

# 2023-2025 CATALOG



**SEATTLE COLLEGES**  
*North • Central • South*

# Combined Campus Course Descriptions

SEATTLECOLLEGES

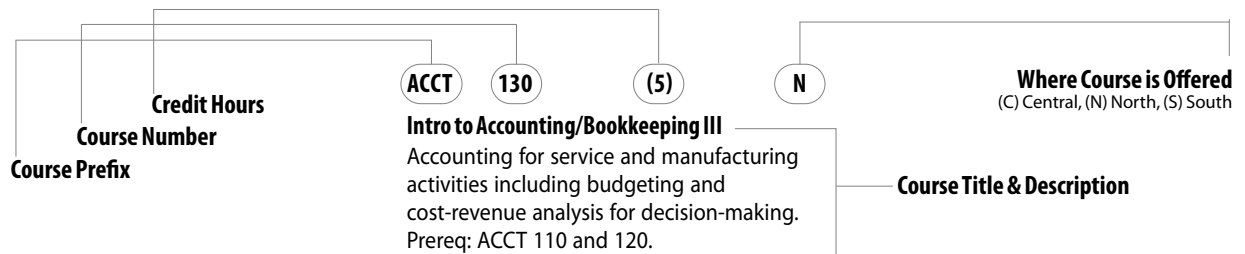
226

Course Descriptions



Brief descriptions of courses offered at the Seattle Colleges are listed here. Guides 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 [seattlecolleges.edu](http://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.

# Course/Prefix Index

## Prefix to Course

*NOTE: Prefixes are revised to fit the statewide Common Course Numbering (CCN) system implemented in Summer 2008.*

<b>ABE</b>	<b>Adult Basic Education</b>
<b>ABS</b>	<b>Applied Behavioral Science B.A.S.</b>
<b>ACCT</b>	<b>Accounting</b>
<b>AD</b>	<b>Application Development B.A.S.</b>
<b>AHE</b>	<b>Allied Health/Dental Hygiene</b>
<b>AIA</b>	<b>Accounting Information Systems</b>
<b>AMA</b>	<b>Medical Assisting</b>
<b>AME</b>	<b>American Ethnic Studies</b>
<b>AMT</b>	<b>Aviation Maintenance Technology</b>
<b>ANTH</b>	<b>Anthropology</b>
<b>APPRL</b>	<b>Apparel Design &amp; Development</b>
<b>ARAB</b>	<b>Arabic</b>
<b>ART</b>	<b>Art</b>
<b>ASL</b>	<b>American Sign Language</b>
<b>ASTR</b>	<b>Astronomy</b>
<b>AUT</b>	<b>Automotive Technology</b>
<hr/>	
<b>BAK</b>	<b>Specialty Desserts &amp; Breads</b>
<b>BIOL</b>	<b>Biology</b>
<b>BOT</b>	<b>Botany</b>
<b>BTM</b>	<b>Business Technology Management</b>
<b>BTS</b>	<b>Basic &amp; Transitional Studies</b>
<b>BUS</b>	<b>Business</b>
<hr/>	
<b>CCE</b>	<b>Early Childhood Education</b>
<b>CDS</b>	<b>Chemical Dependency – see Social &amp; Human Services</b>
<b>CHEM</b>	<b>Chemistry</b>
<b>CHIN</b>	<b>Chinese</b>
<b>CIS</b>	<b>Computer Information Systems</b>
<b>CMA</b>	<b>Certified Medical Assistant</b>
<b>CMS</b>	<b>Community Service</b>
<b>CMST</b>	<b>Communication</b>
<b>CSC</b>	<b>Computer Science</b>
<b>CUL</b>	<b>Culinary Arts</b>
<b>CWE</b>	<b>Cooperative Education/Work Experience</b>
<hr/>	
<b>DAST</b>	<b>Dental Assisting</b>
<b>DES</b>	<b>Graphic Design</b>
<b>DHY</b>	<b>Dental Hygiene B.A.S.</b>
<b>DRMA</b>	<b>Drama</b>
<hr/>	
<b>ECE</b>	<b>Early Childhood &amp; Family Studies B.A.S.</b>
<b>ECED</b>	<b>Early Childhood Education</b>
<b>EDUC</b>	<b>Education</b>
<b>EET</b>	<b>Electronics Technology</b>

<b>EFDA</b>	<b>Expanded Function Dental Auxiliary</b>
<b>ENGL</b>	<b>English</b>
<b>ENGR</b>	<b>Engineering</b>
<b>ENV</b>	<b>Environmental Sciences</b>
<b>ENVS</b>	<b>Environmental Sciences</b>
<b>ESL</b>	<b>English as a Second Language</b>
<hr/>	
<b>FAM</b>	<b>Parent Education/ Senior Adult Education</b>
<b>FIRE</b>	<b>Fire Science</b>
<b>FSD</b>	<b>Restaurant Production – see Culinary Arts</b>
<hr/>	
<b>GED</b>	<b>General Education Development</b>
<b>GEOG</b>	<b>Geography</b>
<b>GEOL</b>	<b>Geology</b>
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<b>HDC</b>	<b>Human Development</b>
<b>HDM</b>	<b>Diesel &amp; Heavy Equipment Technology</b>
<b>HEA</b>	<b>Health</b>
<b>HIN</b>	<b>Watch Technology</b>
<b>HIST</b>	<b>History</b>
<b>HMG</b>	<b>Hospitality Management B.A.S.</b>
<b>HOS</b>	<b>Hospitality</b>
<b>HSC</b>	<b>High School Completion – Adult Basic Education</b>
<b>HSM</b>	<b>Healthcare Services Management B.A.S.</b>
<b>HUM</b>	<b>Humanities</b>
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<b>IBN</b>	<b>International Business B.A.S.</b>
<b>IFS</b>	<b>Industrial First Aid</b>
<b>INFO</b>	<b>Library Research</b>
<b>INTS</b>	<b>Integrated Studies</b>
<b>ISC, ISD, ISP</b>	<b>International &amp; Intercultural Studies</b>
<b>IT</b>	<b>Information Technology</b>
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<b>LAN</b>	<b>Linguistics</b>
<b>LCS</b>	<b>Learning Center Seattle</b>
<b>LHO</b>	<b>Landscape Horticulture</b>
<b>LIT</b>	<b>Literature</b>
<b>LST</b>	<b>Life Skills to Work</b>
<hr/>	
<b>MATH</b>	<b>Mathematics</b>
<b>MEY</b>	<b>Meteorology</b>
<b>MGO</b>	<b>Marine Technology</b>
<b>MOET</b>	<b>Multi-Occupation in Engineering and Technology</b>
<b>MTS</b>	<b>Marine Technology</b>
<b>MUSC</b>	<b>Music</b>

<b>NME</b>	<b>New Media</b>
<b>NTI</b>	<b>Network Infrastructure</b>
<b>NUR</b>	<b>Nursing</b>
<b>NURS</b>	<b>Nursing</b>
<b>NUTR</b>	<b>Nutrition</b>
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<b>OCEA</b>	<b>Oceanography</b>
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<b>PEC</b>	<b>Physical Education</b>
<b>PHA</b>	<b>Pharmacy Technician</b>
<b>PHIL</b>	<b>Philosophy</b>
<b>PHYS</b>	<b>Physics</b>
<b>POLS</b>	<b>Political Science</b>
<b>PSYC</b>	<b>Psychology</b>
<b>PTE</b>	<b>Professional Technical Teacher Education B.A.S.</b>
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<b>RCP</b>	<b>Respiratory Care Bachelor of Applied Science</b>
<b>RCPM</b>	<b>Residential/Commercial Property Management Bachelor of Applied Science</b>
<b>RES</b>	<b>Real Estate</b>
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<b>SBST</b>	<b>Sustainable Building Science Technology B.A.S.</b>
<b>SCI</b>	<b>Science</b>
<b>SHS</b>	<b>Social &amp; Human Services</b>
<b>SLN</b>	<b>Service Learning</b>
<b>SMG</b>	<b>Supervision &amp; Management</b>
<b>SOC</b>	<b>Sociology</b>
<b>SPAN</b>	<b>Spanish</b>
<b>SSC</b>	<b>Social Sciences</b>
<b>STEM</b>	<b>Science, Technology, Engineering &amp; Math</b>
<b>SURG</b>	<b>Surgical Technology</b>
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<b>TDR</b>	<b>Drafting: Architectural Engineering Drafting &amp; Engineering Graphics &amp; Design Technology</b>
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<b>UGR</b>	<b>Undergraduate Research</b>
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<b>VME</b>	<b>Visual Media</b>
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<b>WCO</b>	<b>Wood Construction</b>
<b>WFT</b>	<b>Welding Fabrication Technology</b>
<b>WIN</b>	<b>Wine Industry Training</b>
<b>WMN</b>	<b>Gender &amp; Women's Studies</b>
<b>WTC</b>	<b>Wood Technology Center</b>

## Course to Prefix

Accounting	ACCT
Accounting Information Systems	AIA
Adult Basic Education	ABE
Allied Health/Dental Hygiene	AHE
American Ethnic Studies	AME
American Sign Language	ASL
Anthropology	ANTH
Apparel Design & Development	APPRL
Application Development B.A.S.	AD
Applied Behavioral Science B.A.S.	ABS
Arabic	ARAB
Art	ART
Astronomy	ASTR
Automotive Technology	AUT
Aviation Maintenance Technology	AMT
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Basic & Transitional Studies	BTS
Biology	BIOL
Botany	BOT
Business	BUS
Business Technology Management	BTM
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Certified Medical Assistant	CMA
Chemical Dependency – see Social & Human Services	CDS
Chemistry	CHEM
Chinese	CHIN
Communication	CMST
Community Service	CMS
Computer Information Systems	CIS
Computer Science	CSC
Cooperative Education/Work Experience	CWE
Culinary Arts	CUL
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Dental Assisting	DAST
Dental Hygiene B.A.S.	DHY
Diesel & Heavy Equipment Technology	HDM
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Drafting: Architectural Engineering Drafting & Engineering Graphics & Design Technology	TDR
Drama	DRMA
<hr/>	
Early Childhood & Family Studies B.A.S.	ECE
Early Childhood Education	CCE, ECED
Education	EDUC
Electronics Technology	EET
Engineering	ENGR
English	ENGL

English as a Second Language	ESL
Environmental Sciences	ENV, ENVS
Expanded Function Dental Auxiliary	EFDA
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Fire Science	FIRE
<hr/>	
Gender & Women's Studies	WMN
General Education Development	GED
Geography	GEOG
Geology	GEOL
Graphic Design	DES
<hr/>	
Health	HEA
Healthcare Services Management B.A.S.	HSM
High School Completion – Adult Basic Education	HSC
History	HIST
Hospitality	HOS
Hospitality Management B.A.S.	HMG
Human Development	HDC
Humanities	HUM
<hr/>	
Industrial First Aid	IFS
Information Technology	IT
Integrated Studies	INTS
International & Intercultural Studies	ISC, ISD, ISP
International Business B.A.S.	IBN
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Landscape Horticulture	LHO
Learning Center Seattle	LCS
Library Research	INFO
Life Skills to Work	LST
Linguistics	LAN
Literature	LIT
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Marine Technology	MGO, MTS
Mathematics	MATH
Medical Assisting	AMA
Meteorology	MEY
Multi-Occupation in Engineering and Technology	MOET
Music	MUSC
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Network Infrastructure	NTI
New Media	NME
Nursing	NUR, NURS
Nutrition	NUTR

Oceanography	OCEA
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Parent Education/Senior Adult Education	FAM
Pharmacy Technician	PHA
Philosophy	PHIL
Physical Education	PEC
Physics	PHYS
Political Science	POLS
Professional Technical Teacher Education B.A.S.	PTE
Psychology	PSYC
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Real Estate	RES
Residential/Commercial Property Management Bachelor of Applied Science	RCPM
Respiratory Care Bachelor of Applied Science	RCP
Restaurant Production – see Culinary Arts	FSD
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Science	SCI
Science, Technology, Engineering & Math	STEM
Service Learning	SLN
Social & Human Services	SHS
Social Sciences	SSC
Sociology	SOC
Spanish	SPAN
Specialty Desserts & Breads	BAK
Supervision & Management	SMG
Surgical Technology	SURG
Sustainable Building Science Technology B.A.S.	SBST
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Undergraduate Research	UGR
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Visual Media	VME
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Watch Technology	HIN
Welding Fabrication Technology	WFT
Wine Industry Training	WIN
Women's Studies	WMN
Wood Construction	WCO
Wood Technology Center	WTC

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**Accounting****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.

**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.

**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.

**ACCT 110 (5) N  
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  
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 Online 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. Course culminates with a certification exam through Intuit to become an Intuit QuickBooks Certified User. Prereq: ACCT& 201 or ACCT 110 or instructor permission.

**ACCT 252 (5) N  
Intermediate Accounting II**

Intermediate Accounting II is the second of two intermediate financial accounting courses which provide a comprehensive study of financial accounting theory and financial accounting reporting. The course will concentrate on the foundations of financial accounting and include an in-depth study of generally accepted accounting principles and concepts. PLEASE NOTE: This class is typically offered TWO times per year: Summer and Winter quarters (typical class offerings may change depending on student enrollment and other factors). Prereq: ACCT 202 or ACCT 251 or instructor permission.

**ACCT 255 (5) N  
Individual Income Tax**

Introduction 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. PLEASE NOTE: This class is typically offered every quarter (typical class offerings may change depending on student enrollment and other factors).

**ACCT 256 (5) N  
Taxation of Corporations and Partnerships**

This course provides a comprehensive study of the taxation of corporations and partnerships. Basic tax research and the theory of taxation are also developed.. Prereq: ACCT& 202 and ACCT 255 or instructor permission.

**ACCT 257 (5) N  
Payroll Accounting**

Basic principles, practices, and governmental regulations (Federal, Washington State and local) involved in business tax accounting. Includes filing returns, record-keeping, tax planning, and business registrations and licenses. Prereq: ACCT 110 or ACCT&201

**ACCT 261 (5) N  
Accounting Information Systems**

This course examines accounting information systems as part of enterprise resource planning systems. It 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, systems design, and systems implementation, internal controls, fundamental database concepts, and flow-charting. Prereq: ACCT 110 or ACCT&201 or instructor permission.

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

This course is an overview of accounting for not-for-profit and government entities. It covers basic accounting principles and procedures relating to not-for-profit and government organizations. It includes financial statement preparation and analysis. PLEASE NOTE: This class is typically offered TWO times per year: Summer and Winter quarters (typical class offerings may change depending on student enrollment and other factors). Prereq: ACCT&201 and ACCT&202 or permission.

**ACCT 267 (5) N  
Not for Profit Financial Management**

This course provides the fundamentals of financial management for those pursuing careers within the public, health, and not-for-profit fields. Students will learn the vocabulary, concepts, methods, and basic tools of financial management and financial analysis within the three major areas of the public sector. PLEASE NOTE: This class is typically offered THREE times per year: Fall, Winter and Spring quarters (typical class offerings may change depending on student enrollment and other factors).

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

Theory of cost accounting, cost systems, sources of cost data and their accumulation, allocation, and analysis; managerial control through cost data. PLEASE NOTE: This class is typically offered TWO times per year: Summer and Winter quarters (typical class offerings may change depending on student enrollment and other factors). Prereq: ACCT& 203 or permission.

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

An introduction to the field of fraud examination. Provides an overview of the general fraud examination methodology and fraud theory approach and outlines the basics surrounding fraud examination including criminology related to fraud. Prereq: prior accounting course or instructor 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: prior accounting course or instructor 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: prior accounting course or instructor permission.

**ACCT 275 (5) N****Auditing**

This course is an introduction to auditing, covers such topics as generally accepted auditing standards (GAAS), the auditor's opinion, professional ethics, audit evidence, internal control, an audit procedures. Prereq: ACCT 252 or permission.

**ACCT 299 (1-5) N****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.

**Accounting with International Accounting****AIA 301 (5) N****Intermediate Accounting I**

Intermediate Accounting I is the first of a two-course series which provides a comprehensive study of financial accounting theory and reporting, including the conceptual framework of financial accounting. Topics include: Generally Accepted Accounting Principles, an in-depth examination of assets, the elements and structures of financial statements, accounting research, and the uses of accounting for decision making. Prerequisite: Acceptance into AIA BAS Program or instructor permission.

**AIA 302 (5) N****Intermediate Accounting II**

Intermediate Accounting II is the second of a two-course series which provides a comprehensive study of financial accounting theory, reporting, and research. This course continues the in-depth study of the Conceptual Framework of financial accounting, Generally Accepted Accounting Principles (GAAP), International Financial Reporting Standards (IFRS), liabilities, equity, income taxes, pensions, leases, the Statement of Cash Flows, and financial reporting.

**AIA 310 (5) N****Accounting with International Accounting Ethics**

Within a global setting, students study ethical reasoning, behavioral ethics, and ethical conduct within an accounting practitioner's framework that guides their ethical obligations as they provide accurate legal financial reports that contribute to managerial decisions.

