

SOC 120 (1-5) C
Sociology of the Media

Sociological perspective of print and electronic media, including television, film, news and advertising. Analysis of media institutions and the way they affect social, political and cultural discourse and identities. Examines how American identity shapes and is shaped by the media, including changes in this identity from one period to another.

SOC 150 (5) C | S
Race and Ethnic Relations in the United States

Examines the majority-minority pattern of interaction in American society. Includes theories of race relations and issues shaping intra- and interracial ethnic relations.

SOC& 201 (5) C | N
Social Problems

Introduces students to core sociological concepts and theories through the lens of social problems. The focus is on examining processes by which members of society define social issues as problems and evaluating social change strategies. Students apply concepts and theories to a range of social problems, such as poverty, crime, discrimination, economic inequality, addiction, health issues, war and terrorism, and environmental issues.

SOC 215 (5) C | N
Criminology

Survey of Criminology. Covers legal definitions, research methods, types of criminal behavior, trends and patterns, recidivism, characteristics of offenders, environmental influences, theories of crime and delinquency prevention, and social policy.

SOC 220 (5) C
Sex Roles and Society

Explores the social construction of sex, sexuality, and gender over time and across cultures. Examines gender as a fundamental organizing aspect of social life and study patterns of gender inequality. Students learn about ways in which social structures and personal experiences interact to both reproduce and challenge hierarchical systems.

SOC 225 (5) S
Psychology of Addiction

Psychology of addiction, a critical examination of the behavior and mental processes associated with addiction. Systemic approaches to investigation through psychosocial, biological, cognitive and sociobehavioral areas in psychology. Lecture, research, presentation and critical examination. 5 credit class. 200 level course. Prerequisite: PSYC 100 General Psychology or SOC 101 Intro to Sociology This is a dual PSYC/SOC course.

SOC 230 (5) N | S
Human Sexuality

Survey of sexual behavior. Covers historical, physiological, psychological and social components of sexuality and its deviations. May be taken as PSYC 230.

SOC 245 (5) N | S
Social Psychology

Examines the effect of others on the individual in areas such as self-concept, social cognition, conformity, helping, loving and liking, competition and cooperation and prejudice and discrimination. Research and autobiography by two of the following groups provide content and illustration: African Americans, Asian Americans, Native Americans and Hispanic Americans. May be taken as PSYC 245.

SOC 250 (5) C
Marriage, Family and Intimate Relationships

Surveys the concept of family as a mode for personal living. Analyzes personal adjustment, parent-child relationships, marital and alternative structures and contemporary issues facing today's family systems.

SOC 253 (5) S
Organizational Behavior

Organizational behavior as seen through sociological theory. Concepts show how managers can improve organizational effectiveness by attending to the human side of the enterprise. Topics such as: leadership, conflict theory, motivation, social interaction theory, power, politics, group dynamics and organizational design are examined for the effects on employees and their performance.

SOC 271 (5) N
Introduction to Deviance and Social Control

Examination of deviance, deviant behavior, and social control. Deviance as a social process influenced by power; theories of deviance and deviant behavior; nature and social organization of societal reactions; and social and legal policy issues.

SOC 298 (1-5) C
Special Topics in Sociology

Independent study in selected sociology topics under faculty supervision. Prereq: Permission.

SOC 299 (1-5) C
Special Problems in Sociology

Small group seminar to discuss selected sociology topics. Prereq: Permission.

Spanish

See Languages & Literature, page 293.

Specialty Desserts

BAK 101 (4) C
Intro to Desserts & Breads: Theory

Intro to baking/cooking methods and to the scientific principles used in this field. Covers ingredient responses to temperature, friction and storage; mise en place; ingredient functions and characteristics; tools/equipment; and trade terminology. Includes discussion of yeast doughs, quick breads, syrups, icings, sauces and creams, pastries, pies and tarts, cake mixing and baking. Prereq: Admission to program.

BAK 102 (3) C
Bread and Food Preservation

Presents theory and ingredients, including why specific baking techniques work. Emphasizes the formation and exercise of judgment in baking practice, relationships between procedures and products, and evaluation of product quality. Includes discussion of artisan bread production, German and rye breads, laminated doughs, vegetable ferments, beer and wine, charcuterie, artistic design doughs, cheese reports and five-year plan and site visit reports. Prereq: BAK101 with a minimum grade of 2.0.

BAK 103 (4) C
Science and Practice of Baking with Chocolate

Presents advanced theory and ingredients in the chocolate making process, fair trade practices, cacao bean growing and chocolate making. Learn the scientific principles of sugar process, sugar alcohol, sugar cooking stages, fat functions and characteristics. Prereq: Successful completion of previous quarter's Seattle Culinary Academy courses with a minimum GPA of 2.0 in each course.

BAK 105 (2) C
Restaurant Baking: Theory

For culinary arts students. Expands on science and principles of baking, including yeast doughs and formulas, icing techniques, basic cake types and characteristics of desserts. Prereq: Successful completion of 2nd quarter Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

BAK 111 (6) C
Introduction to Desserts & Breads: Practicum

Application of baking theory to production. Includes mise en place and preparation of a variety of doughs, breads/rolls, breakfast breads/pastries, cookies, tarts, sponge and tea cakes and decorated cakes. Prereq: Admission to program.

BAK 112 (8) C**Beginning Desserts and Breads: Practicum**

Further application of baking theory to production, including exercising judgment and product success/failure analysis. Includes preparation of pastry creams, egg foams, butter creams, meringues, mousses, soufflés, custards, frozen desserts, holiday desserts, compotes, chocolate candies, sauces and fillings. Prereq: Successful completion of 1st quarter Specialty Desserts and Breads Program courses with a minimum GPA of 2.0 in each course.

BAK 113 (8) C**Intermediate Desserts and Breads: Practicum**

Development of professional bakery skills, including organization, accuracy and communication. Practice assessment of product texture, taste and appearance. Includes preparation using advanced techniques of intricate chocolate work, European cakes and plated desserts, with increased emphasis on presentation and artistic skills. Prereq: Successful completion of 2nd quarter Specialty Desserts and Breads Program courses with a minimum GPA of 2.0 in each course.

BAK 115 (1) C**Restaurant Baking: Practicum**

For culinary arts students. Production of baked goods including ganache, custards, creams, puddings, mousses and purees. Prereq: Successful completion of 2nd quarter Culinary Arts courses with a 2.0 or better.

BAK 116 (1) C**Fine Dining Baking: Practicum**

For culinary arts students. Applies baking theory to production of yeast doughs (bread, puff pastry and choux), focaccia, cakes, icings, decorations, mousses, tortes, puff pastries and fine plated desserts. Prereq: Successful completion of 3rd quarter Culinary Arts courses with a minimum GPA of 2.0 in each course.

BAK 117 (1) C**Introduction to Cheese Making**

For culinary academy students. Learn cheese making and fermentation techniques in the culinary field, including cheese diversity, milk composition, and the eight basic steps. Prereq: Successful completion of previous quarter's Specialty Desserts and Breads or Culinary Arts Program courses with a minimum GPA of 2.0 in each course.

BAK 123 (2) C**Adv Buff. Desserts/Wed Cakes/ Preservation-Theory**

Learn, analyze, and develop an understanding for the components of successful wedding cakes and petit fours. You will explore current industry standards in regards to flavor profiles, design components and structure. This course includes a review and discussion on a variety of preservation methods and techniques for preserving summer produce. Prereq: Successful completion of 3rd quarter Specialty Desserts and Breads Program courses with a minimum GPA of 2.0 in each course.

BAK 124 (8) C**Adv. Buffet Desserts/Wedding Cakes/ Preservation**

Design and develop a line of wedding cakes and petits fours using the latest industry techniques. Produce jam and preserves using organic fruits and vegetables. Includes practicing the seed to plate cooking model and designing and marketing a bakery display case. Prereq: Successful completion of 3rd quarter Specialty Desserts & Breads courses with a minimum GPA of 2.0 in each course.

BAK 125 (8) C**Advanced Desserts and Breads: Practicum**

Design and develop a line of bakery goods. Purchase and inventory goods and calculate cost analysis as an extension of the class project. Prereq: BAK 113 or permission.

BAK 126 (3) C**Advanced Whole Grain Baking Theory**

Explore the unique properties associated with a wide variety of fresh milled whole grains as applied to baking as well as alternative sugars in pastry work. Learn scientific principles applied to yeast products, fermented foods, and food preservation including flour facts and alcohol fermentation. Prereq: Successful completion of previous quarter's Specialty Desserts and Breads Program courses with a minimum GPA of 2.0 in each course.

BAK 299 (1-5) C**Special Projects/Commercial Baking**

Independent study course for individual projects in the desserts/pastry field. Prereq: permission.

Supervision and Management**SMG 100 (3) S****Leadership and Supervision**

Intro to management. Covers leadership theories, style skills in various organizational settings; developing techniques for productive work groups; managing a diverse work force; motivating employees; handling difficult people and situations; running effective meetings; and handling the responsibilities of being a leader, manager and supervisor.

SMG 103 (3) S**Supervising A Diverse Workforce**

Examines perceptions held by supervisors and employees in connection with culturally and behaviorally diverse workers. Examines working with and supervising diverse population groups. Explores current legislation and challenges of an evolving workforce.

SMG 120 (3) S**Hiring Personnel**

Examines supervisor's role in staffing. Covers job analysis, descriptions and classifications, recruiting, selection, EEO and new employee orientation.

SMG 197 (1-5) S**Internship or Cooperative Education Experience**

Provides practical work experience and employment contacts by integrating academic studies with actual on-the-job training. Orientation to Internships required prior to registration. Prereq: Permission.

SMG 201 (3) S**the Entrepreneurial Manager**

Study of the major steps, formation and growth for setting up a new small business or department, project or contract within a large organization. Focuses on entrepreneurial characteristics and the task of moving from concept to commercialization. Emphasis on time management, planning and projections, securing capital and marketing plans. Prereq: SMG 100.

SMG 210 (3) S**Project Management**

Covers project planning basics: timelines, evaluation, implementing budgeting concepts and formulating a budget request strategy with specific and measurable outcomes. Focuses on team concepts. Includes computer lab applications.

SMG 220 (3) S
Personnel Performance Management

Covers principles and techniques for employee performance programs, appraisals, coaching and counseling, disciplinary process and wage surveys. Explores reward systems, common disciplinary practice and employment law. Covers assessment of training needs, planning, development and evaluation of training programs.

SMG 222 (3) S
Management and Labor Relations

Covers the supervisory role in employee and labor relations. Includes history of management thought, labor negotiations, laws affecting labor agreements, union contracts and the supervisor's role in the negotiating process.

SMG 243 (2) S
Its the Law: Contracts and Liabilities

Covers the law as it relates to contracts and liabilities in nonprofits. Focuses on legal issues that nonprofit staff and boards need to be aware of, including personnel contracts, grant contracts, personal service contracts, fund-raising contracts, service provider contracts, antitrust and related liabilities. Includes employment laws, officer/director liabilities and indemnification.

SMG 298 (1-10) S
Independent Study-Supervision and Management

Provides opportunity for research, advanced study, or special projects. Work independently with an instructor. Credits vary. Prereq: Permission.

Surgical Technology**SURG 111 (6) C**
Surgical Lab

Covers principles and techniques of operating room procedures. Includes gowning and gloving, aseptic technique, creating and maintaining a sterile field, draping materials, basic instrumentation and patient transport. Prereq: Permission.

SURG 113 (10) C
Surgical Theory I

Intro to surgical technology, including legal and ethical aspects, relationships with co-workers, hospital organization and inter-departmental relations, physical and psychological aspects of patient care, operating room techniques and procedures. Prereq: Permission.

SURG 115 (2) C
Clinical Orientation

Covers observation of the environment, routines, supplies and equipment, patient-team interaction and application of scientific principles. Prereq: Permission.

SURG 121 (6) C
Surgical Specialty/Professional PREP

Intro to the principles and practice of surgical pharmacology and anesthesia related to the surgical patient. Learn about minimally invasive surgical instrumentation, equipment and supplies. Prereqs: SURG 111, 113, 115.

SURG 123 (8) C
Surgical Theory II

Examines microbiology, pharmacology, and anesthesiology relating to the surgical patient. Includes additional peri-operative care techniques and surgical procedures, pathophysiology, and the technologist's role in surgery. Covers general, orthopedic, gynecological, genitourinary-re productive, and ophthalmic specialties. Prereq: Successful completion of SURG 113, or Instructor's permission. Co-requisite: SURG 121 and SURG 125.

SURG 125 (4) C
Clinical Practice I

Provides clinical practice, with focus on development of entry-level skills. Prereq: Permission.

SURG 133 (8) C
Surgical Theory III

Intro to circulating duties and job applicant skills. Covers advanced surgical specialties such as ear, nose and throat, vascular, cardiovascular, thoracic, neurological, plastic/reconstructive and pediatric procedures. Prereq: Permission.

SURG 135 (10) C
Clinical Practice II

Provides advanced clinical practice to develop entry-level skills. Prereq: Permission.

Sustainable Building Science Technology Bachelor of Applied Science**SBST 301 (3) S**
Building Science

Overview of the principles of Building Science and how it is applied to the design, operation and maintenance of buildings and their systems. Covers the interaction of those systems, and the careers that use and are impacted by these principles and their applications.

SBST 302 (2) S
Building Components and Systems

Overview of building components, space conditioning and lighting systems, their interactions, and the building science issues surrounding and impacting them.

SBST 314 (2) S
Professional Portfolio

Document prior work experience by developing an E-portfolio to receive Workforce Experience Practicum credit.

SBST 315 (10) S
Work Experience Practicum

Credits based on the successful completion of the Professional Portfolio course SBST 314. Students must have demonstrated 2-5 years of relevant work experience in their area of interest.

SBST 321 (2) S
Building and Energy Codes in Washington State

Overview of building and energy codes and requirements: Prerequisite: Admission to BAS-SBST Program.

SBST 322 (3) S
Energy Analysis and Auditing

Covers energy auditing and analysis skills for commercial buildings.

SBST 325 (1-10) S
Sustainable Building Science Technology Internship

Observe, reflect and practice sustainable building science technology techniques in a technical, post-secondary environment. Find a building science placement in the field of interest and work with a site supervisor to develop and deliver relevant curriculum. The site supervisor and college faculty advisor will evaluate the internship.

SBST 331 (2) S
Financing Energy Efficiency and Renewable Energy
 Overview of energy economics.

SBST 332 (3) S
Building Energy Codes in Washington State
 Overview of building energy codes in Washington State.

SBST 333 (4) S
Building Controls for Energy Efficiency
 Overview of building components.

SBST 401 (2) S
Utility Rates Regulations and Economics
 Overview of utility rate structure.

SBST 402 (3) S
Lighting
 Overview of building lighting systems.

SBST 421 (3) S
Energy Policy
 Overview of energy policy.

SBST 422 (4) S
Facility Management
 Overview of facilities management.

SBST 431 (4) S
Professional Communication
 Overview of professional communication in the building science industry

SBST 432 (3) S
Fiscal Management for Facility Managers
 Overview of fiscal management for facility managers.

SBST 89 (4) S
Sustainable Building Science Technology Capstone
 Develop a project based on previous classes and internship experiences.

Undergraduate Research

UGR 214 (1-5) C | S
Introduction to Scientific Research
 Preparation for successful completion of an independent research project. Includes the application of scientific method, ethics, research methods, proposal writing and presentation techniques.

UGR 294 (1-5) C | N | S
Independent Research
 Work collaboratively with peers and faculty. Design, complete and publicly present an original research project.

Visual Media

VME 110 (4) C
Professional Practices I
 Explores the varied career paths found in visual media. Emphasis is placed on creative styles and trends in image making and storytellers of today. Entry-level issues such as working conditions, time management, organizational strategies and professional ethics will also be examined. Students will begin learning the language of media and how to critique work of their peers.

VME 111 (4) C
Professional Practices II
 Explores professional business communications. Examines methods of written communication for the visual problem solvers. Explore script writing, the creative pitch, presentations, etc. Learn multimedia storytelling, narrative forms and techniques. Develop a better understanding of using images and audio to advocate, communicate or address a specific subject or issue. Prerequisite: Successful completion of the program through preceding quarter.

VME 120 (4) C
Lighting Techniques I
 Covers the basic methods of commercial lighting; the laws, principles, and practices of light; the qualities of direct/indirect sunlight and tungsten light sources; lighting for form, texture. Introduces standards for the safe operation of lighting equipment in a studio environment.

VME 121 (4) C
Lighting Techniques II
 Covers studio techniques for lighting people. Addresses safe operation of studio equipment for ?portrait lighting? setups. Introduces three-dimensional contrast in a traditional portrait studio setting. Includes subject rapport, subject posing and development of a theme-based narrative using advanced lighting techniques while demonstrating set construction skills. Prerequisite: Successful completion of the program's previous quarter.

VME 131 (4) C
Conceptual Solutions I
 Emphasizes research and creative problem solving to achieve a successful solution to a stated visual problem. First of two courses. Students experiment with different presentation techniques and deliverables to solve a series of eleven one week assignments designed to force students to be creative in a short amount of time. Prereq: Successful completion of the program through preceding quarter.

VME 145 (4) C
Digital Imaging I
 Addresses the terminology and ethics of capturing digital images. Covers the functions and operation of HDSLR cameras. Introduces techniques for determining optimum exposures and basic compositional aesthetics. Includes development of an organized file management system utilizing Adobe Lightroom and parametric editing in Capture One.