**AIA 401 (5) N****International Accounting**

The course provides an overview of issues faced by entities operating in a multi-national environment and their impact on accounting policies. We will focus on accounting issues such as foreign currency transactions, transfer pricing and reporting as a result of engaging in foreign operations. We will also review differences between US GAAP and IFRS as well as auditing in an international setting.

**AIA 402 (5) N****International Taxation**

Course examines our federal tax systems and rules as they apply to tax issues and decisions for corporations, partnerships, estates and special entities from conception to dissolution. The tax attributes of Corporations and pass-through entities like Partnerships, S Corporations and Limited Liability Companies are examined. The complexities of international taxation and their effect on business decisions is explored.

**AIA 410 (5) N****Cost Accounting**

Students use tools to define, calculate, and present accurate data to aid decision-making. Based on jobs, activities, and processes, students compute unit-cost data and present profit planning analyses. Students investigate flexible budgeting managerial tools and apply discounted-cash-flow concepts to the capital budgeting process.

**AIA 430 (5) N****Accounting Information Systems**

Accounting Information Systems (AIS) examines the governance of the AIS as part of the enterprise resource planning systems in a business. This course is focused on the various fraud and fraud prevention associated with AIS, how IT affects processes and controls, and the effects of recent regulatory developments by the international community on the design and operation of accounting systems.

**AIA 440 (5) N****Auditing**

AIA 440 examines and prepares students to understand and apply auditing theory, principles, concepts and practices used for public and non-public companies. Students gain an understanding for how auditing procedures vary among different accounting firms and how to render an opinion on the fairness of financial statements. Students will also analyze how international current events affect the ethical responsibilities of auditing professionals.

**Adult Basic Education****ABE 20 (1-15) N****Adult Basic Education Level 2**

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

**ABE 21 (1-15) C****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.

**ABE 22 (1-15) C****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.

**ABE 30 (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.

**ABE 31 (1-15) C|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.

**ABE 32 (1-15) C|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.

**ABE 34 (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 40 (1-15) C|N****Adult Basic Education Language Arts 1**

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.

**ABE 41 (1-15) C|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 42 (1-15) C|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.

**ABE 44 (1-15) C|S****Adult Basic Education Level 4 - Digital Literacy**

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 and covers Microsoft Office applications.

**ABE 49 (1-15) C|N|S****Basic Skills Support for I-BEST/Professional/Tech Programs**

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

**ABE 50 (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 51 (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 52 (1-15) C|N****Adult Secondary Education Communication Level 5**

Designed to advance students' communication skills in order to begin preparing for the college entrance exam. Emphasizes extended reading strategies and writing different styles of essays.

**ABE 54 (1-15) C****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 57 (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.

**ABE 60 (1-15) C****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 61 (1-15) C|N****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 62 (1-15) C**  
**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 64 (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 70 (1-3) C|N|S**  
**Educational Interviewing for ABE/GED/HS+ Students**

This course serves as an orientation class for new ABE/GED/HS+ students. Students receive an orientation to ABE/GED/HS+ program and to the program's and the college's resources and services.

**ABE 80 (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, writing sentences, paragraphs, and essays. Strongly recommended for students enrolled in developmental English courses.

**ABE 81 (1-15) N**  
**Basic Math Skills**

This course covers whole and signed numbers, fractions, decimals, percent, ratio and proportion, units of measurement, and geometry.

**ABE 83 (1-5) S**  
**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. Instructor permission required.

**ABE 84 (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.

**ABE 85 (1-15) N**  
**Algebra II**

This class will focus on factoring polynomials; rules of exponents; solving quadratic equations; equations and graphs; roots and radicals; solving rational equations; and problem solving.

**ABE 98 (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.

**Allied Health****AHE 107 (3) C**  
**Introduction to Healthcare Leadership**

Prepares learners for entry into health professions leadership, examines leadership practices for entry into health professions at any level. Covers basic tasks for health care leaders and managers for the successful operation of a healthcare business unit.

**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 126 (1-3) C**  
**Essential Skills in Healthcare**

Learn core skills applicable to all health disciplines.

**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 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 152 (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.

**AHE 168 (5) C**  
**Medical Terminology**

Introduction to the concept of word building with Greek and Latin word roots (prefixes and suffixes), resulting in the acquisition of a large medical vocabulary. Essential for clinical and administrative personnel in the health field.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

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

PREREQUISITE ENTRANCE EXAMINATION REQUIRED. There will be a written advanced first aid exam that must be taken by all applicants to the program, after attending a mandatory information session. Applicants must attend one session and do not need to sign up in advance for the information session. All applicants must pay the \$35 application fee and \$35 test proctor fee at the NSC Cashier's office and bring both forms with the cashier's paid stamp on them to the exam. See additional information, including dates for the exam, on EMT website at <https://northseattle.edu/programs/emergency-medical-technician>. Cost is \*\$1,305.53 (\$185.28 tuition + \$1,100 college self-support fee + \$15 medical malpractice professional liability insurance fee + \$5.25 online courseware support fee). Note: AHE 192 Basic Life Support for Healthcare Providers is a corequisite and must be taken before the program starts. See course AHE 192. For additional information contact the Workforce Instruction Division at (206) 934-3790. \*subject to change

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

Corequisite class required for the EMT program; must take concurrently with AHE 190. This course uses the American Heart Association BLS curriculum that is the standard for healthcare agencies/personnel and meets the requirement for CPR certification that includes CPR for Adults, Children and Infants, AED and use of the Bag Valve Mask. Contact the Workforce Instruction Division at (206) 934-3790 for additional information. \*Cost is \$141.03 (\$15.78 tuition + \$120.00 college self-support fee + \$5.25 online courseware support fee). Note: must purchase textbook and pocket mask and bring to the first class. \*Subject to change.

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

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

**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).

**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.

**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.

**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.

**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.

**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.

**AHE 401 (5) C**  
**Principles of Research**

General principles of research design and methodology with emphasis on applications for allied health practice.

**AHE 426 (5) C**  
**Leadership and Team Building/Organizational**  
 Covers leadership, working in and developing teams. Develops personnel management skills.

## 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 111 (5) C**  
**Asian Am & Pacific Isl Communities & Issues**  
 Introduction to Asian American and Pacific Islander issues with a focus on examining one's racial/ethnic identity and strengths in the global context of A&PI communities historically and today. A&PI resilience and efforts for social justice will be explored. Students will experience community advocacy and foster connections with local A&PI community organizations. Required service learning component to add to your resume!

**AME 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.

**AME 150 (5) C**  
**Race & Culture: an American History**  
 Surveys the making of the multicultural United States from indigenous homelands to settler colonialism. Examines the experiences of indigenous peoples, African Americans, Latinx Americans and Asian Americans in exposing the systemic race, class and gender oppression that generates wealth and power in the U.S., and how the struggles of people of color for political power, community well-being and cultural integrity embody the U.S.'s possibility for freedom and democracy.

**AME 151 (5) C|N|S**  
**Ethnic Studies: Identities, Solidarity, & Power**  
 Introduces students to the historical and contemporary social forces and power dynamics that construct racial & ethnic identities in the US. Students will learn how colonialism, capitalism, & Empire impact racial/ethnic communities. Students also consider how race & ethnicity intersect with other identities such as class, gender, sexuality, nationality, & ability. Maps out issues in land and labor rights, immigration, education, and popular culture.

**AME 200 (5) C**  
**Leadership and Social Change**  
 Examines issues raised by civil rights struggles in the United States. Covers the forces shaping social change, the role of the individual or change agent, and the personal skills required of change agents. Incorporates community service as a central teaching technique.

**AME 201 (5) C|N|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.

**AME 202 (5) C**  
**American Indian Contemporary & Social Issues**  
 Covers contemporary issues impacting American Indian & Indigenous Peoples. Uses a social justice lens to give voice to Indigenous Peoples through documents, videos, music, and guest speakers. Through an examination of contemporary issues such as Missing & Murdered Indigenous Women and Girls, and #StopLine3, students will discuss indigenous people's relationship to historical topics, sovereignty, traditional knowledge, and Indigenous resistance and survival.

## American Sign Language

**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.

**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.

**ASL& 123 (5) C|N**  
**American Sign Language III**  
 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.

**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.

## 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.

**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.

**ANTH& 205 (5) C|N**  
**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, politics and power, the environment, language, identity, religion, technology, and art. Focuses on the interactions within and between cultures in an increasingly globalized 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.

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

The development of human societies with special emphasis on relationships between environments and respective cultures throughout the world. Focus on conflicts between traditional cultures and pressures of modernization.

**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.

**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 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.

**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 297 (7) N**  
**Archaeology Field Experience**

Experience archaeological field methods through orientation to field work, on-site excavation, and laboratory analysis of excavated cultural materials. Includes practice with techniques of artifact preparation, identification, documentation, data collection, and curation. Prerequisite: ANTH 100 or 204 recommended but not required.

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

Small group setting to cover selected topics in anthropology.

**Apparel Design & Development****APPRL 96 (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 pattern-making 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 98 (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 99 (6) C**  
**AD&D Skill Development Intensive**

An intensive course combining APPRL096, APPRL098, & APPRL100 (the prerequisite 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 are 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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**APPRL 138 (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.

**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

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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.

**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.

**APPRL 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.

## Application Development Bachelor of Applied Science

**AD 300 (5) N**

**Component Software**

This course focuses on object-oriented programming using Java with an emphasis in the creation and use of software components. It also presents other programming concepts such as reusability, the model-view-controller (MVC) design pattern, elementary data structures (linked lists, binary trees), recursion, and algorithmic analysis using Big-O notation. 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**

This course is an intermediate course in developing a database driven web application incorporating MVC patterns. The course will cover state maintenance, CRUD, & REST integration on both server & client side. Students will parse, cache, integrate API data achieved by third party providers into their application. Technologies can include as jQuery, CURL, AJAX & parsing JSON & XML. Prereq: AD 300.

**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 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**

This course provides a comprehensive overview of current processes, practices & tools used to manage software development projects. Using a combination of case studies & projects, students apply best practices for planning, organizing, scheduling, & controlling software projects. Emphasizes legal & ethical issues that relate to project management. Prereq: Acceptance into the Application Development BAS.

**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 450 (5) N****Data Science Development**

Fundamentals of data science course with topics that include data wrangling, visualization, exploratory data analysis, and machine learning. Students will gain hands-on data science experience with Python or R. AD450 is the first of a two-course sequence.

**AD 470 (5) N****Data Science Practicum**

This course is the second of the two-course sequence. Students integrate and apply the data analytics skills they have learned in Data Science Development course (AD 450) to conduct real-world data science projects. In the projects, students engage in processing real-world data, using a variety of visualization tools and applying appropriate data analytics models. Students conclude the projects with presenting key insights and findings. Prerequisites: AD 450 Data Science Development

**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.

**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.

**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 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.

**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.

**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.

**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 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.

**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.

**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**  
**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.

**ARAB 121 (5) C**  
**Arabic I**

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.

**ARAB 122 (5) C**  
**Arabic II**

Continuation of ARAB121. Covers Arabic listening, speaking, reading, and writing skills with a supplementary focus on Arabic culture. Primary emphasis is on sentence structure and expression of ideas in the present, past, and future. Involves intensive classroom interaction and out-of-class assignments.

**Art****ART 91 (5) S**  
**Art**

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 92 (5) S**  
**World Art**

Explore world geography continent by continent through map work and artwork of the region. For each continent students will study the major concepts in geography for the area including climate, landforms, resources, and culture then explore how art is reflective of the region. Students will also create art that fits with each continent's geography. Students will keep a personal geography notebook that contains all their maps and art projects for course.

**ART 93 (5) S**  
**Geography Through Art**

Explore world geography continent by continent through map work and artwork of the region. For each continent students will study the major concepts in geography for the area including climate, landforms, resources, and culture then explore how art is reflective of the region. Students will also create art that fits with each continent's geography. Students will keep a personal geography notebook that contains all their maps and art projects for course.

**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.

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

Problems in Design. Continuation of ART 102

**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.

**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**

Exploration in subject and media including drawing from the human figure. Focus on composition, expression, and creative conceptualization.

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

Further development of fine art drawing with an emphasis on expression and composition, including development of portfolio building or other project.

**ART 114 (5) C|N  
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.

**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) 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) 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) 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. No prerequisites. Transfer class.

**ART 170 (5) S  
Photography as an Art**

Traces the history and distinctive properties of photography. Includes camera, exposure, lighting, composition, black and white dark-room work and digital imaging. This course has a Photography Materials Course Fee.

**ART 190 (5) N  
US Art Appreciation, Expression & Identity**

Intro to Art as a form of self-expression, identity, & activism. Through lectures, reflective writing, & beginner-level studio art projects, students learn about the personal journeys of US artists whose work reflects the diverse beliefs, attitudes, & ideologies of US culture. Disciplines include: drawing, painting, sculpture, jewelry, graphic design, & photography. Experience not required. Transfer class.

**ART 191 (5) N  
Global Art Appreciation, Expression and Identity**

Intro to Art as a form of self-expression, identity, & activism. Through lectures, reflective writing, & beginner-level studio art projects, students learn about the personal journeys of global artists whose work reflects the beliefs, attitudes, & ideologies of their culture, often in direct opposition to colonizing forces and the dominant Western cultural ideals. Disciplines include: drawing, painting, sculpture, jewelry, graphic design, & photography. Experience no required. Transfer class.

**ART 201 (5) C|N  
Painting**

Beginning painting in oil or synthetic media exploring a variety of subjects, including still-life. Emphasis on basics such as composition, value studies, color mixing, canvas preparation, styles and techniques. Recommended: Drawing background.

**ART 202 (5) C|N  
Painting**

Further development of color and composition in oils or synthetic painting media.

**ART 203 (5) C|N  
Painting**

Further studies in color, composition and subject matter including portfolio building or other project.

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

This course combines fine art and technical aspects of digital composition. Covers logo design, typography, and multi-page layout using vector (Adobe Illustrator) and pixel-based (Adobe Photoshop) programs. Students will be challenged to develop their own visual language.

**ART 211 (5) N  
Sculpture**

Fundamentals of composition in the round, in clay and plaster, using basic techniques of carving, casting and building.

**ART 212 (5) N  
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  
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**

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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**ART 215 (5) N|S**  
**Digital Art and Graphic Design - Advanced**

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.

**ART 221 (5) N|S**  
**Ceramics**

Explore a wide variety of ceramic ideas, techniques and materials as applied to sculptural and vessel forms. Students will develop an understanding of ceramics through hands-on experience working with the various ceramics processes while considering how it relates to contemporary art practices and lifeways. This course has an Art Lab Fee.

**ART 222 (5) N|S**  
**Ceramic Art**

Develop throwing skills. Understand basic glaze composition and kiln operation. Continue studies in techniques of surface decoration.

**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.

**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**  
**Survey of Art: Paleolithic to 5th Century C.E**

Surveys major forms of visual expression from the Paleolithic to 5th Century C.E.. Includes painting, sculpture, and architecture through lectures, slides, and readings. Art History topics include: museum practices, identity, and colonialism. May be taken out of sequence. Transfer Class.

**ART 252 (5) N**  
**Survey of Art: 6th-16th Century**

A survey of European and Islamic art from the 6th-16th century. Includes painting, sculpture, and architecture through lectures, slides, and readings. Art History topics include: colonialism, patronage, and propaganda. Continuation of ART 251 but can be taken out of sequence. Transfer class.

**ART 253 (5) N**  
**Survey of Art: 17th Century C.E. to Present**

Surveys major forms of visual expression from the 17th Century C.E. to Present. Includes painting, sculpture, and architecture through lectures, slides, and readings. Art History topics include: identity, equity, and colonialism. Continuation of Art 252 but may be taken out of sequence. Transfer class.

**ART 255 (5) 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.

**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 280 (5) N**  
**Metal Object Design: Form and Function**

Introduction to the design and fabrication of functional and sculptural objects, using a range of traditional and contemporary metalsmithing techniques. Shape metals and other materials into small-scale art and design objects such as vessels, utensils, toys, tools, or adornment. Examine the forms of objects and their various practical and social functions. Prepares students in any area of study to use metal as a material with broad creative applications. No prerequisites. Lab fee required

**ART 281 (5) N**  
**Jewelry Design I**

Learn basic design and construction of non-ferrous metals involved in jewelry making. Bench techniques involve forging, soldering and basic stone setting. Lab fee required. Transfer Class.

**ART 282 (5) N**  
**Jewelry Design II**

A continued exploration of metal fabrication and jewelry design. Surface enrichment, advanced forming techniques, faceted stone setting and the introduction to enameling. Prereq: ART 281. Lab fee required. Transfer class.

**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. Lab fee required. Transfer Class.

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

Advanced bench skills and production techniques will be taught allowing students to create innovative pieces with personal statements. The emphasis will be on creating a body of work that is exhibition ready. Prereq: ART 283. Lab fee required. Transfer class.