VME 146 (4) C
Digital Imaging II
 Covers the creative and technical requirements of digital image optimization using Adobe Photoshop Creative Cloud. Includes interface navigation, tools, layers and filters, creation and manipulation of image selections, adjustments of color and contrast, use of retouching, masking, cropping, and basic image compositing, and the export of images for print and web. Prerequisite: Successful completion of the first quarter of the Associate of Applied Science program in Visual Media.

VME 147 (4) C
Digital Imaging III
 Introduces advanced image editing techniques and production workflows in Adobe Photoshop. Focuses on precise color correction, refined selections, and multiple image compositing. Includes advanced retouching and image output and evaluation. Requires the creation of a cohesive final project of professional quality utilizing these advanced image editing tools and techniques. Prereq: Successful completion of the previous quarter within the VME program.

VME 150 (4) C
Visual Media I
 This course provides a bridge between still and motion working with a DSLR camera. Introduction to the Adobe Premiere and technical aspects of video production. Students will design, shoot, and edit several short projects. They will be introduced to a digital, non-linear, post-production environment.

VME 151 (4) C**Visual Media II**

This course examines production methods, pre-production and post-production techniques, basic motion graphics, time-lapse video, slow motion and audio design. Working with crane/jib/sliders and other various tools. Students must work collaboratively as well as individually throughout the quarter.

VME 153 (4) C**Visual Media III**

Builds on production methods, pre-production, and post-production techniques learned in previous courses. Introduces multi-camera solutions, as well as color correction and grading using Adobe SpeedGrade. Emphasis placed on professional audio and sound effects using Pro Tools for mixing and mastering audio. Students learn how to work effectively, and develop and simulate a professional workflow for a specific project. Prereq: Successful completion of the program through preceding quarter.

VME 160 (4) C**Studio Techniques I**

Focus on portrait & lifestyle photography techniques: seeing and using available light; using on-camera strobe units; choosing appropriate poses & lighting; story-telling sequencing photos; & adding words & music to increase emotional & saleable impact. Includes retail sales materials, presentations, and pricing strategies. Students encouraged to explore solutions and be creative in their approach to visual problem-solving. Prereq: Successful completion of program through preceding quarter.

VME 170 (4) C**Audio Production I**

Introduces critical listening techniques, basic analog and digital theory, as well as best practices for sound recording and audio editing to develop skills as effective audio storytellers. In the field, students will learn to use equipment typical to the industry to record ambiences, sound effects, and voices. Using Adobe Audition and Premiere students will layer sounds to create audio narratives.

VME 197 (3) C**Work Experience - Visual Media**

Integrates educational studies with supervised work/internship experience. Provides individualized opportunities to apply visual media knowledge and skills in the workplace. Includes developing work experience learning outcomes and monitoring. Prereq: Instructor's permission (Must be employed, interning, or volunteering in a position approved by program faculty or the Cooperative Education Office.)

VME 220 (4) C**Digital Imaging V**

Introduces beginner & intermediate concepts & techniques for creating & rendering motion graphics using Adobe After Effects. Focuses on video compositing & animation, integration of titles, basic green screen & keying skills, & 3d/360 video integration. Requires completion of a cohesive final project that integrates multiple applications of After Effects capabilities and techniques utilizing these image rendering and animation tools. Prereq: All previous program courses with a 2.0 or higher.

VME 232 (4) C**Conceptual Solutions II**

Final of two courses with an emphasis on research and creative problem-solving to achieve a successful solution to a stated visual problem. Students experiment with different presentation techniques and deliverables to solve a series of eleven one-week assignments designed to compel students to be creative in a short amount of time. Prereq: Successful completion of the previous quarter.

VME 233 (4) C**Conceptual Solutions III**

Third course in a series with an focus on storytelling through photography and video work. This class will emphasize key script elements such as plot structure, character and scene development. Students will use production design and photographic techniques to produce deliverables that have compelling narrative or character traits. The class work will focus on a series of two to three-week assignments which are designed to compel students to be creative in a short amount of time.

VME 245 (4) C**Audio Production I**

Introduces critical listening techniques, basic analog and digital theory, as well as best practices for sound recording and audio editing to develop skills as effective audio storytellers. In the field, students will learn to use equipment typical to the industry to record ambiences, sound effects, and voices. Using Adobe Audition and Premiere students will layer sounds to create audio narratives. Prereq: successful completion of the program through preceding quarter.

VME 250 (4) C**Visual Media IV**

Advanced digital video production focusing on the skills needed to complete professional digital video productions pertaining to location and studio environments. Students will produce material including short documentaries, interviews, studio productions, and music videos. Students will rotate through the roles of a production team while producing projects. Prereq: Successful completion of the program through preceding quarter.

VME 251 (4) C**Visual Media V**

Begins the final capstone visual media production. Covers the fundamentals of producing & directing techniques of digital video production. In teams, students learn the process of producing a major video production: concepting, script writing, story development, planning, timelines, props, casting, & budgeting. Explores storytelling using 360 video & virtual reality environments to enhance the experience. Prereq: Successful completion of the program through preceding quarter.

VME 252 (4) C**Visual Media VI**

Builds on the skills and knowledge acquired in previous Visual Media courses. Introduces advanced editing techniques including compositing footage, color balancing, chroma-keying, advanced effects, and sound mixing and manipulation. Concludes with a capstone project that is collaboratively produced and demonstrates advanced skills in editing techniques. Prereq: Successful completion of the program through preceding quarter.

VME 261 (4) C**Studio Techniques II**

Second in a series of 3 classes focused on technique. Explores how to understand the needs of the client, the audience, & the art direction of a campaign, as well as professional requirements of corporate & editorial photography. Continued work on understanding lighting controls while working on location. Students engage in real projects to develop conceptual and creative solutions to produce images that tell a compelling story. Prereq: Successful completion of the program through preceding qtr.

VME 262 (4) C
Studio Techniques III

The final course, in a series of three, focused on technique. Explores how to understand the needs of the client, the audience, and the art direction of a campaign. Focuses on food & product photography, identifying some of the challenges and how to resolve them. It offers an in-depth research and practice on how different foods, textures, & products (metal, glass, fabric, plastic, etc.) respond to different types of light. Prereq: Successful completion of the program through preceding quarter.

VME 270 (4) C
Professional Business Practices: Visual Media

Provides practical experience with pricing and negotiating fees, writing proposals and design briefs, organizing efficient timelines, managing workflows, and applying basic accounting and business practices. Students acquire work contracts with a client and apply their design skills in exchange for a fair wage or equitable trade. Students are provided with ethical guidelines for conduct and behavior within the visual media profession. Prerequisite: Successful completion of the previous quarter.

VME 276 (4) C
Portfolio Show

Students will collaboratively participate in the planning and organization of the portfolio show. This will include, but is not limited to, Branding, Marketing, Web-Design and Development, Photography, Videography, Exhibit Design, Social Media and Promotion. Students are required to design and install their own work for the show.

VME 280 (4) C
Special Projects I

The first in a series of 3 courses designed to expand current visual media knowledge & skills, offering students the opportunity to work on a major self-initiated visual media project. Emphasizes research and visual experimentation that leads to a successful visual media solution. By engaging in a unique quarter-long project, students have the opportunity to develop strong portfolio pieces with the goal of employment. Prereq: Successful completion of the program through preceding quarter.

VME 281 (4) C
Special Projects II

Second in a series of three courses designed to expand current graphic design knowledge and skills, offering students the opportunity to work on a major self-initiated design project. Emphasizes research and the design process that leads to a successful design solution. By engaging in a unique quarter-long project, students have the opportunity to develop strong portfolio pieces with the ultimate goal of employment. Prereq: Successful completion of the program through preceding quarter.

VME 282 (4) C
Special Projects III

The last in a series of three courses designed to expand current graphic design knowledge and skills, offering students the opportunity to work on a major self-initiated design project. The course emphasizes research & the design process that leads to a successful design solution. By engaging in a unique quarter-long project, students have the opportunity to develop strong portfolio pieces with the ultimate goal of employment. Prereq: Successful completion of the program through preceding qtr.

VME 286 (4) C
Portfolio

Develop, design and prepare a portfolio of work that represents the student's creative voice and professional direction, for presentation to multiple clients, representatives and agencies. Includes various presentation methods, including electronic portfolios. Create marketing materials: business card, stationery and self-promotion. Prereq: Successful completion of the program through preceding quarter.

WA Bldg Officials**WABO 101 (3) S**
Public Service in Washington State

This is the first course in the first year of the WABO short-term certification program. This course examines WA State jurisdictions, characteristics of effective public servants, and general guidelines for public service.

WABO 102 (3) S
Skills for Success in Public Service

This is the second course in the first year of the WABO short-term certification program. This course examines the interpersonal and customer service skills needed for public servants working directly with the public.