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

Metalsmithing techniques used to create functional and sculptural objects. Students learn the physical properties of metal and create objects that express personal images and creative thoughts. Basic metalworking techniques used to create metal sculpture, hollowware and model making. Field trips to some metal fabrication studios included to develop resources for future projects. Transfer class.

**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, photographic artwork, building a resume, marketing, copyrights, contracts and other essential business practices. Recommended: At least two college-level art courses. Transfer Class

**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.

**Astronomy****ASTR& 100 (5) C|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 125 (5) S****Big Picture: Astrodata Imaging**

Astronomy gazes to the universe, analyzing images and vast quantities of information or "big data." As an expanding domain in STEM, big data requires interpretation and visualization in context. In this course, we will explore images and big data to answer deep questions by working with digital imaging, analysis software including filters, and data visualization. We will collaborate on local and global citizen science projects to develop skills for interpreting and presenting big data.

**ASTR 201 (5) 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.

**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. Coreqs: AUT 102, AUT 104.

**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.

**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**

This course covers power flow and principles involving automatic transmissions. Teaching how to diagnose, service and make adjustments to automatic transmissions. Teaching will include understanding electronic control systems, and how to locate and repair external transmission leaks. Students will be taught to perform 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 134 (3) S****Introduction to Engine Performance**

Automotive engine performance theory, operation and diagnosis of engine performance components, as well as removal, repair or replacement of components from vehicles. Coreqs: AUT 128, AUT 132.

**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.

**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.

**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.

**MVM 101 (8) S****Introduction to Motor Vehicle Maintenance 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.

**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 105 (15) S****Aviation Introduction & Context**

This is the first course in FAA Airframe and Powerplant Certification. Students will investigate aviation career paths, learn basic physics applications in aircraft systems and calculate aspects of aerodynamics and structures, acquire skills with tools and knowledge of real aircraft, engines, and materials through hands on exercises, and observe the purpose and complexity of the worldwide aerospace system by comparing real world situations to federal aviation regulations.

**AMT 110 (15) S****Aviation Electricity & Tech**

In this class, you will evaluate your way of learning and work towards mastery of a technical subject, investigate and discuss possible career paths and learn your place and interests in this industry. You will discover how basic physics and electrical theory apply to aircraft design, construction, and maintenance, and gain hands-on experience with real aircraft, materials, and engines. Lastly, you'll compare real situations to the federal aviation regulations to understand their safety value.

**AMT 111 (15) 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 (15) 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 (15) 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 115 (15) S**  
**Airframe Structures & Materials**

This course is the third step to the FAA Airframe and Powerplant certification. In this class, students will learn standard practices related to: Metallic and non-metallic aircraft structures, aircraft hardware, materials and processes and cleaning and corrosion control.

**AMT 120 (15) S**  
**Airframe Systems I**

This course is the fourth quarter of eight in the Aviation Maintenance Technology sequence at SSC. Students will investigate some of the systems used in aircraft and will apply knowledge gained in previous AMT classes to discover how these systems work. Many projects will be undertaken as part of a team, as is common in the aviation industry. This will give students an opportunity to learn how to work in diverse groups and help foster an enhanced learning environment.

**AMT 133 (15) 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 205 (15) S**  
**Airframe Systems II**

This course is the fifth step to FAA Airframe and Powerplant Certification. In this class, the following subjects will be covered: Flight Controls, Environmental Systems, Aircraft Instrument Systems, Ice and Rain Control Systems, and Rotorcraft Fundamentals.

**AMT 214 (15) 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 (15) 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 (15) 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 (15) 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 (15) 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.

**Basic & Transitional Studies****BTS 50 (1-5) N**  
**Academic Skills Support for I-BEST**

Class will provide I-BEST enrolled ABE and ESL students with tailored, separate support and review to ensure student success in various I-BEST programs.

**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. This class has an additional Science Lab Course Fee.

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

Basic biological concepts with emphasis on biological molecules, cell structures and processes; diversity, phylogeny and ecology of living organisms; and an exploration of molecular genetics.

**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.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

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

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

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

BIOL& 213 is the third course in the major's biology series. Emphasis is placed on the diversity, ecology and evolution of bacteria, fungi, protists, and plants. This course also explores details of the life cycle, reproduction, and physiology of non-vascular and vascular plants. The ecology of populations, communities and ecosystems is explored unifying concepts of cellular, molecular, evolutionary and organismal diversity covered in BIOL&211, 212, and 213. Lab is included. This class has an additional Science Lab Course Fee.

**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**

Fundamentals of human anatomy and physiology presented in lecture and laboratory. Designed to establish a basis for studying 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. This class has an additional Science Lab Course Fee.

**BIOL 103 (2) C**  
**Nutrition for Food Service Professionals**

Covers identification of known nutrients for human health, demonstration of quality dietary guidelines, and utilization of dietary guidelines in meal planning, including modification of existing recipes to meet nutritional recommendations; Additional topics include understanding of special needs diets and modifications.

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

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. Includes lab.

**BIOL 120 (5) C**  
**Marine Biology W/Lab**

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. Transfer class.

**BIOL 128 (5) C|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. This class has an additional Science Lab Course Fee.

**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.

**BIOL 161 (5) C**  
**Human Genetics W/Lab**

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. Includes lab.

**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.

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## Botany

**BOT 112 (5) C**  
**The Plant Kingdom**

Introduction to the anatomy, physiology, reproduction, diversity and ecology of cultivated and wild plants. Satisfies lab science requirement for A.A. degree.

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## Business

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

Survey of American business in a global context: business and economic terminology, entrepreneurship, forms of business ownership, accounting, budgeting, operations, human resource management, ethics, corporate social responsibility, and marketing principles.

**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 112 (5) N**  
**Multicultural Issues in the U.S. Workplace**

This course examines primary and secondary aspects of diversity, including (but not limited to): race and ethnicity, gender and gender expression, sexual orientation, intersectionality, mental challenges, social class, and appearance/weight. Students will study effects these issues of diversity have on the ethical, legal, communication, marketing, and organizational change in the workplace of the United States.

**BUS 113 (3) 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**

Marketing presents an opportunity: find a need and fill it! Responding to the wants and needs of the consumer with the right product, price, promotion, and distribution forms the basis of the marketing concept. Marketing is dynamic, highly-visible, and often very controversial. Marketers must demonstrate value, quality, and service exceeding customer demands while maintaining channel relationships and meeting company goals and objectives. Marketing methods vary, but the need for marketing remains constant in the face of changing business practices. Marketing is essential to survival in today's customer-driven business. Prerequisite: Eligible for English 101 through English Placement Test or completion of English 097/098.

**BUS 116 (5) 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.

**BUS 118 (5) 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 124 (5) N**  
**Excel for Business**

Learn to use Excel, a spreadsheet program that enables you to create worksheets that allow you to enter, calculate, manipulate, and analyze data such as numbers and text; create charts, graphs, and visuals to give your data impact. Use Excel as a database to manage and organize data, to search for specific data, and to select data that meets particular criteria. Recommended: Familiarity with computer usage or completion of BUS 169 or equivalent. Computer lab fee req'd.

**BUS 131 (5) 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.

**BUS 140 (5) 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**  
**Entrepreneurship: Overview and Mindset**

Designed for those with an interest in starting their own business. This is an opportunity to explore whether you have the Temperament and GRIT (persistence) to successful business owner. Validate or develop your Entrepreneurial Mindset. Understand the process needed to expand your business around your products/services.

**BUS 152 (5) N**  
**Business Creation I: Prep for Success**

Designed for person ready to start a business. All activities directly apply to the student's business idea. Will cover Value Proposition; Feasibility Analysis; Competitor Analysis; Vision/Mission; Business Structure; Customers; and Business Plan Canvas. Our goal is a successful launch/enhancement of the student's business.

**BUS 153 (5) N**  
**Business Creation II: Ready to Start Now**

This course continues the development/implementation of the student's business. We will cover: Proforma Financials; Development of Business Plan; Customer Focus; Website Development; Marketing/Selling; Going Global; Risk Management; Networking. Prerequisite: BUS 152 or instructor's permission.

**BUS 166 (1-2) S**  
**Career Development III**

Plan and create a project proposal. Research an area business or non-profit organization, investigate its needs, create a project solution, present the proposal and implement the result for the organization. Required capstone course for Office Professional Certificate.

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

This is a hands-on course designed to introduce Microsoft Office software. The focus is on representative software that will provide the student with the basic concepts of word processing, spreadsheets, database management, and presentation graphics.

**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.

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

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

**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: BUS114 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**

This course will teach the students how to define and sequence project tasks and how to use the most popular planning and control tool, MS Project. Students will complete a project using Project Management elements, including developing a project plan and budget. Students will also work with resource allocations, critical path, dependencies, estimating, risk management, contingency planning, implementation, and evaluation. Prerequisite: IT 101 or BUS 169 and BUS 236

**BUS 236 (5) N****Interpersonal Communications for the Workplace**

This course teaches effective interpersonal communication skills. Students learn communication styles and effective ways to adapt communication to meet business needs. Through individual and group activities, students improve understanding of cultural diversity, non-verbal communication, and individual influences on communication. Techniques for making informal and formal business presentations are also covered. Careful preparation for the employment interview is emphasized.

**BUS 237 (5) N****Team Skills in the Workplace**

This course will explore aspects of successful teams, and examine the importance of assessing and recognizing individual team member skills. This course will also review and use tools to support the growth and development of teams in effective decision-making, efficient meetings, and improving team performance. Prereq: BUS 236

**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**

Learn business analytics to comprehend the amount of data that business professionals deal with every day. Learn the basics of descriptive, predictive, methodologies. You will also learn how to build efficient models and graphic presentations to solve business problems and how to convert large data sets of unorganized raw data into useful information for decision making. Prerequisites: MATH 098 or higher; BUS 169 or equivalent. Recommended: BUS 124 (or MATH& 146) and BUS 210.

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

Prereq: Permission.

**BUS 299 (1-5) C|N****Independent Study**

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

**Business Technology Management****BTM 98 (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.

**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.

**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.

**BTM 104 (2) C****Photoshop**

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

**BTM 111 (5) C****Business Productivity Applications**

Introduces business productivity applications used for spreadsheets, word processing, database, and presentation software. Includes an overview of file management techniques, email, and operating systems.

**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.

**BTM 113 (5) C****Cloud Foundations**

Introduces students to cloud-based, client-side software applications for business productivity and collaboration solutions using enterprise grade Office 365. Learn cloud computing basics. Examine the primary cloud service providers. Differentiate between cloud, hybrid-cloud and multi-cloud deployment options. Evaluate software vs platform vs infrastructure as a service concepts. Explore cloud practitioner certificate pathways. Course includes AWS Educate account.

**BTM 118 (5) C****Applied Business Math**

Covers introductory business statistics (averages & standard deviation), invoices, trade and cash discounts, markups and markdowns, payroll, depreciation, compound interest and solving equations. Includes use of spreadsheet software to analyze business data.

**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.

**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.

**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. Co-requisite: Must be employed, interning, or volunteering in a position approved by program faculty or the Cooperative Education.

**BTM 220 (5) C****Social Media Marketing**

Explains the role social media plays in a digital marketing strategy. Students will learn best practices for different platforms and test their social media skills. Course projects include creating a real Facebook ad campaign. One of five courses required for the Facebook Digital Marketing certificate.

**BTM 221 (5) C****Digital Branding & Advertising**

Introduces digital branding and paid advertising strategy for professionals and small business owners. Topics covered include creating appropriate content, search and display advertising, and consumer psychology. Search and display life-cycle best practices are discussed. Students will calculate advertising costs, bids, and key optimization metrics. No prerequisites. BTM 221 is one of the five Facebook Digital Marketing Certificate courses. Students may take any or all of these courses.

**BTM 222 (5) C****Digital Marketing Foundations**

Introduces the basics of digital marketing and branding strategy in the context of a small business owner. Students will learn marketing concepts including market segmentation, market positioning, unique value propositions, and key marketing metrics. Strategies to create effective marketing content are presented. No prerequisites. BTM 222 is one of the five Facebook Digital Marketing Certificate courses and can satisfy the entrepreneurship cert & AAS degree requirements. Students may take any or all of these courses.

**BTM 223 (5) C****Email Marketing Campaign Strategies**

Introduces issues regarding email marketing. Topics covered include understanding the life-cycle of an email campaign, generating email lists, and available automation tools. Students will practice creating marketing emails that focus on voice, tone, and content.

**BTM 224 (5) C****Marketing Analytics & Performance Optimization**

Introduces the tools necessary to analyze the results of digital marketing efforts like data gathering using spreadsheets, Google Analytics, and A/B testing. Students will analyze Acquisition & Behavior reports & create analytics dashboards. Drive conversion and marketing performance optimization factors will be presented. BTM 224 is one of five courses in the Facebook Digital Marketing Certificate.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**BTM 226 (5) C**  
**Small Business Startup**

Introduces steps to starting a small business. Students review skills of successful entrepreneurs to select the most appropriate form of business ownership, register a business name, and access and complete required local, state, and federal legal documents. Includes the study of trademarks, copyrights, and patents, and methods to finance a business. Students also practice creating and presenting start-up proposals.

**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**  
**QuickBooks Online**

Provides a detailed overview of QuickBooks Online for addressing small-business accounting needs. Topics include customizing company settings, creating customers and sub-customers accounts, recording bank deposits, setting up bank feeds, and reconciling bank and credit card accounts. Learn to create purchase orders, assign sales tax, prepare journal entries, and transfer funds between accounts.

**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 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.

**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.

**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 organizations operations to create strategies that improve operational productivity.

**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.

**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.

**BTM 299 (1-5) C**  
**Independent Study: BTM**

An independent study course for Business Technology Management students who need to fulfill degree requirements under the approval and supervision of faculty.

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**Certified Medical Assistant**

**CMA 101 (5) C**  
**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**  
**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.

**CMA 103 (8) C**  
**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.

**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.

**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.

**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 (1-12) C|N**  
**Medical Assisting Practicum**

First of two courses of externship. Students will acquire study skills for the national CCMA exam, then participate in an unpaid practicum (externship) of 160 hours total in a medical clinic. In this course or the next, students will also apply for CCMA exam, MA-C WA State License and graduation.

**CMA 109 (6) C**  
**Medical Assisting Practicum II**

Second of two courses of externship. Students will acquire study skills for the national CCMA exam, then participate in an unpaid practicum (externship) of 160-180 hours total in a medical clinic. Students will also apply for CCMA exam, MA-C WA State License and graduation.

**Chemistry****CHEM& 110 (5) C|N|S**  
**Chemical Concepts W/Lab**

A humanistic approach to chemistry for students who have no previous experience in chemistry. Introduces chemical principles, facts, and theories and how they relate to our lives, communities, and the environment. Topics include atomic theory, stoichiometry, gas laws, solutions, periodicity, basic thermodynamic and elementary bonding, an introduction to organic chemistry, and other topics that relate to chemistry in the every day world.

**CHEM& 121 (5) C|N|S**  
**Introduction to Chemistry**

Introduction to Chemistry (CHEM&121) is intended for allied health programs and other non-science majors. Completion of CHEM& 121, and either CHEM& 131 or CHEM& 122, fulfills the chemistry requirement for many allied health programs (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 W/Lab**

Continuation of organic chemistry and intro to biochemistry. Lab included.

**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.

**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.

**CHEM& 161 (6) C|N|S**  
**General Chemistry with Lab I**

The first in a 3-quarter sequence introducing basic chemistry concepts such as: structure & bonding, chemical reactivity, measurement, stoichiometry, structure of matter, gas laws, intermolecular forces, solutions, acid/base, kinetics, equilibrium and other chemical concepts. Satisfies the general chemistry requirement for science & engineering majors. Lab included.

**CHEM& 162 (6) C|N|S**  
**General Chemistry with Lab II**

The second in a 3-quarter sequence introducing basic chemistry concepts such as: structure & bonding, chemical reactivity, measurement, stoichiometry, structure of matter, gas laws, intermolecular forces, solutions, acid/base, kinetics, equilibrium and other chemical concepts. Satisfies the general chemistry requirement for science & engineering majors. Lab included.

**CHEM& 163 (6) C|N|S****General Chemistry with Lab III**

The third in a 3-quarter sequence introducing basic chemistry concepts such as: structure & bonding, chemical reactivity, measurement, stoichiometry, structure of matter, gas laws, intermolecular forces, solutions, acid/base, kinetics, equilibrium and other chemical concepts. Satisfies the general chemistry requirement for science & engineering majors. Lab included.

**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**

First quarter of a two-quarter organic chemistry laboratory sequence. Entails purification techniques, synthesis & spectral analysis of representative compounds.

**CHEM& 252 (4) C|N****Organic Chemistry Lab II**

Second quarter of a two-quarter organic chemistry laboratory sequence. Entails synthesis, identification of unknowns & spectral analysis of representative compounds.