WABO 103 (3) S
Permit Specialist Course

This is the third course in the first year of the WABO short-term Code Accreditation certification program. This course introduces students to the codes that jurisdictions expect Permit Specialists to have basic knowledge of. Exposure will be to the 2015 International Residential Code and 2015 Washington State Energy Code.

WABO 201 (3) S
Code Administration for Inspectors

This is the first course in the second year of the WABO short-term certification program, focusing on construction inspectors. The course examines data collection, technical accuracy and production efficiency, balancing these demands in a highly visible role with government authorities, for-profit businesses and the general public.

WABO 202 (3) S
Public Service and Regulation for Inspectors

This is the second course in the second year of the WABO short-term certification program, focusing on construction inspectors. The course examines data collection, technical accuracy and production efficiency, balancing these demands in a highly visible role with government authorities, for-profit businesses and the general public.

WABO 203 (3) S
Building Inspector Course

This is the third course in the second year of the Washington Association of Building Officials short-term Code Accreditation certification program. This course introduces students to the codes of which jurisdictions expect Building Inspectors to have basic knowledge. Exposure will be to the 2015 International Resident Code and 2015 Washington State Energy Code.

Watch Technology**HIN 111 (6) N**
Introduction to Watch Technology

Survey of the history of time measurement and the watch and clock trade. Learn safe shop practices including lab hazard, accident prevention and first aid. Intro to trade terminology associated with tools, equipment, technical drawing, measuring devices and applications appropriate to the trade and physical properties of materials. Coreqs: HIN 112 and 113.

HIN 112 (6) N**Watch Technology I: Tools, Equipment & Measureme**

Learn to use and maintain in a lab setting, including jeweler's saw, tweezers, screw drivers, files and the watchmaker's lathe. Learn the fundamentals of hardening, tempering and annealing steel; measuring techniques and applying the metric system in the use of instruments and gauges. Make technical drawings and manufacture tools and parts using drawings. Coreq: HIN 111 and 113

HIN 113 (10) N**Watch Technology I: Practicum**

10 credit practicum. Apply knowledge from HIN 111 and 112. In lab practice making tools and develop basic skills in the manufacture and repair of parts for time pieces. Identify and apply tools and equipment using safety precautions in a watchmaker's shop. Practice measuring techniques and apply problem-solving skills to manufacturing. Coreqs: HIN 111 and 112.

HIN 121 (6) N**Watch Technology II: Professional Knowledge**

Learn or review the math necessary to calculate formulas used in manufacturing and watch repair. Use formulas to find the length of mainsprings, calculate running time and beats per hour. Apply various polishing materials and techniques to master the manufacture of small parts.

HIN 122 (6) N**Watch Technology II: the Watchmakers Lathe**

Intro to use, care and maintenance of specialty lathes using the watchmakers' turns, the Jacot tool and pivot polishing machine.

HIN 123 (10) N**Watch Technology II: Practicum**

Apply knowledge from HIN 121 and HIN 122. Practice manufacturing watch stems and pivoting. Identify and apply appropriate tools, equipment and safety precautions in a horological repair shop.

HIN 131 (6) N**Watch Technology III: Winding and Setting Mechan**

Learn to correct common errors in the mainspring barrel, the barrel bridge and mainplate. Intro to common types of setting mechanisms. Practice correct disassembly, assessment and adjustment, re-assembly and lubrication procedures. Learn mathematical formulas for determining correct size of mainsprings. Prereqs: HIN 121, 122 and 123. Coreqs: HIN 132 and 133.

HIN 132 (6) N**Watch Technology III: Watch Gear Trains**

Intro to the mathematics involved in working with the gear train and tooth form, module, pitch and distance between centers, including calculations to determine running time and vibrations per hour for mechanical watches and ratios. Learn to dismantle, assemble, maintain and repair the gear train of a watch. Prereqs: HIN 121, 122 and 123. Coreqs: HIN 131 and 133.

HIN 133 (10) N**Watch Technology III: Practicum**

10-credit practicum. Apply knowledge from HIN 131 and 132. In lab practice jewel setting and adjusting. Develop skills to prepare for and complete the third WOSTEP intermediate exam (winding, setting, gear train). Expand skills to identify and apply appropriate tools and equipment safely in a horological repair shop. Prereqs: HIN 121, 122 and 123. Coreqs: HIN 131 and 132.

HIN 141 (4) N**Watch Technology IV: Escapements**

Intro to the role of escapement in the watch. Explore history and development of different escapements and their influence on time-keeping. Prereqs: HIN 131, 132 and 133. Coreqs: HIN 142 and 143.

HIN 142 (4) N**Watch Technology IV: External Parts**

Learn about different case styles and the parts that complete the case including crystals, crowns, push buttons, dials, hands, and gaskets. Prereqs: HIN 131, 132 and 133. Coreqs: HIN 141 and 143.

HIN 143 (8) N**Watch Technology IV: Practicum**

8-credit practicum. Apply knowledge from HIN 141 and 142. Prereqs: HIN 131, 132 and 133. Coreqs: HIN 141 and 142.

HIN 211 (6) N**Watch Tech V: Introduction to Precision Timing**

Learn concepts of precision timing with emphasis on the eight influences of isochronisms (friction, external influence, regulating pins, escapement, magnetism, temperature, poising of balance wheel, poising of hairspring). Students apply the theoretical concepts of precision timing to practice watches: analyzing errors and making corrections to improve the timekeeping of the watches. Prereq: Permission, HIN 141, 142 and 143 with 2.0. Coreq: HIN 212 and 214.

HIN 212 (6) N**Watch Tech V: Introduction to Electronic Watches**

Learn fundamentals of electronics to understand how quartz watches work: tension, current, capacity, power, consumption, electric field, magnetic field, functioning of stepping motors, energy source, and functioning of the transistors in switching. Intro to equipment designed specifically for testing quartz watches and to analyze the various components of watches. Prereq: Permission, HIN 141, 142 and 143 with 2.0. Coreq: HIN 211 and 213.

HIN 213 (10) N**Watch Tech V: Practicum**

Intro to repair of pocket watches and/or wristwatches, the service, repair and replacement of external parts of watches. Practice includes work on precision timing, quartz watches, short jobs (battery, crystal, crown and stem replacement) and customer repairs. Prereq: Instructor permission, HIN 141, 142 and 143 with 2.0. Coreq: HIN 211 and 212.

HIN 221 (6) N**Watch Technology VI: Precision Timing 2**

Continue study of theory and practical application of the principles of precision timing. Prereq: HIN 211, 212 and 213. Coreq: HIN 222 and 223.

HIN 222 (6) N**Watch Technology VI: Automatic Watches**

Intro to the various self-winding (automatic) mechanisms for watches. Practice testing, adjusting, disassembly and assembly of automatic mechanisms. Study history and development of these mechanisms. Prereq: HIN 211, 212 and 213. Coreq: HIN 221 and 223.

HIN 223 (10) N**Watch Technology VI: Practicum**

Apply knowledge from HIN 221 and 222. Practice repairing automatic watches and continue working on precision timing. Further develop skills with appropriate tools, equipment and safety precautions in a horological repair shop. Prereq: HIN 211, 212 and 213. Coreq: HIN 221 and 222.

HIN 231 (6) N**Watch Technology VII: Advanced Precision Timing**

Refine and synthesize the art of precision timing. Each unit of the watch must be clean and well-adjusted. Check each unit systematically so that repairs are made in a timely fashion. Prereq: HIN 221, 222 and 223. Coreq: HIN 232 and 233.

HIN 232 (6) N**Watch Technology VII: Chronographs**

Learn to repair the main types of chronographs - those with column wheels and those with cams. Covers the function and components of chronographs, checking the general condition and correct fitting of components, understanding and correct application of lubrication, identifying errors and carrying out required corrections. Prereq: HIN 221, 222 and 223. Coreq: HIN 231 and 233.

HIN 233 (10) N**Watch Technology VII: Practicum**

10-credit practicum. Apply knowledge from HIN 231 and 232. Practice repairing chronograph watches and continue working on precision timing. Further develop skills of identification and use of appropriate tools and equipment. Exercise appropriate safety precautions. Prereqs: HIN 221, 222 and 223. Coreqs: HIN 231 and 232.

HIN 241 (4) N**Watch Technology VIII: After-Sales Service**

Learn the range of skills necessary to manage a watch repair shop. Prereqs: HIN 231, 232 and 233. Coreqs: HIN 242 and 243.

HIN 242 (4) N**Watch Technology VIII: Review of Courses**

Review highlights of the two-year Watch Technology Program in preparation for final exams. Prereq: HIN 231, 232 and 233. Coreq: HIN 241 and 243.

HIN 243 (8) N**Watch Technology VIII: Practicum**

8-credit practicum. Apply knowledge from HIN 241 and 242. In lab, practice repairing all types of watches and review the theory of watchmaking. Prereqs: HIN 231, 232 and 233. Coreqs: HIN 241 and 242.

Web / Information Technology**WEB 105 (3) C****Working On A Web Project**

Overview of different web-related careers including web team job descriptions, functions, workflow, processes, and overall project management.

WEB 110 (5) C**Web Authoring I**

Covers the fundamental mechanics of web page production starting with the absolute basics of creating properly structured websites using the HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Students will learn how to write their own code to create web pages that include text, links, images, tables, and forms as well as how to launch their website on the Internet using the File Transfer Protocol (FTP). Prereq: BTM 111 with a 2.0 or higher, or appropriate score on SAM Challenge.

WEB 112 (4) C**Typography for the Web**

Introduces the elements of traditional typography and brand identity as applied to web design to communicate information effectively using overall typographic principal and scale. Co-requisite: concurrent enrollment in WEB 110, or instructor's permission.

WEB 114 (4) C**Graphics for the Web**

Basic to intermediate web production techniques using Adobe's Illustrator and Photoshop. Topics include digital imagery concepts, developing and editing pixel and vector based graphics for the web, integrating text and images, slicing web compositions and creating very basic animation. Prereq: WEB 110 with a 2.0 or higher; or, concurrent enrollment in WEB 110.

WEB 120 (5) C**Web Authoring II**

Explores how to write code to create modularly-built responsive websites that include a proper page layout, navigational structure, form validation and interactivity, and well-formatted and readable text to ensure accessibility across major browsers and devices. This course follows WEB110, building on a student's existing knowledge of creating websites using HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Prereq: WEB 110 with 2.0 or higher, or Instructor's permission.

WEB 130 (5) C**Web Authoring III**

Design and develop a web standards compliant and responsive website. Utilize HTML5, CSS3, JavaScript & jQuery (client side) scripting and Bootstrap. Introduces emerging web related technologies. Create a final project to include in student's portfolio. Utilize Agile methodology and Github workflow to participate in a group project. Prereq.: WEB 120 and WEB 150, each with a 2.0 or higher.

WEB 150 (5) C**Introduction to JavaScript**

Examines computer programming theory and basics with the use of JavaScript language. Uses a hands-on approach to building interactive websites with JavaScript and demonstrates how to simplify the web development process with the use of jQuery. Studies several popular web techniques. Prereq: WEB 110 with a grade of 2.0 or higher or permission.

WEB 160 (3) C**Writing for the Web**

Provides an overview and detailed look at the user-centered design techniques used to write successful human-readable and machine-readable search engine optimized copy for a website. PREREQ: WEB 110 with a 2.0 or higher, or instructor's permission.

WEB 170 (5) C**Content Management Systems with Wordpress**

Overview of the basic principles and practices of professional website design and development while focusing on content management and custom theme creation using WordPress (an open source technology). Prerequisite: WEB 120 with 2.0 or higher. Co-requisite: ITC 240.

WEB 200 (5) C**Theory of Web Design**

Examines the basic principles and practices of professional website design, including: discovery, site structure, page layout, navigation, color theory, typography, and best coding practices. Prereq: WEB 110 with 2.0 or higher, or Instructor's permission. Coreq: WEB 120.

WEB 202 (5) C**User Interface & Experience Design for the Web**

Provides an overview and detailed look at how the User Interface & User Experience gets fulfilled via the design, functionality, features, and content of a website project while successfully achieving strategic business goals and user needs. Prereq: WEB 120 and WEB 200, each with 2.0 or higher.

WEB 204 (5) C**Usability Research Methods for the Web**

Provides an overview of the different design and user research methods that are conducted throughout a web design or redesign process in order to improve designs and experiences for end users. Methods include: Competitive Analysis, Heuristic Evaluation, Card Sorting and Usability Testing. Prereq: WEB110 with a minimum grade of 2.0.

WEB 205 (2) C**Web Career Strategies**

Presents various tools and skills needed to transition into the web industry. Learn about web careers, presenting skills, finding appropriate positions and creating a portfolio. Prereq: WEB 120 with 2.0 or higher and ITC 200. Coreq: WEB 210 or permission.

WEB 210 (5) C**Advanced Web Design & Development Projects**

Provides both design and development students with the hands-on experience of designing and producing an effective web site for a live client while practicing a team workflow process. Prereq: WEB 170, and WEB 200, each with a 2.0 or higher.

Welding Fabrication Technology**WFT 100 (5) S****Welding Theory**

Exploration of the applications and criteria for selecting the most widely used welding and weld-related metal joining processes, including, GMAW, FCAW, SMAW, GTAW, submerged metal arc, oxyacetylene, brazing, soldering and cutting, plasma arc cutting and resistance welding. Covers types of welds and weld joints.

WFT 105 (5) S**Print Reading and Welding Symbols**

Learn to read and interpret industrial prints for both mechanical and structural welded fabrications. Includes interpreting various views and types of prints and welding symbols and their application. Prereqs: Placement into Engl 105 and Math 110 or instructor permission. Coreq: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

WFT 111 (5) S**Materials and Testing**

Covers theory and application of metallurgical principles applied to weld design and heat affected zone (HAZ), heat treating and distortion (pre-post), and heat effects on crystalline structure of Ferrous and non-ferrous metals. Includes methods of destructive and non-destructive testing. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreq: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

WFT 120 (6) S**Intro to Welding Oxyacetylene/Shielded Metal Arc**

Practice safe and efficient use of oxyacetylene flame for cutting and joining applications. Perform sound welds using the Shielded Metal Arc Welding (SMAW) process. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreqs: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

WFT 121 (6) S**SMAW Shielded Metal Arc Welding**

Learn advance configurations and position for welding with the Shielded Metal Arc Welding process including vertical and overhead. Prepare for the WABO certification testing procedure. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreqs: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

WFT 124 (6) S**Gas Metal Arc Welding**

Lab practice and competencies with equipment, multiple positions and applications of GMAW uses. Combines weld theory, operation of OXY-Acetylene and SMAW processes, using mild steel, low alloy steel, aluminum, and stainless steel. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreqs: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

WFT 125 (6) S**FCAW Flux Core Arc Welding**

Lab practice and competencies with equipment, multiple positions and applications of FCAW uses (Inner shield/Dual Shield). Combines weld theory, operation of OXY-Acetylene, and SMAW processes, using mild steel, low alloy and stainless steel. Prereq: Placement into Engl 105 and Math 110 or instructor permission. Coreqs: Any of the following: TDR 131, ENGL 101 or ENGL 105 with ICT 103, MAT 110, PSYC 240, WFT 115.

WFT 127 (6) S**Gas Tungsten Arc Welding**

Learn equipment, theory of operation and applications of the Gas Tungsten Arc Welding (GTAW) process, also called TIG and Heliarc, that is used in pressure piping systems, aerospace products and with heat-sensitive metals.

WFT 128 (6) S**Fabrication Carbon Arc / Plasma Arc Cutting**

Learn the practical transfer of blueprint information onto metal using a variety of techniques. Covers applications of geometric shape constructions and divisions in the shop environment. Demonstrate proficiencies with Carbon Arc Cutting, Plasma Arc Cutting, and manual OXY Fuel Cutting.

WFT 144 (6) S**Shipyard Intensive Welding**

Learn to adapt welding techniques to the marine industry. Apply Flux Core Arc Welding (FCAW), tack welding, joint fit-up, back-gouging and other skills in a shipyard work environment. Includes practice with welds in vertical and overhead positions for marine operations and accomplishing welds outdoors in all weather conditions and in areas not easily accessible. Prereq: WFT 125.

WFT 197 (3) S**Industry Internship**

Provides practical work experience and employment contacts by integrating academic studies with actual on-the-job training. Orientation to Internships required prior to registration. Prereq: Permission.

WFT 220 (8) S**Pipe Shielded Metal Arc (SMAW)**

Learn more advanced configurations and positions for welding with the E 7018, and E 6010 Shielded Metal Arc Welding process on pipe including vertical and overhead. Cut and bevel pipe with oxy fuel and hand tools. Prepare for the WABO pipe certification testing procedure.

WFT 227 (7) S**Advanced Fabrication I**

Covers knowledge of all shop equipment and theory of operation and applications of the SMAW, GMAW, FCAW, and GTAW processes through project-oriented exercises. Design and create pre-approved individual project.

WFT 228 (8) S**Pipe Gas Tungsten Arc Welding (GTAW)**

Learn more advanced configurations and position for welding with the Gas Tungsten Arc Welding (GTAW) on pipe including vertical and overhead. Cut and bevel pipe with oxy fuel and hand tools. Prepare for AWS pipe certification testing procedure.

WFT 238 (7) S**Advanced Fabrication II**

Improve skills in all major areas including design and development, estimating, layout, cutting (machine torch & plasma), forming, fit up, tack welding, and product assessment. Fabricate an approved individual design project.