**CHEM 117 (5) S****Cannabis Chemistry**

For non-science majors; a survey of chemistry concepts that are used in the cannabis industry. Students will learn about the structure of different cannabinoid compounds and their associated physical and chemical properties. Students will learn the concepts and lab techniques from both general and organic chemistry that have practical applications in extracting and characterizing cannabinoids. Lab included. This course has an additional Science Lab Course Fee.

**CHEM 255 (3) N****Biochemistry I**

First course in a 2 quarter sequence. 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. Prereq: CHEM& 242 with a grade of 2.0 or better.

**CHEM 256 (3) N****Biochemistry II**

Second course of a two-quarter sequence. 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.

**CHEM 298 (1-5) C****Special Topics: Chemistry**

Seminar of selected topics and/or activity in the chemical sciences. Prereq: Variable, dependent on topic.

**Chinese****CHIN& 121 (5) C****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.

**CHIN& 122 (5) C****Chinese II**

Continuation of CHIN& 121.

**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.

**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.

**CMST& 210 (5) C|N****Interpersonal Communication**

Introduces theories and skills associated with interpersonal communication to understand and improve relationships with family, friends, romantic partners, and in professional settings.

**CMST& 220 (5) C|N|S****Public Speaking**

Learning to speak with confidence; topic selection and research; and preparation and delivery of informative, persuasive, special occasion and other forms of presentations.

**CMST& 230 (5) N|S****Small Group Communication**

Experience in and analysis of communication within groups, emphasizing interdependent thoughts and efforts, active listening and empathizing, cooperation, power and conflict management, and collaborative decision making/problem solving.

**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.

**CMST 245 (5) 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.

**CMST 260 (5) S****Race and Media Representations of Cannabis**

This course explores how the mass media has represented marijuana use since the 1930s. Students will develop media literacy and analysis skills that will help them historicize and analyze how mass media representations of marijuana use has been used to both reinforce and challenge US drug policies and dominant ideologies that marginalize people of color. Course objects of study include movies, television shows, news articles, music, and advertisements.

**CMST 295 (1-5) C****Studies and Works in Communication**

Analytical study or creative work in Communication.

**Community Health Education Bachelor of Applied Science****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 (2) 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.

**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.

**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.

**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.

**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.

**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.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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.

**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.

## Computer Science

**CSC 102 (1) C**  
**Computers in Mathematics**

Introduction to software (such as Mathematic) used extensively in advanced math courses. Completion of self-paced tutorials to prepare for final exam in the last week. CSC 102 is strongly recommended for students in MATH& 151. First class is mandatory because it provides an introduction to the software.

**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. 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, exceptions, recursion, analysis of algorithms, and some dynamic structures (lists, stacks, trees). Uses Java programming language. Lab fee. Transfer class.

**CSC 299 (1-5) C|N**  
**Independent Study**

Independent study of approved topics in computer science.

## Computer Science Baccalaureate

**CSB 301 (5) N**  
**Logic and Problem Solving for Computer Science**

Provides the student with a thorough introduction to computational logic, covering in depth the topics of syntax, semantics, decision procedures, formal systems, and definability for both propositional and predicate logic. The material is taught from a computer-science perspective, with an emphasis on algorithms for automated reasoning. The goal is to prepare the students for using logic as a formal tool in computer science, in general, and artificial intelligence, in particular.

**CSB 302 (5) N**  
**Analysis of Algorithms**

Techniques for design of efficient algorithms. Methods for showing lower bounds on computational complexity. Examines types of algorithms including greedy, divide and conquer, and dynamic programming. Particular algorithms for sorting, searching, set manipulation, arithmetic, graph problems, pattern matching. Explores intractability including NP-Complete Problems. Discussions led around Algorithmic Bias and why it's important to avoid.

**CSB 305 (5) N**  
**Fundamentals of Computer Science**

Examines fundamentals of set theory, number theory, induction, and algebraic structures with applications to computing; grammars, finite state machines, and limits of computability.

**CSB 310 (5) N**  
**Programming Languages**

This course is an introduction to the design and implementation of programming languages. The course explores organization and structure of programming languages, how programming languages evolve, differences in problem domains, language suitability, basic features of programming language translation, and implementation techniques for these constructs. The course teaches the programming models underlying different paradigms such as functional, logic, scripting and object-oriented languages.

**CSB 330 (5) N****Computer Architecture and Networking**

This course introduces different hardware architectures, organizations, and operations of various machines followed by the fundamentals of computer networking. The architecture portion includes topics such as number representation, CPU concepts, hardware/software interaction, memory hierarchy, I/O organization, and assembly language. The networking portion includes basic concepts of computer networks, layered network architecture, protocols, and concept of network performance.

**CSB 340 (5) N****Operating Systems**

This course explores the operating systems, the services they provide, the processes they execute, and their secure access. Topics include memory management, concurrent process management, resource management, system call implementation, file systems, and memory protection.

**Cooperative Work Experience Internships****CWE 101 (1-3) N****Portfolio, Job Search Preparation and Job Shadow**

Learn how to find, and succeed in the internship or job you want. Students create portfolios, research resources, develop job search tools, and integrate identify workplace competencies. The 3rd credit provides students practical, experiential learning through Job Shadow and Informational Interviewing. Prepares students to compete for internship and employment opportunities and/or to transfer to a 4 year institution. (Variable 2-3 credit) Prereq: Eligibility for ENG 98.

**CWE 102 (2) N****Job Shadow**

Provides an opportunity to observe the practical side of the students chosen field of study. Students are introduced to expected behavior, culture, and dynamics of the workplace. Students will find and shadow professionals in the field, conduct information interviews, and assess their own career choices. Credits variable (1 - 2). Class meets Wednesdays from 12:00 PM - 2:00 PM in IB3406.

**CWE 110 (1-3) N|S****Internship**

In CWE 110, students apply theory and skills learned in previously completed courses to their internship work site.

**CWE 197 (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 198 (1-5) C****Work Experience-Cooperative Education**

Integrates educational studies with continued supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace, and to continue practicing and updating skills gained in CWE197. Includes updating previous work experience learning outcomes and continuing to monitor achievement through self-evaluation and faculty and supervisor evaluations.

**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.

**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 help prepare online students to find and secure appropriate internship positions. Students will develop internship search skills which include identifying and using resources, writing targeted resumes and cover letters, creating a professional online profile and practicing interview skills. Hybrid class meets in person 3 times for 2 hour sessions. See instructor notes for specific dates/times. Online students will have phone contact with instructor 1 2 times during the quarter by appointment. Prereq: enrollment and good standing in the International Business B.A.S.

**CWE 495 (1-8) N****Baccalaureate Internship**

In completing an internship, Bachelor of Applied Science (BAS) students apply knowledge from BAS classes to an outside workplace environment. Students write learning objectives, complete internship documentation, participate in online discussions, prepare oral presentations and write reflection essays. Hybrid sections meet twice on campus. See Instructor notes for dates/times. Students may register for CWE 495 two times. Credits variable (1-8). Prerequisite CWE 494 or BAS Internship Guide.

**Culinary Arts****CUL 101 (6) C****Food Theory I**

Introduction to the basic fundamentals of professional cooking. Covers history of the foodservice industry, professional attributes, kitchen safety, tools & equipment identification, knife safety and cutting techniques, basic kitchen ratios, and mise en place. Includes basic seasoning & flavoring and scientific principles of moist and dry heat cooking, egg cooking, the making of stocks, plus introduction to and identification of vegetables, fruits, starches, meats, poultry, fish and shellfish.

**CUL 102 (5) C****Food Theory II**

Continuation of introduction to professional cooking and professional food production theory. Includes trade terminology, heavy equipment, tool identification, mise en place, garde manger, meat fabrication and cookery, fish fabrication and cookery, vegetables, starches, international cuisine, garnishes, and presentation.

**CUL 103 (4) C****Food Theory III**

This final course on theory of restaurant professional cooking and techniques explores international cuisines, food history, and cultural food connections. Topics include styles of pasta, olive oils, dumplings, soups, fresh cheeses, and classic sauces; the study of market trends, basic plate presentations, menu planning & writing. Includes exploration of wine growing regions and grape varieties and how a menu influences decisions in purchasing and labor.

**CUL 104 (6) C**  
**Food Theory IV**

Theory course level IV, focuses on advanced scientific theory & techniques. Students explore the historical evolution of global cuisines and cultures, current trends & influences within the restaurant industry. Emphasis on menu writing, method cooking, palate development, flavor building, international ingredients and applications. Advanced technique focus: refinement, plate presentation, sauce work, whole animal butchery & preservation techniques.

**CUL 106 (2) C**  
**Introduction to Culinary Arts: Theory**

Students will learn procedures of table service, waiter/waitress responsibilities, restaurant first-aid, and food cost analysis. Students must be registered concurrently with HOS 116 and 194.

**CUL 111 (6) C**  
**Professional Cooking Practicum I**

This course will introduce students to the fundamentals of professional cooking through hands-on practice. Course content will include kitchen safety and operations, introduction to industrial kitchen equipment operation, basic knife skills, basic food preparations, mise en place, foundational stock production, teamwork, organization and leadership, buffet set up and breakdown, and sanitation procedures. Students will rotate through a variety of stations.

**CUL 112 (9) C**  
**Professional Cooking Practicum II**

Lab: Students begin applying heat to food in an industrial food setting, rotating through a variety of stations to produce food products for lunch service. Recipes and cooking techniques discussed in the classroom will be applied. Practical focus on organization, mise en place, item marketing, meat and seafood fabrication, equipment operation, sanitation & safety, and preparation of meals from international cuisine.

**CUL 113 (9) C**  
**Professional Cooking Practicum III**

Intro to restaurant line cooking in a bistro style kitchen. Includes rotations through kitchen stations, applying culinary techniques to produce a diversity of international menu items, including soups, pasta, pizza and entrees for restaurant service. Students practice organization, collaboration, and speed. Continued development of knife skills, meat and seafood fabrication, cooking techniques, plate presentation, and evaluation of finished product.

**CUL 114 (9) C**  
**Professional Cooking Practicum IV**

Hands-on professional cooking training in a full service restaurant. Students work collaboratively to present dishes, highlighting local and global cuisine. Apply new techniques, refine & master skills, building on foundation established in CUL 113. Skill focus: organization, professionalism, accuracy, safety, sauce work, fish, meat & vegetable preparation, refined plate presentation, palate development, sustainable practices.

**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.

**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.

**CUL 151 (2) 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 social justice, trade, and health issues, preservation of cultural food traditions and foodstuffs, and activism within the food system. Prereq: Admission into Culinary Arts Program.

**CUL 152 (1) C**  
**Sustainable Food Systems Practices II**

Expansion of concepts introduced in CUL 151. Course explores food system issues related to ocean health, ocean acidification, climate change, plastics pollution, and its affects on fisheries, human health and cultural food traditions. Understanding of food sovereignty, concepts and tools to manage food waste in kitchens and local sourcing.

**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.

**CUL 205 (2) C**  
**Advanced Culinary Theory**

Students will explore the history of dietary trends, and the methods involved in creating menus for restricted diets. Students will learn application of specific scientific principles to food preparation & preservation, using specialized equipment and techniques to add perceived value to dishes & menus. Topics will be explored through lecture, product sampling, & demonstrations.

**CUL 215 (5) C**  
**Professional Cooking Practicum V**

Students culminate their culinary education through a series of capstone projects. Students utilize learned techniques and skills to demonstrate the ability to organize, plan, lead, provision, and execute menus of their own design. Projects build leadership, advanced culinary techniques and culinary competition skills. Students demonstrate professionalism and commitment to producing quality food while leading others.

**CUL 251 (1) C**  
**Banquet, Catering and Buffet Management**

Introduction to catering & event management: explores event development and budgeting strategies, professional organizational tools, different catering event styles and appropriate menus and production plans. Identifies internal & client-facing communication tools and strategies, and menus & culinary techniques appropriate to buffet & catering scenarios with emphasis on hors d'oeuvres.

**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.

**CUL 257 (2) C****Meat Fabrication & Charcuterie Practicum**

This course provides deeper understanding of whole animal butchery, meat fabrication, and product utilization. Includes cold-kitchen production of market cuts, charcuterie items, and utilization of offal. Covers basics of forcemeats, pates, terrines, smoking, curing, brining, confit, and fermentation. Explores sustainability and issues in industrial livestock farming and meat production.

**CUL 298 (1-5) C****Independent Project/Culinary**

No Description Available

**CUL 299 (1-5) C****Independent Projects/Culinary Arts**

Independent study course for individual projects in the Culinary Arts field.

**FSD 100 (3) S****Health and Sanitation**

Basic sanitation principles, ways to apply the principles in practical situations, and methods for training and motivating food service personnel to follow good sanitation practices. Certification is awarded by the National Education Foundation of the National Restaurant Association upon successful completion of the national examination.

**FSD 165 (15) S****Fundamentals of Classical Techniques**

Focuses on fundamental concepts, skills, and techniques in basic cooking. Emphasis is given to the study of sustainable ingredients, cooking theories, organizational skills in the kitchen, work coordination, and knife cuts. Introduction to basic salads, vegetable and starch cookery, use of thickening agents, fundamental meat and poultry butchery and production, and preparation of stocks, soups, and mother sauces. Introduction to purchasing and food cost. Concurrent enrollment in FSD100.

**FSD 175 (15) S****Advanced Classical Techniques**

Advancing principles of protein fabrication focusing on awareness of anatomy of beef, lamb, pork, poultry, and game. Advanced knife skills are emphasized focusing on efficiency and consistency. Skills are developed in defining primal and sub-primal cuts of meats and applying cooking methods including dry and moist heat. Coverage of inventory, purchasing, and cost control. Sustainable Healthy cooking and dietary restrictions.

**FSD 185 (15) S****Restaurant Production 1**

Menu, design and execution pertaining to banquets and catering. Exploration of world cuisine pertaining to industry trends. Management theory and cost controls within all aspects of running a food service operation. Introduction to baking, pastries, and desserts. Advanced pasta production and risotto. Breakfast menus and practicum. Advanced charcuterie covering forcemeats, sausage making, pates, curing, and food safety. Introduction to sustainability in the kitchen.

**FSD 190 (5) S****Cost Controls**

Examines the manager's role in cost control and the relationship between operational standards and controlling costs.

**FSD 195 (15) S****Restaurant Production 2**

Menu and recipe development with food costing and sustainability. Artisan breads are covered. Advanced proteins including shellfish, seafood, and specialty meat cuts. Introduction to molecular gastronomy, preserving techniques, and food presentation. Advanced sauce making. Cost management. Advanced cheese making. Prerequisite: successful completion of FSD185

**FSD 197 (1-5) S****Internship in Culinary Arts**

Individual internship in the culinary, restaurant, banquet and other food-related industries. Prereq: Permission.

**FSD 205 (15) S****Management Practicum**

Management practicum focusing on operations of Alki Cafe. In-depth exploration of human relations, employee scheduling and wages, inventory control, menu design and implementation, advertising and marketing, sustainable food operations, and product development and licensing. Students will design a complete food truck operation, create advertising campaigns, create a retail food product with a HACCP plan, and run a virtual cafe simulation.

**FSD 210 (5) S****Intro Sustainable Food Systems**

Examines the issues and challenges in the global food system. Covers historical events impacting the current food production model, and the effects food systems have on the environment, health, and communities. Explores conventional agriculture and food safety concerns. Emphasizes the movement towards sustainable food systems. Prerequisite: Enrollment in the Culinary Arts program, 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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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.

**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.

**DAST 121 (4) C**  
**Fundamentals of Chairside Procedures I**

A study of pre-clinical chairside assisting procedures. Composition, properties, procedures and safety standards related to dental materials.

**DAST 122 (7) C**  
**Clinical Chairside Procedures I**

This lab and clinical course is an introduction of basic concepts and principles of chairside dental assisting.

**DAST 123 (2) C**  
**Dental Assisting Law and Ethics**

Focuses on ethics and law in dentistry, and modeling of the American Dental Assistants Association's professional Code of Ethics.

**DAST 124 (2) C**  
**Fundamentals of Dental Imaging**

Designed to provide a foundation of the principles and application of dental radiology. Students learn about theory, safety, and application of oral radiographic techniques.

**DAST 125 (2) C**  
**Dental Imaging Laboratory**

Designed to create radiology proficiency. The student will safely expose, process, and mount dental radiographs while professionally interacting and ensuring patient ease and comfort.

**DAST 131 (3) C**  
**Fundamentals of Chairside Procedures II**

Provides the foundational knowledge to acquire the skills necessary to assist in general and dental specialty practices, including advanced dental assisting functions.

**DAST 132 (10) C**  
**Clinical Chairside Procedures II**

This lab/clinical course is designed for the student to apply chairside four-handed dentistry in a clinical setting while continuing to develop advanced dental assisting functions necessary in general and specialty practices.

**DAST 133 (2) C**  
**Professional Preparations**

Prepares the student to take the DANB for CDA certification, as well as self-market.