WFT 241 (6) S**Wabo Test PREP SMAW Plate**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Shielded Metal Arc Welding (SMAW) process on steel plate. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) prereq: WFT 121.

WFT 242 (6) S**Wabo Test PREP GMAW Plate**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Gas Metal Arc Welding (GMAW) process on steel plate. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Weld Performance Qualification Reports (WPQR) prereq: WFT 124.

WFT 243 (6) S**Wabo Test PREP FCAW Plate**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Flux Core Arc Welding (FCAW) process on steel plate. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) prereq: WFT 125.

WFT 244 (6) S**Wabo Test PREP GTAW Plate**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Gas Tungsten Arc Welding (GTAW) process on steel plate. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) prereq: WFT 127.

WFT 245 (6) S**Wabo Test PREP SMAW Pipe**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Shielded Metal Arc Welding (SMAW) process on steel pipe. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) coreq: WFT 220.

WFT 246 (6) S**Wabo Test PREP GTAW Pipe**

Students practice welding technique in preparation for the Washington Association of Building Officials (WABO) welder certification test, using the Gas Tungsten Arc Welding (GTAW) process on steel pipe. Students will assemble and weld test coupons, then perform destructive testing on test specimens. Students will evaluate weld quality using WABO standards. Students will follow Weld Procedure Specifications (WPS) and complete Welder Performance Qualification Reports (WPQR) coreq: WFT 228.

WFT 297 (1-12) S**Special Topics in Welding Fabrication**

Special topics for an individual or group in welding fabrication field. Prereq: Permission.

Wine Technology

Students must be 18 to participate in wine-tasting and wine-making.

WIN 101 (3) S**Introduction to Enology**

An introduction to the science of winemaking, history and geographical distribution; grape varieties and wine types; influence of climate and soil; wine fermentation, handling, storage and bottling methods; wine disorders; winery sanitation; legal compliance. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

WIN 102 (3) S**Enology Laboratory Analysis**

Intro to vineyard and winery laboratory practices including basic chemistry principles, laboratory techniques and commonly used analysis methods for musts and wines. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 101, WIN 112, WIN 121, WIN 123, WIN 131, WIN 133, and permission of instructor. Corequisite: WIN 103 and WIN 107.

WIN 103 (4) S**Elements of Wine Production**

Introduction to the elementary production of wines including considerations that take place during the harvesting of grapes, transportation, stemming and crush. May include field trip if season permits. Orientated for the beginning student. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 101, WIN 112, WIN 121, WIN 123, WIN 131, WIN 133, and permission of instructor. Corequisite: WIN 102 and WIN 107.

WIN 104 (4) S**Elements of Wine Production II**

Intermediate course in winemaking that will emphasize the theories and practices of various fermentation process, theories of racking, topping, and preservation methods. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 102, WIN 103, WIN 107. Corequisite: WIN 108.

WIN 105 (4) S**Elements of Wine Production III**

Advanced course in winemaking. Emphasizes the final stages of wine production including the philosophy of usage and maintenance of barrels, elements of mixing wine varietals and the final stages of finishing wine production. Lab fee. Prereq: WIN 101, 102, 103, 104, 107. Coreq: WIN 109.

WIN 107 (1) S**Winery Production I**

Practical application of theories and principles being concurrently studied and discussed in WIN 103, Elements of Wine Production. This laboratory will involve hands-on practicum. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 101, WIN 112, WIN 121, WIN 123, WIN 131, WIN 133, and permission of instructor. Corequisite: WIN 102 and WIN 103.

WIN 108 (1) S**Winery Production II**

Practical application of theories and principles from WIN 104. Lab fee. Prereq: WIN 103, 107 or permission. Coreq: WIN 105.

WIN 109 (1) S**Winery Production III**

Advanced studies in winemaking. Practical application of the theories and principles of WIN 105. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 104 and WIN 108. Corequisite: WIN 105.

WIN 110 (3) S**Introduction to Wine Science**

An introduction to scientific aspects of wine composition and production for the student with a limited background in chemistry and microbiology. Prereq: WIN 101, 123, 133, MATH 098, CHEM 139.

WIN 112 (5) S**Wine Science**

An introduction to scientific aspects of wine composition and production for the student with a limited background in chemistry and microbiology. The course prepares students to understand scientific material presented in more advanced enology courses. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 101, 123, and 133; or instructor's permission.

WIN 121 (3) S**Introduction to Viticulture**

Introduction to the theory of grape growing including botany, anatomy, history, distribution, propagation, varieties, wine type, climate, production practices, and common diseases and pests. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

WIN 122 (3) S**Wine Chemistry and Microbiology**

Covers wine chemistry and microbiology including wine acidity, sulfur dioxide, protein and phenolic equilibria and other concerns. Learn to make informed decisions on style, crush options, cellar practices, fining, stabilization and quality assurance. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Recommended for Success: WIN 112 and WIN 121; or permission from instructor.

WIN 123 (3) S**Sensory Evaluation**

Intro to wine sensory evaluation methods including statistical analysis of trials, philosophy of wine styles and the common evaluation methods used in sensory testing. Lab fee. Prereq: WIN 101 and 121.

WIN 131 (3) S**Introduction to Washington Wines**

Intro to wines produced in Washington, including history, viticulture practices and winemaking styles. Includes sensory evaluation of representative Washington wines. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

WIN 132 (3) S**Wine History: Ancient Times to the Enlightenment**

A survey of wine and its role in history, religion, art, culture and society from pre-history to the Age of Enlightenment. Includes sensory evaluation of representative wines. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

WIN 133 (5) S**Introduction to Wines of the World**

Introduction to the world's wine-producing regions, including history, viticulture practices and winemaking styles. The seated class includes sensory evaluation of representative wines. Materials fees will be assessed. The online class encourages tasting groups and provides a guide for creating one. Students must be 18 years of age to participate in wine tasting.

WIN 134 (3) S**Wine History: the New World and Modern Times**

A survey of wine and its role in history, religion, art, culture and society in the global era; including the discovery and development of the wine industry in the New World, as well as contemporary European history from the 18th Century to contemporary times. Includes sensory evaluation of representative wines. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

WIN 141 (3) S**Wine Marketing and Sales**

Introduction to wine marketing and sales methods, basic approaches to packaging, advertising, promotion, retail and wholesale selling of wine. A materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

WIN 142 (3) S**Wine Business -Winery Operations**

Overview of winery operations with emphasis on inventory, pricing, forecasting, sales methods, allocating and distribution of wine from the manufacturer. The course covers compliance for Washington State. Includes equipment, insurance, bonding, production, general management, and space needs of a winery. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

WIN 143 (3) S**Wine Business-Distribution Network and Suppliers**

Further examination of Sales and Distribution. Reviews the roles of brokers and distributors. Topics will include the costs of distribution including margins, mark ups, freight and taxes. Covers decisions related to import and export of wine. Regulatory agencies and legal requirements. Students must be 18 years of age to participate in wine tasting. Recommended that WIN 141 and 142 be taken in advance of this class.

WIN 145 (3) S
Wine Business - Entrepreneurship and Innovation

Systematic look at components of successful wine-related businesses with emphasis on the decisions faced by entrepreneurs. Concepts of financial management, profitability, break-even analysis, capital budgeting, and cash flow analysis. Students will be exposed to key aspects of the business including creating a business plan, regulatory climate for making and selling wine, and brand promotion. Recommended that WIN 141 and WIN 142 be taken prior to WIN 145 but not required for registration.

WIN 151 (3) S
Introduction to Food and Wine Pairing

Learn the basic elements of the character and key components of wines. Includes the four primary taste sensations present in everyday food (salty, sweet, bitter and savory) and how these affect the taste of wine. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 101.

WIN 152 (3) S
Advanced Food and Wine Pairing

This course will evaluate, discuss and investigate classical and new cuisines and how they can be paired with wines throughout the world. Food preparation demonstrations and various methods of preparation will be covered as it relates to wines. The course will focus on classic cuisines, new cuisines and regional preparations and wines paired with them. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151.

WIN 153 (4) S
Food and Wine Pairing - Varietals I

Focuses on Cabernet Sauvignon, Merlot, Pinot Noir, Chardonnay and Sauvignon Blanc. Prereq: WIN 101, 151, 152 (or concurrent enrollment) or permission.

WIN 154 (4) S
Food and Wine Pairing - Varietals II

Focuses on Zinfandel, Rhone style Syrah, Viognier, Pinot Grigio and others. Prereq: WIN 101, 151, 152 (or concurrent enrollment) or permission.

WIN 155 (4) S
Food and Wine Pairing - Varietals III

Focuses on Italian reds and whites, Rieslings and/or other specific varietals. Prereq: WIN 153 or 154 or permission.

WIN 157 (2) S
Food and Wine Pairing - Desserts

Focuses on dessert wines: sweet wines, sparkling wines, red varietals and others. Prereq: WIN 153 or 154 or permission.