**DAST 140 (12) C**  
**Experiential Dental Assisting**

This final program course is designed to provide the student with the opportunity to perfect dental assisting competence through experiential practicum.

**Dental Auxiliary,  
Expanded Function**

**EFDA 100 (1) C**  
**Procedures I**

Reviews and reinforces the duties and skills of a dental assistant: oral hygiene instructions, radiographs, coronal polishing, fluoride treatments, and final impressions. Students perform many of these procedures under general rather than close supervision of a dentist.

**EFDA 101 (3) C**  
**Restorative Lab I**

The course requires the student to utilize and build on knowledge and skills acquired from all previous clinically and didactically related expanded functions dental auxiliary courses, including: oral anatomy, dental anatomy and morphology, dental materials, restorative dentistry procedures in order to gain proficiency in performing restorative procedures on typodonts and on patients.

**EFDA 110 (2) C**  
**Dental Coronal Anatomy**

Covers dental anatomy related to the EFDA scope of restorative practice: tooth morphology, anatomical features and function. Emphasizes coronal anatomy, occlusion, GV Black's classification of cavity preparation and basics of primary and permanent dentition.

**EFDA 111 (2) C**  
**Dental Materials and Technique**

This course is the study of the chemical, physical and mechanical properties of dental materials which will be commonly used by the EFDA. Besides materials science, selection of the appropriate material for different preventive and restorative procedures will be dealt with as well as safety measures and proper handling protocol. Basic techniques for the utilization of these materials will be introduced. With the knowledge gained in EFDA 100, this course will reinforce specific procedures.

**EFDA 200 (1) C**  
**Procedures II**

This course is a continuation of Procedures I and reviews the various duties and skills already within a dental assistant's scope of practice such as oral hygiene instruction, taking of radiographs, coronal polishing, administration of fluoride, initial and final impressions. Being connected closely with a corresponding lab component, this course allows the EFDA student to increase competency when performing many of these procedures under "general" rather than "close" supervision of a dentist.

**EFDA 201 (4) C**  
**Restorative Clinic II**

Demonstrate clinical competence on patients using the full range of basic restorative procedures, from patient management to technical skill of operating field isolation, restoration placement, and finishing.

**EFDA 202 (1) C****EFDA License Exam Preparation**

Preparation for the Central Regional Dental Testing Services (CRDTS) restorative examination for licensure. The CRDTS requires the placement, carving and finishing of one anterior and one posterior class II restoration within a specific time frame at a minimum passing level. Practice written and clinical simulation tests will be administered to develop proficiency.

**EFDA 212 (1) C****Ethics and Jurisprudence**

Covers the ethical, legal and regulatory issues for an EFDA in private dental offices and community settings. Includes professional traits, theories of moral development, ethical dilemmas and principles, the state dental practice act, the EFDA-patient relationship and risk management in the dental practice.

**Dental Hygiene Bachelor of Applied Science****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 health-care 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.

**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.

**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.

**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.

**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**

Theory of pain control in dental hygiene and restorative dentistry including nitrous oxide administration, topical anesthesia, and nerve block, field and infiltration local anesthesia applications.

**DHY 312 (2) C**  
**Pain Control Anesthesia Practice**

Practice of pain control in dental hygiene and restorative dentistry including nitrous oxide administration, topical anesthesia, and nerve block, field and infiltration local anesthesia applications.

**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.

**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 (2) 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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 226.

**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 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.

**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 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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**Drama****DRMA& 101 (5) C  
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) S****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.

**DRMA 108 (1-5) C****Rehearsal and Performance**

Participation in rehearsal and performance process culminating in performance. Audition or instructor permission.

**DRMA 121 (5) C****Acting**

Theory and practice of acting fundamentals. Exercises in voice, movement, observation, imagination and script analysis. Culminates in scene study, production and performance process.

**DRMA 122 (5) C****Acting**

Continuation of DRMA 121 with emphasis on characterization and further scene study. May culminate in public performances.

**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.

**DRMA 125 (5) S****20/21st Century U.S. Theater & Race**

Course explores the cultural, critical, and artistic works of Native American, Black, Arab American, Asian American, and Latinx theater artists/performers from the 20/21st centuries. Course considers the socio-historical, aesthetic, and political contexts engaged through these artists' works. Course explores the relationship between the construction of identity and strategies of performance to describe race, gender, sexuality, class, subjectivity, and ideas of belonging in the U.S. imagination.

**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 140 (5) C****Technical Theatre Skills I**

An introduction to technical theater artistic skills. Explores design, tools, language, rehearsal processes, and specializations within technical theater as an artistic profession. Students attend local theater rehearsals (e.g., Intiman Theater) to witness the work of technical theater professionals. First of two skills classes for the Tech Theater for Social Justice AA-DTA emphasis

**DRMA 141 (5) C****Tech Theatre Skills II**

Second of two skills classes for the Technical Theatre for Social Justice emphasis. Focus on technical skills needed to work as apprentices on Intiman Theatre mainstage shows. Students select a technical theatre focus area and receive hands-on training from Intiman's expert technicians and local IATSE members while exploring how backstage storytelling relates to social justice issues.

**DRMA 197 (2) C****Work Experience-Technical Theatre**

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

**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.

**Early Childhood & Family Studies Bachelor of Applied Science****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 strategies to teach math and science content based on the understanding of cognition and state guidelines for early learning. Prerequisite: Entry into the BAS program.

**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. Prerequisite: Admission into ECE.

**ECE 320 (3) N****Creative Expression**

Students will analyze the meaning of creativity using music, art, movement, and imaginative play to promote development across 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. Prerequisite: entry into the ECE BAS program.

**ECE 350 (4) N****Practicum: Interactions**

Students will analyze the meaning of creativity using music, art, movement, and imaginative play to promote development across 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. Prerequisite: entry into the ECE BAS program.

**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. Prerequisite: Entry into the ECE BAS program.

**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. Prereq: Entry into the ECE BAS program.

**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. Prerequisite: Entry into the ECE BAS program.

**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. Prereq: Entry into the ECE BAS program.

**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 as well as address the importance of advocacy for vulnerable populations. We will explore and contribute to professional development in a variety of formats in the ECE field. Prerequisite: Entry into the ECE BAS program.

**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& 132 (3) 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) 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& 137 (3) N**  
**Outdoor Learning for Young Children**

This course is an exploration of nature-based, outdoor learning experiences for all young children. Students will identify the benefits of outdoor learning for children, learn about the teacher's role in supporting learning in the outdoor learning environment, consider adult comfort levels with outdoor experiences, and examine risk-taking as a part of learning.

**ECED& 139 (3) N**  
**Administration**

Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available for 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 102 (2) N**  
**Technology in Early Childhood Education**

Students will identify culturally responsive and developmentally appropriate classroom technology in early childhood classrooms. Students will identify technology systems and tools that early learning programs are required to use including MERIT, Electronic Attendance System and online training portals. Students will learn how to use Microsoft Office and evaluate various perspectives on using electronic media (computers, tablets, television, cellphones, etc.) in early childhood education.

**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.

**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.

**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, and collaborative treatment strategies.

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**Early Childhood & Family Studies****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.

**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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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& 132 (3) 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) 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& 137 (3) N**  
**Outdoor Learning for Young Children**

This course is an exploration of nature-based, outdoor learning experiences for all young children. Students will identify the benefits of outdoor learning for children, learn about the teacher's role in supporting learning in the outdoor learning environment, consider adult comfort levels with outdoor experiences, and examine risk-taking as a part of learning.

**ECED& 139 (3) N**  
**Administration**

Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available for 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 102 (2) N**  
**Technology in Early Childhood Education**

Students will identify culturally responsive and developmentally appropriate classroom technology in early childhood classrooms. Students will identify technology systems and tools that early learning programs are required to use including MERIT, Electronic Attendance System and online training portals. Students will learn how to use Microsoft Office and evaluate various perspectives on using electronic media (computers, tablets, television, cellphones, etc.) in early childhood education.

**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.

**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.

**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, and collaborative treatment strategies.

## Early Childhood Education

**CCE 195 (3) N**

### Art for Young Children

Paint, draw and use clay to discover personal expression. After exploring these media themselves, class members review the components providing art experiences to young children, 3 to 8 years old. Class members conduct a series of art classes for children to practice facilitating children's self-expression in these fundamental art media. Students enrolling in this course should have access to early childhood settings and preschool-aged children. Observations of children and their environments is a requirement of the ECE Curriculum.

**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 Education

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& 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.

**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.

## Education

**EDUC& 115 (5) C|N**

### Child Development

Builds a foundation for explaining how children develop in all domains, from conception through early adolescence. Explores various developmental theories, methods for documenting growth, and impact of brain development. Topics and issues addressed: include stress, trauma, culture, race, gender identity, socioeconomic status, family status, language, and health.

**EDUC& 130 (3) C|N**

### Guiding Behavior

Examines the principles and theories that promote social competence in young children and create safe learning environments. Develops skills that promote effective interactions, provide positive individual guidance, and enhance group experiences. Includes working/volunteering 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& 202 (5) C**

### Introduction to Education

Intro to the Elementary Education profession. Overview of the education profession and U.S. educational system, including historical development, social foundations, and diversity of educational institutions. Focus on the K-8 system. Includes current theories, trends and issues in education and the community, roles and responsibilities of teachers, learners, and other school personnel.

**EDUC& 203 (3) N**

### Exceptional Child

Formerly CCE 113 Human Exceptionalities) Requirement for Early Childhood Education degree. This course 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. For questions contact the Health and Human Services Division at (206) 934-3783.

**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& 230 (5) C**  
**The Democratic Classroom**

Develop guidance and classroom management skills based on current research and best practices that support positive development for children including mutually respectful methods of communication, prevention strategies, problem solving, conflict resolution, and ethical interactions.

**EDUC 197 (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.

**EDUC 198 (1-5) C**  
**Work Experience-Education**

Integrates educational studies with continued supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace, and to continue practicing and updating skills gained in EDUC197. Includes updating previous work experience learning outcomes and continuing to monitor achievement through self-evaluation and faculty and supervisor evaluations

**EDUC 199 (1-5) C**  
**Work Experience-Education**

Integrates educational studies with continued supervised work/internship experience. Provides individualized opportunities to apply knowledge and skills in the workplace, and to continue practicing and updating skills gained in EDUC198. Includes updating previous work experience learning outcomes and continuing to monitor achievement through self-evaluation and faculty and supervisor evaluations.

**EDUC 200 (1-5) C**  
**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 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.

**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 260 (5) N**  
**Trauma Informed Care in ECE**

This is an introduction to trauma-informed care. We will define and describe trauma and reflect on its impact on children's behavior, their families, and our community. Curriculum examines types of traumas, how they are present in young children and their families, and strategies for building resilience. We will learn how to practice trauma-informed care and self-care strategies in ECE classrooms. Some content referenced in this class may be triggering, active self-care is strongly encouraged.

**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.

**Electronics****EET 105 (2) N**  
**Introduction to Technology**

Survey disciplines within the field of electronics and technologies related to electronic occupations to give students a knowledge of the standards, practices and skills necessary for employment in electronic-related occupations. Guest speakers, field visits, reading, media or general discussion with class members. Computer Fee.

**EET 106 (1) N**  
**Introduction to Soldering**

Beginning electronics support course providing the student with information and skills to safely perform soldering tasks in the field. The student will acquire skills to remove components and replace them without causing damage to either the component or the Printed Circuit Boards (PCB's). The student will learn the techniques to select the proper solder, soldering aids, tools, and other associated test equipment. Prerequisite: EET 160 or EET 161 or instructor permission.

**EET 107 (5) N**  
**Introduction to Aviation Electronics**

Presents an overview of aviation electronics and the instrumentation commonly found in commercial aviation. Includes an introduction to schematic reading, OSHA/FAA/Basic electrical safety, tools and basic connectors, plugs, cables and wiring, shielding. Prerequisite: EET 162 or instructor permission to take EET 162 concurrently during the same quarter.

**EET 108 (5) N**

### Introduction to Fiber Optics

Introduces fiber optics theory and maintenance as applied to Information Technology, Aerospace, Broadband and generic use. Emphasis on hands on labs using industry standard diagnostic test equipment, safety, routing, installation, cleaning, measurement, and inspection processes. Prepare for FOA certification. Prerequisites: Math 081 or placement into Math 084 or instructor permission. Computer Fee.

**EET 109 (5) N**

### Mathematical Applications for Circuit Analysis

This is an 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 triangles, basic trigonometric functions, vectors and complex numbers. Prerequisite: MATH 081 or equivalent.

**EET 112 (5) N**

### Fundamentals of Fluid Power

Introduction to fluid power systems used in industry. Covers fundamentals of hydraulic and pneumatic systems including fluid power components and schematic diagrams. Includes electrical/electronic control of fluid power systems and information on 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 and magnetism, light and modern physics. Includes physical concepts as applied to industrial-technical fields. Prereq: EET 109 or MATH& 141.

**EET 131 (5) N**

### IT Essentials I - A+ Certification

First of two courses that addresses the body of knowledge required for the current CompTIA A+ Certification. The emphasis is on the fundamentals of installing, maintaining, and configuring computer hardware; operating systems; networks; and security. Course Prerequisite: Ability to use an internet browser and create a document with a word processor. Computer lab fee.

**EET 132 (5) N**

### IT Essentials A+ Certification Advanced

This course is part two of a two-course series that addresses the body of knowledge required for the current CompTIA A+ Certification. Emphasis is placed on the fundamentals of installing, maintaining, and configuring computer hardware, operating systems, networks, and security. Computer lab fee.

**EET 137 (5) N**

### Introduction to Robotics

**\*\*Please Note:** This course replaces EET 136\*\*This course introduces foundational concepts in building and programming robots. Students 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 end effectors, sensors, 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**

### Principles of DC Electronics

First in a series of lecture-lab courses designed for an in-depth study of electronics. Performance goals will allow students to analyze series and parallel circuits. Basic concepts of energy, work, power, current and voltage are studied as well as Ohm's and Kirchhoff's laws. Achievement of course goals is supported using computer models and hands-on labs. Prerequisite: MATH 081 or equivalent, or higher

**EET 162 (5) N**

### A.C. Principles of Electronics

This 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, and transformers. Computer models, as well as labs with the oscilloscope, are used throughout.

**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. Computer Fee.

**EET 165 (5) N**

### Analog Circuits and Devices

Continued analysis of characteristics of 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. Prerequisite: EET 163 or instructor permission. Computer Fee.

**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 flip-flops, and an introduction to programmable logic controllers (PLCs). Prerequisite: EET 161 or instructor permission. Computer fee.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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. Computer fee.

**EET 201 (5) N**  
**Energy Generation and Conversion**

This course covers principles of AC and DC rotating equipment 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. Course Prerequisite(s): 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 286 (5) N**  
**Biomedical Equipment I**

This course covers 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. Laboratory exercises cover the maintenance, troubleshooting, repair, and calibration of equipment.

**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 have finished their electronics certificate requirements and would like to improve their skills before actively seeking a job. (55 hours of job-related work experience = 1 credit.) Prereq: Completion of appropriate amount of designated program and permission.

**EET 297 (4) N**  
**Biomedical Technician Externship**

This course is designed to supply students with industry work experience in the biomedical electronics field. Students are expected to source their own work site, but it must be approved by the instructor. Specific equipment will vary from site to site but the student is expected to generalize the experience to the biomedical electronics field.

**Engineering**

**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.

**ENGR& 214 (5) C|N|S**  
**Statics**

Basic concepts, resultants, force-couple relationships, equilibrium analysis, three-dimensional structures, two-dimensional frames, trusses, beams, friction, and geometric properties of area. Vector algebra used.

**ENGR& 215 (5) C|N|S**  
**Dynamics**

An in-depth treatment of the dynamics of particles and rigid bodies using vector analysis. Topics include kinematics, kinetics, momentum, and energy principles for both particles and rigid bodies. A required course for numerous engineering programs. Transfer class.

**ENGR& 224 (5) N**  
**Thermodynamics**

Introduces the basic principles of thermodynamics. Covers energy transformations, work and heat, ideal and real gases, first and second laws of thermodynamics, and applications to engineering systems.

**ENGR& 225 (5) C|N|S**  
**Mechanics of Materials**

Covers basic relationships between axial, torsional, bending, and shear loads acting on solid elements such as rods, shafts, columns, and beams and their allowable stress, strains and deformations(axial deformation, angle of twist, and deflection). Mohr's circle of stress.

**ENGR 110 (2) C|N|S**  
**Engineering Orientation**

Covers fields of engineering, career options and general information.

**ENGR 115 (5) S**  
**CAD CNC Plasma Table Programming and Operation**

Programming, maintenance and proper use of computerized cutting system such as CNC plasma cutters, laser cutters, routers, and mills using G code. Includes basic 2D and 3D CAD instruction.