WIN 160 (3) S
Sommelier Service and Beverage Management

This class will focus on product knowledge, professional standards in service, and management of alcoholic beverages in retail and foodservice industry. The student will gain practical knowledge of table service, regulations, and compliance, conducting tastings, cellar management, and pricing, cost controls, and development of wine lists. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 133 or concurrent enrollment or instructor permission.

WIN 170 (3) S
Introduction to Beer with Food Pairing

An introduction to beer sensory evaluation, service and food pairing methods. The course will cover beer history including Purity Laws, the brewing process, ingredients, beer styles, brewery operation and quality control, beer categories and styles. The student will study the business of beer including the purchasing, storage and handling of beer, beer manufacture and distribution. Materials fee will be assessed. Students must be 18 years of age to participate in tasting.

WIN 197 (1-5) S
Internship in Wine Technology

Students apply academic learning and skills in wine making, marketing, distribution, and industries related to their field study. Course credit can be earned through current employment or the development of opportunity or leads found in conjunction with the Work-Source Office. Student must complete hours and submit a Training Agreement, Learning Outcomes, and a Self-Evaluation in order to pass. Prerequisite: approval from a Faculty Mentor (Instructor) and Embedded Career Specialist.

WIN 224 (3) S
Advanced Sensory Evaluation

A continuation of WIN 123, Sensory Evaluation, with more focus on blind tastings, anatomy of the human sensory preceptors, and a strong focus on classical style comparisons. Group work, group tastings, varietal expressions, and production methods which bring about aromas and characteristic will be explored. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 101 and WIN 123.

WIN 233 (3) S
Advanced Wines of the World France

In depth study of France's wine producing regions including grape varieties, origin of cultivars, geological exploration, vine cultivation and viticulture, history of the regions winemaking, food specific to each region, and regulations for wine categories. Sensory evaluation of representative wines assessed in class. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 133.

WIN 234 (3) S
Adv.Wines of the World:Europe

In depth study of Italy, Germany and Austria wine producing regions including grape varieties, origin of cultivars, geological exploration, vine cultivation and viticulture, history of the regions winemaking, regional foods, and regulations for wine categories. Sensory evaluation of representative wines assessed in each class. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 133.

WIN 235 (3) S
Advanced Wines of the World: New World

In depth exploration of the New World wine producing regions, including identifying key differences in production, taste, cost, and other factors making each wine region unique. Explore the influence of the increasingly important role of varieties since the 20th century. Sensory evaluation of representative wines assessed in each class. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 133.

WIN 253 (3) S
Advanced Food and Wine Pairing: Old World

Advanced course designed to provide an appreciation of the history and culture of food and wine traditions with a focus on Old World Wine ? including France, Italy, Greece, Turkey, Austria and Germany. Focus on major grape varietals, appellations, laws, geography, climate and soils that define the terroir of each grape growing region. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151 or concurrent enrollment.

WIN 254 (3) S
Advanced Food and Wine Pairing: New World

Appreciation of the history and culture of food and wine traditions with a focus on New World Wine ? including Spain, Argentina, Chile, Australia, New Zealand, South Africa and the United States. Focus on the major grape varieties, appellations, and terroir of each grape growing region. Course will explore the gastronomic identity of each region. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151 or concurrent enrollment.

WIN 257 (3) S
Advanced Food and Wine Pairing Dessert

A focused study of the cohesive pairing in bringing desserts and wine together. Course covers the various styles and production of sweet, fortified and dessert wine and the history and development of desserts, pastry and confection. Included in this class will be the production and plating, pairing and presentation of wine and desserts as partners. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151 or concurrent enrollment.

WIN 258 (3) S
Advanced Food and Wine Pairing Cheese

Introduces the philosophies and techniques involved in bringing cheese and wine together in a cohesive pairing. Focus on the eight styles of cheese, cheese production, storage and selection. Material fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisite: WIN 151 or concurrent enrollment or instructor permission.

WIN 299 (1-5) S
Wine Special Topics
 Special Topics.

Women's Studies

See Gender & Women's Studies, page 263.

Wood Construction

WCO 110 (18) C
Introduction to Professional Woodworking

Intro to wood construction skills and safety, including safe operation of basic hand and power tools, wood construction terminology and materials.

WCO 130 (18) C
Marine Carpentry

Covers employable skills in the boatbuilding trade. Includes instruction in fiberglass, wood construction and repair. Prereq: WCO 110. Q-1: Lofting, layout, patterns, design, basic joinery, bevels, bandsaws & safety. Q-2: Fiberglass lay-up & repair, personal & safe shop practices with Fiberglass. Q-3: Fiberglass fitting-out & repair, spray gun, machine safety & maintenance. Q-4: Wood boat construction, estimating, bidding, safety of equipment & compounds. Q-5: Wood boat construction, fitting-out, materials, interior & exterior joinery

WCO 141 (18) C
Residential Remodel and Preservation Carpentry

Covers specific techniques in residential remodeling including bathrooms and kitchens, stairs, scaffolding design and construction, sheetrock demolition, installation and repair and siding application. Prereq: WCO 110.

WCO 142 (4) C
Introduction to Carpentry and Blueprint Reading

Intro to becoming a professional carpenter. Focuses on career pathways, craftsmanship, vocabulary, blueprint reading, and jobsite and tool safety. Covers materials, products, tools and best practices for constructing sustainable residential and light commercial construction. Emphasizes developing a strong work ethic, communication skills and collaboration strategies. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WCO 143 (5) C
Building Site System Site Selection to Layout

Develops skills in site selection, building layout, surveying, and moisture management. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WCO 144 (9) C
Foundation System Forms to Concrete Finishes

Develops skills in building foundations including form construction, concrete and cement placement, reinforcement and finishing. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WCO 145 (9) C
Framing Systems Floor to Ceiling

Develops skills in structural framing systems including building physics, framing layout, alternative and traditional framing techniques and energy efficiency strategies. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and 120.

WCO 146 (5) C
Roof System Framing to Roofing Installation

Develops skills in roof systems including framing styles, roofing techniques, flashing, ventilation, roofing materials, and installation strategies and techniques. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WCO 147 (4) C
Stair System Rough Framing to Finished Stairwell

Develops skills in stair systems, including interior and exterior framing styles, layout techniques, and design strategies and techniques. Covers appropriate selection of materials, products, tools and best practices for constructing durable stairways in residential and light commercial buildings. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WCO 148 (9) C
Exterior Finishes Building Enclosure Finish Trim

Develops skills in building exterior systems including building enclosure design, siding installation techniques, installing insulation, window types and installation, flashing techniques and strategies, and trim design and installation techniques. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WCO 149 (9) C
Interior Finishes Door Installation to Trim

Develops skills in building interior systems including drywall installation and finishing, door and trim installation, finish carpentry techniques and strategies. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WCO 151 (18) C**Intro to Cabinetmaking Fundamentals**

Learn to work safely and efficiently with hand, portable, and stationary tools to produce jigs and fixtures to increase productivity. Covers basic principles of joining and assembling, blueprint reading, layout procedures, developing a cut list, milling procedures, and fabrication techniques to successfully produce required projects. Use working drawings, layout on a story stick or on a CAD program to construct a router table.

WCO 153 (18) C**Basic Cabinetmaking Fundamentals**

Build a series of jigs and fixtures to produce basic traditional joinery. Use working drawings to produce a frameless cabinet based on the 32mm system of cabinet construction, and a face frame cabinet for personal hand tool storage. Includes workplace standards for self-confidence, interpersonal communication and safe use of equipment and tools, and individual skills development

WCO 155 (18) C**Adv Cabinetmaking Architectural Woodworking Fund**

Design, layout and construct three pieces of furniture using advanced joinery techniques, applications of veneers, and previously learned construction techniques. Emphasizes mortise and tenon joinery, tapered legs and application of basic veneering techniques. Within certain criteria, choose own dimensions, materials and detailing.

WCO 157 (18) C**Independent Capstone Project**

Propose a culminating project of interior furnishings (casework, furniture, and millwork) of a custom or limited production fabrication. Devise a coherent engineering approach to the concept and manage all project tasks. Emphasizes individual time management, problem solving, creativity, and professional growth. Expand fabrication skills. All projects must be faculty approved.

WCO 197 (1-15) C**Work Experience-Wood Construction**

Earn work experience credit in the wood construction field. Prereq: Permission.

WCO 203 (3) C**Introduction to Vectorworks**

Introduction to drafting and design using the cross-platform program Vectorworks. Offered at the Wood Technology Center. Prereq: BTM 098 or permission.

WCO 299 (1-18) C**Special Projects Boatbuilding**

Special Projects in Boatbuilding

Wood Technology Center**WTC 110 (18) C****Introduction to Professional Woodworking**

Intro to wood construction skills and safety, including safe operation of basic hand and power tools, wood construction terminology and materials.