**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.

**Engineering Graphics & Design Technology****TDR 100 (5) N****Basic BIM for Design and Construction**

Introduces basic Building Information Management/Modeling (BIM) practices using Autodesk's Revit and Bentley's Microstation programs. Focuses on familiarization with BIM environment including drawing commands, efficiencies of CAD vs. BIM and integration of green analysis software with BIM software. Emphasis placed on developing 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. Computer Lab Fee. Prereq: TDR 101 or instructor permission.

**TDR 103 (4) N****Energy Analysis for 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 instructor permission.

**TDR 109 (1) N****Architectural Engineering Lab**

A supervised drafting development lab where students can work on class projects to increase speed and competency and hands-on skills using software or hand drafting techniques. May be repeated. Computer Lab Fee.

**TDR 111 (5) N****Basic CAD Drafting for Construction and Design**

Introduces basic Computer Aided Drafting practices using Autodesk's AutoCAD program. Focus will be on drawing commands, layering, scaling, dimensioning and text styles as used in construction/design applications. Emphasis placed on developing production skills. The first of a two-class sequence. Open Lab. Computer Lab Fee.

**TDR 112 (5) N****Intermediate CAD Drafting/Construction & 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 applications. May introduce isometrics and 3-D concepts. Emphasis on production skills. Prerequisite: TDR111 or instructors permission. Open lab. Computer lab fee.

**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 124 (5) N****Materials and Methods of Construction**

Introduces the 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 134 (5) N****Systems in Buildings**

Focuses on the major building systems including HVAC, water and waste, fire protection, electrical and structural. Introduces the Uniform Building Code, type of construction and history. Includes heat loss calculation and lateral loads and their resisting elements. Includes Earth work and Foundations.

**TDR 144 (5) N****Design and Construction Environment**

Introduces basic organizational, business and legal aspects of the construction/design industry. Includes business forms, contractual obligations, employment issues, registration duties to the public, safety and other issues, which may affect business.

**TDR 160 (5) N****Applied Mechanics I**

Designed primarily for the non-engineering students, covering basic concepts of force systems, equilibrium, moments, centroids, moments of inertia, and simple beam design as applied to structural steel. Includes loading criteria, tributary loads and deflection.

**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 170 (5) N****Introduction to Design for 3D Printing**

This course will introduce students to Design for manufacturing processes by using 3D models designed in programs such as AutoCAD, Solidworks, etc. This course will also familiarize students with the processes and proper usage of 3D printers and slicing software. Introduction to various new design software used for 3D printing.

**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.

**TDR 172 (5) N****Intermediate Solidworks**

This course builds on the modeling skills taught in TDR171 (Introduction to SolidWorks) and includes expanded coverage of part and assembly modeling and the production of engineering drawings, as well as an introduction to parametric solid modeling, the use of analytical tools available within the SolidWorks application, basic surfacing, skills associated with the modeling of sheet metal parts, molds and weldments, and use with various industrial processes, particularly additive manufacturing.

**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 Simplify 3D. Significant practice troubleshooting and problem solving designs and 3D prints. Prerequisite: TDR 170 (Introduction to Design for 3D Printing).

**TDR 176 (4) N****Advanced AutoCAD for Arch & Engineering Drafting**

Student will be introduced to advanced concepts of AutoCAD. Course continues skill-building with the AutoCAD program and offers instruction and hands-on practice in the development of productivity tools such as macros, templates, and system customizing. In addition, students will begin to work in 3D (three dimension). Prerequisite: TDR 112 or Instructor Permission. Computer Fee.

**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 297 (10) N****Special Topics in Const Design Drafting with CAD**

Students with solid AutoCAD skills will be introduced to Architectural Desktop, one of Autodesk's specialized versions of the AutoCAD program. Focus will be on utilizing the special tools and commands to create flexible computer models and drawing sets for construction/design applications. Emphasis placed on developing production skills. Completion of TDR 174 and 175 OR TDR 111 and 112 OR instructor permission.

**TDR 299 (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****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.

**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.

**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.

**ENGL& 112 (5) C|N|S****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.

**ENGL& 113 (5) C|N****Introduction to Poetry**

Study, appreciation and analysis of the form, meaning, music and metaphor of poetry. Includes poems from diverse sources.

**ENGL& 114 (5) C****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.

**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& 246 (5) C****American Literature III**

Covers late 19th and 20th century writers with emphasis on modern fiction, drama, poetry and trends in literature. Practice of critical techniques.

**ENGL 40 (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.

**ENGL 80 (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 85 (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 91 (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.

**ENGL 94 (5) S****Junior English**

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 95 (1-5) 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 97 (10) 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 98 (10) C|N|S**  
**Integrated Reading and Writing II**

This course provides students with a supportive learning community in which 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, vocabulary, study skills, and grammar instruction.

**ENGL 99 (5) C|N|S**  
**Supporting College Writing**

This is a support course for 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. This is a co-requisite and must be taken with English 101.

**ENGL 104 (5) 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**  
**Applied Composition**

Covers skills and strategies needed to meet writing demands in college and on the job.

**ENGL 107 (5) N|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.

**ENGL 115 (5) C**  
**LGBTQ Literature**

Survey of lesbian, gay, bisexual, and transgender literature. Explores ideas, themes, historical contexts, and social issues in fiction, poetry, drama, creative non-fiction, and essays.

**ENGL 116 (5) N**  
**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 119 (5) S**  
**Graphic Novels: Art, Identity, and Storytelling**

This interdisciplinary course features comics, graphic novels, manga, and film to explore the diversity of graphic/sequential storytelling media as a product of culture. Students will put graphic storytelling media into conversation with meaningful aspects of human society, identity, and culture such as art, literature, history, and equity and social justice issues within a global context. They will develop creative, interdisciplinary, and multi-modal projects. Dual ENGL/HUM course.

**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 hypertext, interactive fiction, blogs, social media, apps, video games, and multimedia formats. No specialized software knowledge required. Access to computer and internet recommended.

**ENGL 151 (5) C|N|S**  
**Creative Writing**

Creative Writing introduces a variety of creative writing forms, genres and techniques. Emphasis is on empowerment of personal voice and creative expression using genres such as fiction stories, creative nonfiction, poetry and playwriting. Students will read and discuss published works, engage in the writing process, and collaborate in inclusive student-centered workshops.

**ENGL 152 (5) N|S**  
**Creative Writing**

Continuation of ENGL 152. Creative Writing with focus on development of language, imagery, style, voice, and emphasis on techniques.

**ENGL 153 (5) N**  
**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 160 (5) C**  
**Introduction to Writing for Media**

Introduction to writing for digital and online media including social media, digital journalism, blogs, video games, web sites, mobile apps, and emerging new media formats. Emphasis on developing writing skills for presentation in digital media formats through examination of course readings and creation of digital media projects. No previous software knowledge required. Internet access recommended. Prereq: ENGL&101 Placement.

**ENGL 197 (2) N**  
**Writing Workshop**

Augments instruction in writing within a collaborative environment geared towards understanding how and why we learn most effectively. Provides additional writing support to students in all stages of the reading and writing processes, and for a range of writing contexts and tasks across disciplines. Intended to support students in writing-intensive courses (50% or more of course grade determined by written assignments).



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**ENGL 199 (2) S**  
**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.

**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.

**ENGL 205 (5) C**  
**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.

**ENGL 210 (5) C**  
**Translation for Global Competence**

Introduces the practice of translation but without foreign language competency. Students actively practice global competence, learning about and communicating across cultural differences. Students produce collaborative translations from a world language into English. Designed for both mono and multilingual students.

**ENGL 231 (5) N|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.

**ENGL 232 (5) S**  
**Young Adult Literature**

Exploration of young adult literature that represents culturally diverse populations within the United States with emphasis on the societal values reflected in the genre and the powerful influence of well-crafted stories. Prerequisite: Eligibility for ENGL 099.

**ENGL 258 (5) N**  
**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**

Examines memoir, fiction, poetry, graphic novels, films by and about the people of Asian descent in the US and the diaspora. Focus on Chinese, Japanese, Filipino, Korean, South Asia, Southeast Asian, and Pacific Islander subjects and their works. Topics may include language and identity, history and memory, power and resistance, national and transnational identities, ways of belonging and non-belonging.

**ENGL 265 (5) C**  
**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.

**ENGL 293 (5) C|N**  
**Science Fiction**

Examines selected works of science fiction by creators across cultures. Exploration of science fiction's history, trends, genres, and sub-genres and how they deepen our understanding of contemporary experience.

**ENGL 299 (1-5) C|N**  
**Independent Study**

Create an individual project, syllabus and outcomes with instructor.

## English as a Second Language

**ESL 7 (1-15) C**  
**English as a Second Language-Pre-Literacy**

Pre-literacy Level is designed for students who are unable to read, write, speak, or listen in English and who are pre- or non-literate in their native language. These students are true beginners in ESL in every sense of the word. General goals of the course are to introduce students to the beginning concepts of reading and writing, to expose students to common spoken English for aural comprehension, and to help students begin to use spoken English for meeting classroom and personal needs. Course goals are chosen from the mandated Level 1 Washington State Core Competencies, which are used in SSC's Literacy ESL classes.

**ESL 10 (1-15) C|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.

**ESL 11 (1-15) N**  
**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 12 (1-15) N****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 13 (1-15) N****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 15 (1-15) 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.

**ESL 16 (1-15) 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 20 (1-15) C|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.

**ESL 21 (1-15) N****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 22 (1-15) N****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 25 (1-15) 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.

**ESL 26 (1-15) 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.

**ESL 27 (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 30 (1-15) C|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.

**ESL 31 (1-15) N****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 32 (1-15) N****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 35 (1-15) 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.

**ESL 36 (1-15) 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.

**ESL 39 (1-15) N****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 40 (1-15) C|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.

**ESL 41 (1-15) C|N****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 42 (1-15) C|N****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 45 (1-15) N|S****ESL Reading and Writing 4**

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.

**ESL 46 (1-15) 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.

**ESL 47 (1-5) C**

#### **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.

**ESL 49 (1-15) C**

#### **Vocational ESL Level 4**

Supports vocational, technical and employment training.

**ESL 50 (1-15) 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. Pre-requisite: Completion of ESL 4, placement test or instructor permission.

**ESL 51 (1-15) C|N**

#### **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 52 (1-15) N**

#### **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 55 (1-15) N|S**

#### **ESL Reading and Writing 5**

Provides practice of English reading and writing skills needed for successful transition into college academic and professional-technical courses.

**ESL 56 (1-15) 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.

**ESL 57 (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.

**ESL 58 (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 59 (1-15) C|N**

#### **Vocational ESL 5**

For students currently enrolled in the ESL Program. Provides specific support in vocational ESL and assists students pursuing career and professional technical programs.

**ESL 60 (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. Pre-requisite: completion of ESL 5, placement test or instructor permission. May include concurrent enrollment in ESL 069.

**ESL 61 (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 62 (1-15) N**

#### **English as a Second Language - Level 6B**

Emphasis on composition, reading a variety of texts, grammar and vocabulary expansion.

**ESL 65 (1-15) 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.

**ESL 66 (1-15) N**

#### **ESL Speaking and Listening Level 6**

On completion, be able to listen actively and speak so others can understand.

**ESL 68 (1-6) C|N|S**

#### **Educational Interviewing for ESL Students**

This course serves as an orientation class for new ESL students. Students receive an orientation to the ESL program and to the program's and the college's resources and services.

**ESL 69 (1-15) S**

#### **Service Learning / Vocational ESL**

For ESL students concurrently enrolled in ESL Level 6. Provides specific support in content courses and vocational ESL and assists students in completing their programs and building job-related language skills. Usually 3 credit per quarter.

**ESL 76 (1-5) C|N**

#### **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 78 (1-15) N**

#### **Advanced English Pronunciation 2**

Advanced course on accurate English pronunciation: troublesome vowel and consonant sounds, word stress and sentence intonation.

**ESL 81 (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.

**ESL 82 (1-5) S****ESL Special Topics**

Designed to allow for special course offerings that are responsive to student need and/or current and emerging topics that are related to but not offered as part of the regular Basic ESL curriculum.

**ESL 83 (1-5) S****Strategic Learning in a Content Area**

Supports strategic learning in a college credit class. 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. Instructor permission required and may include concurrent enrollment in ESL 083.

**ESL 85 (1-5) C****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.

**ESL 86 (5) C****Survey of English Grammar II**

This course is designed for non-native speakers of English who need to improve their understanding of more intermediate and advanced English of grammar with an emphasis on paragraph writing using the four sentence types and further development of editing skills and academic vocabulary.

**ESL 96 (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.

**ESL 97 (5) C****College Prep English for Non-Nat Speakers I- Writing**

For non-native speakers. Practice developing coherent, multiple paragraph compositions. Review English writing styles and their application to academic writing.

**ESL 98 (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.

**ESL 99 (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.

**Environmental Science****ENVS& 100 (5) C|N|S****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.

**ENVS 160 (5) C|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.

**ENVS 170 (5) 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.

**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.

**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 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.

**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.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**ENVS 214 (5) C**  
**Food Systems Analysis**

Investigates food system dynamics, with emphasis on the Pacific Northwest and the relationship between food production and the environment while exploring the complex social and economic interactions that occur throughout the food system. Students will question, research, quantify and justify the exchanges that take place in a food system as well as identify opportunities for change. Field trips are an integral part of this course.

**Fire Science**

**FIRE 101 (5) N**  
**Principles of Emergency Services**

This course provides an overview to fire protection and emergency services, career opportunities in the fire protection and related fields, and culture and history of emergency service.

**FIRE 102 (5) N**  
**Fire Behavior and Combustion**

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled.

**FIRE 103 (5) N**  
**Building Construction for Fire Protection**

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies.

**FIRE 104 (5) N**  
**Principles of Fire & Emerg Services Safety/ Surv**

This course introduces the basic principles and history related to the national firefighter life safety initiatives, analyzing the needs for cultural and behavioral change throughout the emergency services.

**FIRE 105 (5) N**  
**Fire Prevention**

This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation.

**FIRE 106 (5) N**  
**Legal Aspects of Emergency Services**

This course will address the federal, state, and local laws that regulate emergency services and include a review of national standards, regulations, and consensus standards.

**FIRE 107 (5) N**  
**Fire Protection Systems**

This course provides information relating to the features of design and operation of fire alarm systems, water based fire suppression systems, special hazard, fire suppression systems, water supply for fire protection and portable fire extinguishers.

**FIRE 108 (5) N**  
**Principles of Fire & Emer Service Administration**

This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service ethics and leadership from the perspective of the company officer.

**FIRE 109 (5) N**  
**Occupational Safety & Health for Emergency Svcs**

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations.

**FIRE 110 (5) N**  
**Strategy and Tactics**

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents.

**French**

**FRCH& 121 (5) C|N**  
**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 reading, writing, listening, and speaking at the novice level. Exercises are assigned outside of class to increase oral and written proficiency. Intended for students with little or no college-level French.

**FRCH& 122 (5) C|N**  
**French II**

Intended for students who have completed French 121 or its equivalent. Interactive course fostering communicative skills where the language is situated within francophone cultural contexts and emphasis is placed on meaning as well as grammatical forms. Develops reading, writing, listening, and speaking at the intermediate novice level. Exercises are assigned outside of class to increase oral and written proficiency.

**FRCH& 123 (5) C|N**  
**French III**

Intended for students who have completed French 121 and French 122 or their equivalents. Interactive class fostering communicative skills where the language is situated within French-speaking cultural contexts and emphasis is placed on meaning as well as grammatical forms. Develops reading, writing, listening, and speaking at the beginning level. Exercises are assigned outside of class to increase oral and written proficiency.

**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.

**FRCH& 222 (5) C**  
**French V**

Continuation of FRCH& 221.

**FRCH& 223 (5) C**  
**French VI**

Continuation of FRCH& 222.

**FRCH 204 (5) C****Advanced French Language and Literature**

Advanced study of core literature and grammar. Choose an area of interest and prepare regular compositions and presentations. May include creating and performing adaptations of plays and short stories. Prereq: FRCH& 223 or permission.

**Gender & Women's Studies****WMN 200 (5) C|N****Introduction to Gender & Women Studies**

Introduction to interdisciplinary field of Gender and Women Studies, focusing on how intersections of gender, race, class, sexuality, religion, nationality, age, and ability shape people's lives. Emphasizes the construction and enforcement of gender differences and inequalities in relation to race, class, sexuality and culture. Readings include both narrative and analytical approaches.

**WMN 205 (5) C****Women, Gender, & Globalization**

Interdisciplinary course introducing the study of gender and women in a transnational context. Examining the lives, experiences, and material conditions of women around the world and how they are impacted by the conditions emerging from globalization, global capitalism, policies developed by large international entities, social movements, and neoliberalism. Regional emphasis may vary based on instructors.

**WMN 257 (5) C****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 50 (1-15) C****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.

**GED 51 (1-10) C****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 52 (1-15) C|N****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 60 (1-15) C****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.

**GED 61 (1-10) C****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 62 (1-15) C****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.

**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.

**GEOG 92 (5) S****Geography Through Art**

Explore world geography continent by continent through map work and artwork of the region. For each continent students will study the major concepts in geography for the area including climate, landforms, resources, and culture then explore how art is reflective of the region. Each student will create a personal geography notebook that contains all their maps and art projects for course.

**Geology****GEO& 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.

**GEO& 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.

**GEO& 106 (5) C|N****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 111 (1) 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 118 (1) 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**

This course explores the remarkable story of the ice ages in the Pacific Northwest over the last three million years, with special attention to how these events have sculpted the modern landscape of this area. Other topics include the evolution of plants and animals over this dramatic period, and the earliest appearance of people in this area. This is a lab science credit course, a transfer course, and has no prerequisites.

**German****GERM& 121 (5) 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) N****German II**

Continued systematic study of German focusing on listening, speaking, reading, writing, and cultural understanding. Prerequisite: GERM& 121 or permission.

**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 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**

Introduces principles of User Experience Design (UX), and skills required for front end development, specifically HTML and CSS. Students will be introduced to concepts such as user research, user testing, personas, and task flows while building responsive websites and learning how to use basic prototyping tools.

**DES 152 (4) C****Interactive II**

Continues the exploration of User Experience Design (UX), and skills required for front end development, specifically HTML and CSS. Students will be introduced to concepts such as Design Thinking, Design Systems, Empathy Maps, Customer Journey Maps, Prototyping tools, and SVG animation.

**DES 153 (4) C****Interactive III**

Advanced principles of Web Design and User Experience Design, building on the core principles of the previous two quarters. Students will build complex websites with advanced techniques such as CSS Grid and Animated SVG, and explore additional prototyping tools such as Webflow, while exploring emerging technologies such as Augmented Reality and Voice Design.

**DES 160 (4) C****Design Thinking and Storytelling for Design**

A hands-on exploration of design thinking and public speaking tools geared at helping students produce novel solutions, and present them effectively. Students will explore design thinking methodology, employ creativity tools, prompts, and sprints to become more agile and confident creative problem solvers.

**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.

**DES 230 (4) C****Graphic Design III**

This course covers the history and design of packaging: three-dimensionality, marketing insights, innovations in technology. We look at consumption and how packaging communicates to consumers. Projects include, for example, soda bottles, folding box packages and a line of products, mocked up to a high standard of polish.

**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 251 (4) C****Interactive IV**

Advanced principles of Interaction Design including eCommerce Websites, continued exploration of CSS Grid, prototyping tools, design thinking, design for the public good, social media strategies, and Content Management Systems (CMS) such as WordPress.

**DES 252 (4) C****Interactive V**

Introduction to Motion Graphics and how it relates to Web design and development. Focus on using Adobe AfterEffects to create video and animation projects for web, TV, and Film.

**DES 253 (4) C****Interactive VI**

Final Capstone project which utilizes all skills acquired in the previous quarters along with public speaking and whiteboard interview practice and the production of their personal portfolio web site.

**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 (4) C****Environmental Graphics I**

Explores graphic 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 299 (1-5) C****Independent Study - Graphic Design**

Independent study on selected graphic design topics.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**Health**

**HEA 90 (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.

**HEA 150 (5) N|S**  
**Health and Human Sexuality**

Wellness and human sexuality are examined as multidimensional subjects, with topics including but not limited to behavior, stress management, communicable and non-communicable disease, nutrition, physical activity and fitness, psychoactive substances, contraception, sexuality, and aging. Issues related to diversity and inclusion are incorporated into the above topics from both local and global perspectives.

**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 299 (1-5) C**  
**Independent Study: Health**  
Independent study in health education.

**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.

**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.

**HSM 476 (1) C**  
**Healthcare Services Management Capstone I**

The 1st of 3 successive capstone courses in Healthcare Services Management. 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.

**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.

**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.

## Hearing Impairment, Survey of

SPS 141 (9) C

### Sterile Processing Services 141

Provides advanced clinical practice to develop entry-level skills. Prereq: AHE 140 with a 2.0.

## High School Completion

HSC 41 (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.

HSC 42 (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.

HSC 43 (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.

HSC 44 (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.

HSC 45 (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 46 (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.

HSC 47 (1-5) C|N|S

### 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 48 (1-5) C|N|S

### 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 49 (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 50 (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.

HSC 52 (1-5) N

### U.S. History 1

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 53 (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 54 (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 55 (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. .

HSC 82 (1-5) N

### HSC Special Topics

Designed to allow for special course offerings that are responsive to student need and/or current and emerging topics.

## History

HIST& 126 (5) C|N|S

### World Civilizations I

The history of human societies from the earliest complex societies through the end of the ancient world (circa 500 C.E.), with particular focus on social, economic, political, intellectual, and artistic developments. Students apply a global perspective by studying ancient cultures, worldviews, and social institutions, as well as systems of thought and belief.

HIST& 127 (5) C|N|S

### World Civilizations II

The global history of medieval and early modern societies from 500 to 1750 C.E., with particular focus on social, economic, political, intellectual, and artistic developments. Students apply a global perspective by studying different worldviews and social institutions, as well as systems of thought, religion, science, and art, laying the foundations of the modern world. Includes emphasis on the increasingly global interaction of cultures in both enriching and exploitative ways.

**HIST& 128 (5) C|N|S**  
**World Civilizations III**

The history of the modern world from c. 1750 to the present, with particular focus on social, economic, political, intellectual, and artistic developments. Students apply a global perspective by studying different cultures, worldviews, and social institutions, as well as systems of thought and belief. Students will critically examine primary source material, such as written texts, artistic productions, and archaeological evidence.

**HIST& 136 (5) C**  
**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& 146 (5) 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.

**HIST& 147 (5) 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.

**HIST& 148 (5) 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& 214 (5) C|N|S**  
**Pacific Northwest History**

This course explores the histories of the Pacific Northwest, especially Washington State, from First Peoples through cultural contact, exchange, colonization, political and economic development. Emphasizes the growth of the Northwest in relation to national and global developments, foregrounding the dynamics of a multicultural society responding to environmental crises.

**HIST 90 (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 91 (5) S**  
**US 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 92 (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 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.

**HIST 140 (5) 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 145 (5) C**  
**Women, Race and Class**

Focuses on the United States and its historical stratification by race, sex and class. Examines the experience of women in their own words, with emphasis on women of color. Examines 'her story' to help in understanding the conflict facing the divided women's movement.

**HIST 150 (5) C|N**  
**Race and Culture: an American History**

Surveys the making of the multicultural United States from indigenous homelands to settler colonialism. Examines the experiences of indigenous peoples, African Americans, Latinx Americans and Asian Americans in exposing the systemic race, class and gender oppression that generates wealth and power in the U.S., and how the struggles of people of color for political power, community well-being and cultural integrity embody the U.S.'s possibility for freedom and democracy.

**HIST 210 (5) C**  
**Contemporary Asia: Issues and Influences**

Focuses on contemporary issues and influences of selected Asian countries regionally and globally. Emphasizes responses to the problems and challenges of economic, political and social development.

**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).

**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 281 (5) C****Queer and Trans History**

Introduces students to the emergence of Queerness and Transness as identity categories, the role of race, class, and gender in their formation, and the historical impact of Queer/Trans communities. Focuses on these categories and communities as they are historically situated in the Western Europe/United States context, and critically examines that relationship through a decolonial lens. Students will also learn to analyze literature as historical artifact.

**HIST 298 (1-5) C|N****Special Topics: History**

Independent study in selected history topics under faculty supervision.

**Hospitality****HOS 101 (1) C****Customer Service Practicum I**

Application of basic customer service theory in a full service restaurant or pastry case. Includes bussing, housekeeping, mise en place for both casual and formal restaurant settings; and customer service and sales techniques in bakery counter settings.

**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 setup and wait staff duties. In the bakery counter setting, students practice product rotation and merchandising.

**HOS 103 (1) C****Customer Service Practicum III**

Students acquire expertise in customer service by performing opening/closing procedures, displaying French, English and Russian table service, and training bus staff.

**HOS 104 (1) C****Customer Service Practicum IV**

Introduction to leadership positions in the dining room. Mastery of French service; exhibition of tableside food preparation and service in a fine dining setting. Encompasses maitre d'hotel duties, supervision of opening/closing, training of wait staff and kitchen liaison duties.

**HOS 105 (1) C****Customer Service for Specialty Desserts Breads**

For desserts students. Students assume responsibility for opening/closing, sales, organization and merchandising of product and training of first-quarter students at a retail pastry case.

**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.

**HOS 111 (1) C****Introduction to Customer Service: Theory**

Introduction to the theory behind the operation of table service in a variety of dining environments. Instruction includes: dining room safety, professional service and etiquette, guest interaction, menu knowledge, ticket writing and use of a variety of dining room equipment. Students explore historical and modern restaurant ethics and culture.

**HOS 112 (0.5) C****Spreadsheets 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.

**HOS 113 (2) C****Spreadsheets and Menu Planning**

This class introduces key concepts for using business spreadsheet applications such as MS Excel and teaches various menu layouts and designs using MS Word. Students will use proper language in the creation of menus with these software applications. They will review the basics of cell formatting, functions, and data manipulation in a spreadsheet, and perform weight to volume conversions while learning how to cost out recipes. A foundation for the COD notebook will be created during this course.

**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.

**HOS 123 (2) C****Costing, Purchasing and Inventory**

Explores connection between profit and food cost; discusses product waste and defines costing terms and purchasing units; introduces 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.

**HOS 124 (2) C****Menu Planning & Recipe Development II**

Create a portfolio of tools needed to design, provision, produce, & lead the execution of a restaurant menu. Learn menu formats, styles, and function in a food business. Utilize technical writing skills to develop recipes for a student-created restaurant menu. Perform weight to volume conversions. Utilize software programs to design a menu, create order guides, manage budgets, inventory & food costs.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**HOS 127 (2) C**  
**Career Planning and Human Resources Management**

Exploratory course designed specifically for those in the Culinary field: Includes resume writing, interviewing for jobs and maintaining social media presence while fielding a Culinary career; maintaining wellness and mental health in a stressful environment; understanding human resources management concepts and introduction to hospitality law.

**HOS 138 (1) C**  
**Barista Theory I: Operations and Management**

In this theory companion to the HOS 139 practicum, students will identify the tools and equipment used to make espresso and coffee drinks: covers classic espresso drinks and how they are prepared, and customer service essentials and espresso program fundamentals. Students also learn an abbreviated history of espresso - the foundation of a fifteen-billion-dollar industry.

**HOS 139 (1) C**  
**Barista Lab I: Practical Applications**

Covers practical knowledge of contemporary barista service in a real-world setting. Students will apply methods and skills used to make and serve classic espresso-based beverages in a working coffee business, practice industry standards related to maintenance and upkeep of espresso-related equipment, demonstrate familiarity with proper food safety and sanitation procedures, and assess and requisition product inventory to maintain adequate supplies for the venue.

**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.

**HOS 201 (3) 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 résumé writing.

**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 401 (5) S**  
**Cost Controls**

Provides the basics of cost control management in the food and beverage industry within the Hospitality Industry by using standard cost control ratios to track labor and other expenses.

**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 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. This course is designed to help the student understand and apply cause and effect relationships between Performance Measures and their causes. By the end of the course students will be able to analyze the business situations, analytically think about the situation, and make their "evaluation and recommendations based on available information.

**Human Development****HDC 100 (1-3) C|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. Nominal career assessment fee.

**HDC 101 (1-3) C|N|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 119 (1-3) N****Stress Management**

Learning about the human stress response and building skills to accurately appraise and regulate the physiological response to stress. Includes functional understanding of the nervous system and evidence-based mind/body stress reduction strategies.

**HDC 125 (3) N****Learning Strategy for Math Success**

Identifies emotional and cognitive barriers to math learning. Covers research-based skills for strengthening math approach and performance. Includes learning styles, anxiety management, relaxation techniques, cognitive behavioral strategies, memory storage and retrieval, and other skills related to math success.

**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 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 107 (5) S****Introduction to Environmental Humanities**

Why do we think of "nature" as something apart from human "culture"? How have past representations of this disconnect informed our attitudes today? How can the arts and humanities help to create and maintain a more resilient and biologically diverse world during global ecological crisis? This introduction to ecocriticism in the humanities explores these questions and a wide range of ethical & political concerns for the environment, nonhuman animals, and environmental justice.

**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****Democracy and Capitalism**

Examines state formation in the context of global capitalism. Students will study the ways in which economic structures produce specific social relations of power - such as racism and patriarchy - and the role of the state in producing and reproducing these systems. Each class is structured around a unique theme. Past themes for this course have included prisons, struggles for Black liberation, and reproductive justice.

**HUM 119 (5) S****Graphic Novels: Art, Identity, and Storytelling**

This interdisciplinary course features comics, graphic novels, manga, and film to explore the diversity of graphic/sequential storytelling media as a product of culture. Students will put graphic storytelling media into conversation with meaningful aspects of human society, identity, and culture such as art, literature, history, and equity and social justice issues within a global context. They will develop creative, interdisciplinary, and multi-modal projects. Dual ENGL/HUM course.

**HUM 120 (5) S****Asian Cinema**

Introduces 20th and 21st century films/filmmakers of several Asian countries. Students will explore Asian film narratives that represent social, political and cultural movements in Asia. Invites students to connect AAPI identities and cultures to Asian cinema topics such as nationalism, representations of spiritual practice, borders/migration, war/empire, new technologies, storytelling, etc. Fulfills GS, IS, Comm, VLPA designations. Prerequisite: ENGL& 101 Placement.

<b>HUM 121</b>	<b>(5)</b>	<b>S</b>	<b>Issues in the Humanities</b> Introduces students to a core humanities issue from multiple and interdisciplinary perspectives. Explores how the humanities intersect with various career, disciplinary, or academic pathways. Teaches the importance of interdisciplinary inquiry in research and provides models for how to formulate, undertake, and present projects. Emphasizes interdisciplinary inquiry and methods in the humanities (visual media, history, literature, philosophy). Includes readings, films, performances, and exhibits.
<b>HUM 125</b>	<b>(5)</b>	<b>C</b>	<b>Hip-Hop Theory and Culture</b> 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.
<b>HUM 130</b>	<b>(5)</b>	<b>C S</b>	<b>World Cinema</b> Survey of 20th and 21st century international films and filmmakers from around the globe. Course emphasizes the power of world cinema to tell culturally diverse stories representing and influencing social, political and cultural movements. Students learn basic terminology of film analysis and discuss representations of identity (ie: race, class, gender, nationality, and sexuality, etc.) within course films. Examines film techniques, themes, and narrative styles in global films.
<b>HUM 145</b>	<b>(5)</b>	<b>C N</b>	<b>Film Genre</b> Study of a particular film genre through a theoretical lens to discover its historical and cultural roots, significance, and context.
<b>HUM 150</b>	<b>(5)</b>	<b>C</b>	<b>Ways of Knowing</b> Course in self-assessment or self-evaluation in which students will write and talk about their own education. Study of learning styles and exploration of our own learning styles in order to create a meeting ground.
<b>HUM 151</b>	<b>(5)</b>	<b>S</b>	<b>Introduction to Film</b> This class provides an introduction to the basic tools of film analysis. We will examine how elements like mise-en-scène, cinematography, editing and sound work together to create meaning in a range of films. We will also examine how these elements are put together in different types of films—narratives, documentaries and experimental cinema—and how films function in society to circulate ideas and ideologies.
<b>HUM 197</b>	<b>(1-5)</b>	<b>C</b>	<b>Work Experience-Humanities</b> 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.
<b>HUM 200</b>	<b>(5)</b>	<b>N</b>	<b>Reading the Media</b> 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).
<b>HUM 201</b>	<b>(5)</b>	<b>C</b>	<b>Cities and Power</b> Examines the economic, political, and social organization of urban space. By studying current social issues like homelessness, gentrification, and police violence, students will explore the links between power, oppression in U.S. cities in the context of global capitalism. We will also explore how social movements have sparked important social changes.
<b>HUM 210</b>	<b>(5)</b>	<b>C</b>	<b>Introduction to LGBTQ Studies</b> 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.
<b>HUM 270</b>	<b>(5)</b>	<b>C</b>	<b>Comic Books, Manga and Graphic Novels</b> 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.'
<b>HUM 289</b>	<b>(1-10)</b>	<b>C</b>	<b>Chinese Language Through Experiential Activities</b> 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.
<b>HUM 290</b>	<b>(1-10)</b>	<b>C</b>	<b>German Language Through Experiential Activity</b> See course description listed for HUM 289.
<b>HUM 291</b>	<b>(1-10)</b>	<b>C</b>	<b>Spanish Language Through Experiential Activity</b> See course description listed for HUM 289.
<b>HUM 292</b>	<b>(1-10)</b>	<b>C</b>	<b>French Language Through Experiential Activity</b> See course description listed for HUM 289.
<b>HUM 293</b>	<b>(1-10)</b>	<b>C</b>	<b>Italian Language Through Experiential Activity</b> See course description listed for HUM 289.
<b>HUM 294</b>	<b>(1-5)</b>	<b>C</b>	<b>Independent Projects</b> Independent projects based on humanities research.
<b>HUM 297</b>	<b>(1-10)</b>	<b>C</b>	<b>Japanese Language Through Experiential Activity</b> A self paced experiential education course designed for the undergraduate who plans on taking advantage of the language enhancement opportunities outside the USA, living with a family for total language immersion or attending a language school while at the same time studying the culture of the country.
<b>HUM 298</b>	<b>(1-10)</b>	<b>C</b>	<b>Portuguese Language Through Experiential Activity</b> See course description listed for HUM 289.