WTC 131 (14) C**Introduction to Composite Boatbuilding**

Introduces fiberglass boatbuilding as well as wood joinery. Students work in teams to lay up, by hand, a complete fiberglass hull and then trim it with wood. Industry standards in safety and production will be modeled. Prereq: WCO 110 with a minimum GPA of 2.0.

WTC 132 (4) C**Introduction to Marine Electrical Systems**

Introduces basic AC and DC electrical systems as found on recreational and small commercial vessels. Safe installation and troubleshooting of engine starting and charging systems, DC house systems for lights, pumps, navigational gear and shore power AC systems. Prereq: WCO 110 with minimum GPA 2.0.

WTC 133 (10) C**Wooden Boat Joinery and Repair**

Construction and repair of both contemporary and traditional wooden boats. Topics include: tools, wood types, adhesives, pattern making and interior joinery on wood and composite vessels. Personal and shop safety are emphasized. Prereq: MRT 101 and MRT 102 with a minimum GPA 2.0 for each course.

WTC 134 (8) C**Introduction to Marine Mechanical Systems**

Introduces basic gas and diesel engine operating principles, service, maintenance and troubleshooting. Course also covers marine sanitation systems, various marine pumps and plumbing. Prereq: MRT 101 and MRT 102 with minimum GPA 2.0 for each course.

WTC 135 (14) C**Advanced Composites**

Complex fiberglass boatbuilding and repair problems, including repair of damaged fiberglass structures, plug and mold building, and advanced composites, including resin infusion. Direct hands-on experience in safe and productive use of machinery and supplies is emphasized. Prereq: MRT 103 and MRT 104 with a minimum 2.0 GPA for each course.

WTC 136 (4) C**Marine Electrical II**

Advanced vessel electrical systems, sizing of battery banks, AC battery charging systems, inverter systems, engine operation gauge systems, gen-sets and galvanic corrosion. Preparation for ABYC Marine Electrical Certification exam. Prereq: MRT 103 and MRT 104 with minimum 2.0 GPA for each course.

WTC 137 (1-10) C**Internship****WTC 138 (1-18) C****Advanced Wooden Boat Joinery and Repair**

Provides the opportunity to build one's own boat or undertake a more comprehensive boat restoration project. Emphasis is on performance in a professional manner in safety and project execution. Course is optional. Prereq: MRT 105 and MRT 106 with minimum GPA of 2.0 for each course.

WTC 141 (18) C**Residential Remodel and Preservation Carpentry**

Covers specific techniques in residential remodeling including bathrooms and kitchens, stairs, scaffolding design and construction, sheetrock demolition, installation and repair and siding application. Prereq: WCO 110.

WTC 142 (4) C**Introduction to Carpentry and Blueprint Reading**

Intro to becoming a professional carpenter. Focuses on career pathways, craftsmanship, vocabulary, blueprint reading, and jobsite and tool safety. Covers materials, products, tools and best practices for constructing sustainable residential and light commercial construction. Emphasizes developing a strong work ethic, communication skills and collaboration strategies. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WTC 143 (5) C**Building Site System Site Selection to Layout**

Develops skills in site selection, building layout, surveying, and moisture management. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WTC 144 (9) C**Foundation System Forms to Concrete Finishes**

Develops skills in building foundations including form construction, concrete and cement placement, reinforcement and finishing. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WTC 145 (9) C**Framing Systems Floor to Ceiling**

Develops skills in structural framing systems including building physics, framing layout, alternative and traditional framing techniques and energy efficiency strategies. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and 120.

WTC 146 (5) C**Roof System Framing to Roofing Installation**

Develops skills in roof systems including framing styles, roofing techniques, flashing, ventilation, roofing materials, and installation strategies and techniques. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WTC 147 (4) C**Stair System Rough Framing to Finished Stairwell**

Develops skills in stair systems, including interior and exterior framing styles, layout techniques, and design strategies and techniques. Covers appropriate selection of materials, products, tools and best practices for constructing durable stairways in residential and light commercial buildings. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WTC 148 (9) C**Exterior Finishes Building Enclosure Finish Trim**

Develops skills in building exterior systems including building enclosure design, siding installation techniques, installing insulation, window types and installation, flashing techniques and strategies, and trim design and installation techniques. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WTC 149 (9) C**Interior Finishes Door Installation to Trim**

Develops skills in building interior systems including drywall installation and finishing, door and trim installation, finish carpentry techniques and strategies. Covers appropriate selection of materials, products, tools and best practices for sustainable residential and light commercial construction. Prereq: WCO 110 and proof of First Aid/CPR/AED training.

WTC 151 (18) C**Intro to Cabinetmaking Fundamentals**

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Build a series of jigs and fixtures to produce basic traditional joinery. Use working drawings to produce a frameless cabinet based on the 32mm system of cabinet construction, and a face frame cabinet for personal hand tool storage. Includes workplace standards for self-confidence, interpersonal communication and safe use of equipment and tools, and individual skills development.

WTC 155 (18) C**Adv Cabinetmaking Architectural Woodworking Fund**

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WTC 157 (18) C**Independent Capstone Project**

Propose a culminating project of interior furnishings (casework, furniture, and millwork) of a custom or limited production fabrication. Devise a coherent engineering approach to the concept and manage all project tasks. Emphasizes individual time management, problem solving, creativity, and professional growth. Expand fabrication skills. All projects must be faculty approved.

WTC 161 (6) C**Construction Job Readins**

Prepare for entry-level employment as a beginning apprentice in a building/construction trade. Focuses on job hunting materials and skills, entry requirements for various trades, and knowledge of the union apprenticeship system.

WTC 163 (4) C**Blueprint Reading**

Learn basic blueprint terms and symbols and follow the plan in a construction application. Focuses on job hunting materials and skills,

WTC 164 (0.5) C**Industrial 1st Aid/CPR**

Covers cardiopulmonary resuscitation (CPR) and basic industrial first aid as it applies to the building and construction trades. Learn to apply correct life saving techniques, assess and treat the sick and injured.

WTC 165 (0.5) C**Road Flagging**

Prepare for road flagging certification. Learn to establish and maintain a safe traffic flow in a construction zone, understand hazardous and safe behaviors in flagger situations, and review material to successfully pass the Washington State 3-year flagger certification examination. Continuing Education class.

WTC 167 (3) C**Const Trades Training I**

Survey of skills and responsibilities of 12 building/construction trades. Visit the training centers of several trades: carpentry, laborer, electrician, plumber, drywall installer, brick layer, painter, cement mason, sheet metal worker, and ironworker.

WTC 172 (1) C**Forklift Operation & Crt**

Covers functions and parts of a forklift, OSHA forklift regulations, safety habits, and proper picking, placing, and moving of a variety of loads through a work site. Take the test to become an OSHA certified forklift operator, a federal requirement in industry.

WTC 174 (2) C**Tools/Material Id/Handl**

Intro to construction-related tools and building materials. Learn proper use of tools and materials: lumber, brick, blocks, scaffolds, wheelbarrows, and shovels. Emphasizes occupational safety.

WTC 177 (2) C**Fitness and Nutrition I**

Develop competency in personal dietary management and physical fitness through regular stretching and aerobic exercise to assure a more injury free and healthier career in construction.

WTC 179 (1) C**OSHA 10 Safety**

Occupational Safety and Health Administration regulates construction safety, and certifies workers on safety practices. OSHA 10 (first level) provides 10 hours of safety training: intro to OSHA, personal protective equipment, stairways and ladders, electrical, fall protection, confined space, scaffolds, cranes, excavations, and materials handling.

WTC 203 (3) C**Introduction to Vectorworks**

Introduction to drafting and design using the cross-platform program Vectorworks. Offered at the Wood Technology Center. Prereq: BTM 098 or permission.

YouthBuild**YBLD 100 (9) S****Introduction to Construction Trades**

This course is designed to introduce students to the skills and responsibilities of the building and construction trades. The purpose of this course is to train students to identify and utilize various construction related tools and building materials. Students receive training on the proper use of tools and materials including lumber, brick, blocks, scaffolds, wheelbarrows, shovels, hammers, drills and other building related materials.

YBLD 102 (9) S**Intro to Construction Trades - Advanced**

This course is designed to continue education in the skills and responsibilities of the building and construction trades. The purpose of this course is to train students to identify and utilize various construction related materials. Students receive training on various components to residential construction.

YBLD 103 (6) S**Professional Leadership Skills for the Trades**

This course is designed to teach students essential leadership skills required to work in the trades. Through individual and small group work, students learn to identify and utilize their leadership skills.

YBLD 104 (1) S**Scaffold & Ladder Certification**

Covers basic knowledge, information and awareness for individuals to properly use a scaffold(s) and ladder(s) within the State of Washington and perform scaffold and ladder techniques safely.