**HUM 299 (1-5) N**  
**Special Problems in Humanities**  
 An independent study/research course in the interdisciplinary field of humanities. Prereq: Permission.

### Industrial First Aid

**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.

### Information Technology

**IT 100 (5) C|N**  
**Information Technology Fundamentals**  
 Introduces computers and information systems, including hardware, software, data organization, data communications, systems development, cloud computing, and the constantly changing roles of Information Technology (IT) professionals, and the evolving role of computers in society.

**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. This class features JavaScript, the language of interactive web pages. Recommended for students considering careers in application development, IT security, or network and server administration.

**IT 111 (5) C|N**  
**Programming Fundamentals**  
 Introduction to basic computing concepts and object oriented programming using an object oriented language such as Python, C# or Java.

**IT 112 (5) C|N**  
**Web Programming with Python**  
 This hands-on, project driven course uses Python and any contemporary framework, such as Django, to illustrate the creation of data driven web sites.

**IT 115 (5) C|N**  
**Intro to Software Development & Version Control**  
 Introduces hardware architecture and software systems that support web applications, 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, BSDs, and windows systems.

**IT 116 (5) C**  
**Programming and Web Page Concepts**  
 Covers introductory concepts in HTML, CSS, scripting, procedural, and objects oriented programming languages.

**IT 120 (5) C|N**  
**Database Development**  
 Designed to provide students with an overview of database design and development.

**IT 121 (5) C**  
**JavaScript 1**  
 Examines computer programming theory and basics with the use of JavaScript language. Uses a hands-on approach to build interactive websites with JavaScript and demonstrates how to simplify the web development process with the use of jQuery. Studies several popular web techniques.

**IT 122 (5) C|N**  
**JavaScript 2**  
 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.

**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 designing a Microsoft Windows Active Directory Services infrastructure. Prereq: IT 122 or permission.

**IT 125 (5) C|N**  
**Intro to Data Analytics**  
 Introduces how to gather and organize data, analyze data-sets with use of Python, data analysis libraries, and statistical inference. Examines how to interpret data and effectively communicate data insights. The concepts and skills taught in this course prepare students for work in a variety of industries. Students build a portfolio project.

**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 130 (5) C**  
**Network Essentials**  
 Provides the background necessary to understand network technologies. The course serves as a general introduction for students who need a foundation in current networking technology for local area networks (LANs), wide area networks (WANs), and the Internet.

**IT 131 (5) C**  
**Network OS 1 Install Config Windows Server**  
 Covers the installation and configuration of 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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**IT 132 (5) C**  
**Network Operating Systems 2 - Server**

Covers how to: install managed enterprise-class servers in a LAN\WAN\Cloud configuration; implement a directory service to provide single sign-on; use a console to monitor systems; administer account, group, and enterprise policies; script common tasks; and study network protocols and services. Explores hypervisors, routing and remote access, DHCP, DNS, and business continuity.

**IT 133 (5) C**  
**Network OS3 Windows Network Infrastructure**

Focuses on administering enterprise class servers. Investigates IaC (Infrastructure as Code). Students learn to deploy advanced directory services, explore enterprise server tools using PowerShell & Python, and develop a foundation in the use & manipulation of enterprise systems operation applications. Specific attention is given to Authentication, Authorization, and Access to enterprise/Cloud objects.

**IT 135 (5) C|N**  
**TCP/IP**

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.

**IT 138 (5) N**  
**Linux for Network Administration**

Intermediate course. 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. Focuses on UNIX tools, network schedulers, security, remote access, performance monitoring, and networking aspects of UNIX. Includes multi-user, multi-tasking, time-sharing networked communications, and set-up and maintenance of an Internet server. Prereq: IT 135 or permission.

**IT 141 (5) C**  
**Intro to Hardware Comptia A+**

Provides a basic understanding of hardware components in personal and portable computers/peripherals and how software interacts with the hardware. Provides hands-on experience installing/configuring components, recognizing problems, logically analyzing symptoms, and developing step-by-step troubleshooting procedures that may be applied to new and unexpected situations.

**IT 142 (5) C|N**  
**Introduction to Operating Systems**

Introduction to Windows and Linux operating systems. Covers the functions of operating systems. Students will install and configure Windows and Linux operating systems in physical and virtual environments, explore operating system functions via a graphical and command line interface, and use operating system utilities to backup, restore, image, defrag, device, process, and manage memory and user accounts.

**IT 144 (5) N**  
**Network Management - CISCO II**

The second of three classes, provides instruction in 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, and the use of decision-making and problem-solving techniques to solve networking problems. Prerequisites: IT 142 or instructor permission. Computer Fee.

**IT 146 (5) N**  
**Network Management - CISCO III**

The third of three classes extends the student's knowledge and practical experience with configuring LANs, VLANs, switching, wireless, Wide Area Networks (WANs), network troubleshooting and management. Protocols covered include 802.1D, 802.11, Point-to-Point Protocol (PPP), BGP, DHCP, NAT/PAT, and Ipv6. Prerequisites: IT 142, IT 144, or instructor permission. Computer Fee.

**IT 150 (5) N**  
**IT Systems Security +**

Introduction to computer network security terminology, technology, and best practices as defined by the Computing Technology Industry Association's vendor neutral Security+ Certification and the International Information Systems Security Certification Consortium's vendor neutral Systems Security Certified Practitioner Certification. Prepares students to take the CompTIA Security+ and ISC2 SSCP exams. Prerequisites IT 120, IT 135, 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. Prereq: IT 135 and IT 150 or Permission.

**IT 161 (5) C|N**  
**Web Authoring 1**

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).

**IT 162 (5) C**  
**Web Authoring 2**

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 IT161, building on a student's existing knowledge of creating websites using HyperText Markup Language (HTML) and Cascading Style Sheets (CSS).

**IT 163 (5) C**  
**Web Authoring 3**

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.

**IT 164 (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.

**IT 165 (3) C**  
**Graphics for the Web**  
No Description Available

**IT 166 (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.

**IT 171 (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.

**IT 172 (5) C**  
**User Interface & Experience Design for the Web**

Provides a broad and detailed examination of 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.

**IT 174 (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.

**IT 211 (5) C**  
**Object Oriented Programming with Java**

Explores how to code basic Java applications using an IDE. Students work with primitive types, control statements, strings, and arrays. They also learn how to use Object Oriented programming skills such as classes, objects, inheritance, and interfaces.

**IT 212 (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.

**IT 214 (3) C**  
**Epic Essentials for Healthcare IT**

This course will cover an introduction to Epic, an integrated Electronic Medical Record (EMR) system, that is used in hospital systems and clinics both nationally and abroad. It will cover concepts and terminology specific to Epic as well as provide an overview of what the end user experience looks like. The course will also cover ways IT professionals work within Epic in an entry-level role.

**IT 216 (5) C**  
**Android Application Development 1**

This course introduces students to the fundamentals of mobile application development with Android. Students design user interfaces and implement app features while utilizing Object Oriented programming and Android programming paradigms.

**IT 217 (5) C**  
**Android Application Development 2**

Builds on the basic Android development skills from IT 216 and extends Android development to more advanced topics such as working with menus and preferences, fragments, threads, services, notifications, databases and content providers.

**IT 221 (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.

**IT 222 (5) C**  
**Designing Database Solutions**  
No Description Available

**IT 223 (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.

**IT 225 (5) C**  
**Systems Analysis**

Analyze complex systems for development using various tools and approaches that reflect current industry practices.

**IT 228 (5) C**  
**Capstone**

No Description Available

**IT 229 (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.

**IT 231 (5) C**  
**Linux Fundamentals**

No Description Available

**IT 232 (5) C**  
**UNIX for Network Administration**

An intermediate level course, covering the organization of Unix-based hardware components, and the Unix operating system software and tools the Unix host administrator uses to control access, tune the system, and account for system resources used. Unix tools network scheduler, security, remote access and performance monitoring will be covered. Networking aspects of Unix and the Internet will be examined.

**IT 241 (5) C**  
**CISCO 1**

No Description Available

**IT 242 (5) C**  
**CISCO 2**

Continuation of IT 241. 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.

**IT 243 (5) C**  
**CISCO 3**

Third of three courses designed to expand knowledge and previously learned networking skills. Introduces and 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.

**IT 250 (5) C**  
**Intro 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.

**IT 257 (5) C**  
**Enterprise Applications**

This capstone course will investigate managing and maintaining enterprise applications in a highly integrated computing environment. Students will examine LAN and WAN server applications implementing a user environment from a case study. The focus will be on the user experience as server application access crosses the enterprise LAN/WAN security boundaries. A small business scenario will be the foundation for this survey of software tools and applications.

**IT 261 (5) C**  
**Web App 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 learn to elegantly incorporate their scripts into their websites, to create dynamic web pages and gather data from HTML forms.

**IT 262 (5) C**  
**Web Application Programming 2**

This course builds on IT 261 with more advanced server-side scripting. Students learn how to collect data from forms and to store and retrieve data from a database. Proper coding conventions, security, and code organization are emphasized.

**IT 270 (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).

**IT 286 (5) C**  
**Advanced Web Design Project**

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.

**IT 289 (2) C**  
**Web Career Strategies**

This course provides resources, strategies and techniques for information technology job search and placement. Students create and revise industry-oriented resumes, cover letters and portfolios, and receive feedback from industry professionals and peers. Students learn job search techniques and practice interviews. Students learn to research employers, speak their language, and understand the hiring process from their perspective.

**IT 299 (1-5) C**  
**Independent Study: IT**

No Description Available

**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.

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**Integrated Studies****INTS 100 (10) N**  
**Integrated Studies**

Ten-credit Integrated Studies course organized around a theme.

**INTS 101 (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.

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**International Business Bachelor of Applied Science****IBN 301 (5) N**  
**International Management**

This course lays the foundation of the global business environment - varying political, economic, and legal environments, globalization, international organizations, and regional integration. Students also explore the cross-cultural environment - the dimensions of culture, cross-cultural communication, motivation, leadership, and negotiation. Global human resources will also be studied.

**IBN 302 (5) N****International Marketing**

This course examines the fundamentals of marketing within a global context students learn the impact of economic, cultural, political, legal and other environmental influences on international marketing. They analyze international marketing cases, considering product, pricing, placement, and promotion. Students learn from lectures, discussions, international case studies, and group projects.

**IBN 303 (3) N****Ethics and International Business**

This course enhances the awareness of ethical issues connected with international corporate decision-making. It provides students with business strategies and frameworks needed to analyze and resolve ethical problems through case studies and shared dialog. An analytic section introduces concepts including corporate social responsibility and the moral decision making processes.

**IBN 310 (5) N****Operations Management**

Operations Management (OM) introduces processes that convert resources into goods/services and extends these to suppliers, distributors, and customers. The course offers an 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**

This course will examine common legal issues and risks that affect business transactions in the global marketplace. Students will learn the international legal framework, methods of resolving disputes (including litigation, arbitration, and mediation), joint ventures, trade agreements, international sales contracts, intellectual property issues, international labor matters, and risks of foreign direct investment. Prereq: BUS&201 Business Law, or BUS 200 Law & Society.

**IBN 320 (5) N****International Finance**

This course focuses on the environment in which the international financial manager operates. Students will study the risks of doing business in a global environment and the tools available to minimize those risks. Foreign exchange risk, political risk, working capital management, long-term investments, and financing as well as accounting and controls are examined within this context familiarity with the basic use of spread sheets is needed. Prerequisites: ACCT& 202, MATH 160.

**IBN 330 (4) N****Data Analytics in Business and Accounting**

Ongoing business operations require accountants to work with vast amounts of data generated daily. Data analytics helps businesses improve business intelligence, identify process improvements, and increase operational efficiency by uncovering valuable insights within their financial information. This course covers understanding and visualizing data, scientific decision making, and predictive data analysis.

**IBN 350 (5) N****International Business Practicum**

This course is designed as an immersion experience in a student's non-native culture or language. The practicum can be completed through a variety of means, including (but not limited to) an educational excursion to a country where the primary culture or language is different from the student's native language or culture; working or volunteering in a non-profit or business that communicates primarily in a non-native language or serves a population from a non-native culture.

**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.

**IBN 402 (5) N****Management of Information Systems**

This course offers an overview of how businesses use information technologies and systems to achieve corporate objectives - including achieving operational excellence, developing new products/services, enhancing decision making, and achieving competitive advantage. Students will learn about a variety of issues facing organizations—infrastructure, security, business intelligence, networking, the Internet, telecom, wireless, enterprise applications, e-commerce, and ethics. Several case studies will be examined.

**IBN 410 (5) N****International Entrepreneurship**

Overview of the international entrepreneurial process, examination of the marketplace, and discussion of successful business strategies. Product/service selection, selling and marketing strategies, and sources of information and assistance are addressed.

**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.

**International Student Development****ISD 200 (1-3) C|N|S****Orientation to the American College**

Provides international students with the knowledge and skills necessary for success in an American community college

**International Studies****ISP 101 (5) C****The Global Society**

The Global Society

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**ISP 201 (5) C**  
**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**  
**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) C**  
**Contemporary Asia: Issues and Influences**

Contemporary issues and influences of selected Asian countries regionally and globally. Emphasizes responses to the problems and challenges of economic, political and social development.

**Japanese**

**JAPN& 121 (5) C|N**  
**Japanese I**

For students who have not previously studied Japanese. Intro to Japanese conversation, grammar, culture, and the Japanese Hiragana & Katakana writing systems.

**JAPN& 122 (5) C|N**  
**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**  
**Japanese III**

Continues the development of language skills in all areas. Presents another 60 characters.

**Landscape Horticulture**

**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 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 123 (5) S**  
**Residential Landscape Design**

Gain a conceptual foundation in manual drafting, design and the process for residential landscape design. Information on how to complete a landscape design from the preliminary diagram to the final conceptual planting plan including an introduction to CAD and the digital design process.

**LHO 136 (5) S**  
**Irrigation and Drainage**

Gain basic principles of hydraulics, irrigation systems, fixtures and apparatus to install, maintain and trouble shoot existing systems. Application of concepts through field work.

**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 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 189 (4) 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 196 (4) S****Capstone: Planning and Design**

Integration of design concepts, processes, and plant knowledge to produce a landscape design. Preliminary diagram to final conceptual planting plan, including CAD and the digital design process. Emphasis on aspects of plant materials to achieve a pre-determined style, theme, or user response. Increase sophistication and use of plant selection, placement, planting patterns, and structures. On-site consulting and other professional services discussed and practiced.

**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 (3) S****Greenhouse and Nursery Practicum**

Hands-on application of knowledge, and development of skills in nursery and greenhouse plant production, propagation, maintenance, marketing and retail sales. Includes Saturday Garden Center open dates. Prerequisites: LHO 111 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.

**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 250 (5) S****Small Business for Horticulture**

Introduction to the organization and operation of a horticulture-related small business. Includes success and failure factors through accurate estimating, and bidding individual projects, developing annual contracts, calculating business costs, minimizing and controlling risk. Guidance in how to write a business plan. Familiarization with industry opportunities and standards.

**LHO 255 (4) S****Edible Trees Shrubs and Vines**

Explore edible perennial plants and the benefits of their incorporation into the landscape, community and home gardens. Examine their impact on resources and urban sustainability. Covers selection, culture, maintenance and siting of plants through field trips, site visits and in-service learning.

**LHO 296 (5) S****Capstone: Implementation**

The second capstone course. A start to finish experience installing the landscape project from LHO 196. From site analysis to planting, develop skills in standard trade procedures and techniques for residential landscaping. Covers care and safe use of tools used in landscape construction.

**LHO 299 (1-4) S****Special Topics**

Special individual or group study topic in the landscape horticulture field.

**Learning Center Seattle****LCS 90 (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.

**Learning Communities****LCS 90 (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.

**Library Research****INFO 101 (1-5) C|N|S****Introduction to Information Studies**

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.

**INFO 102 (1) S****Info in Action Research Basics**

Covers the process to get started with a research project and gain a solid understanding of research options.

**INFO 104 (1) 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.

**INFO 106 (1) 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.

**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 65 (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 85 (4) S**

#### Stop the Turn Stile Lifestyle

This prep course provides the skills necessary for new KCCC/CCAP court referrals to jumpstart the cognitive learning process for GED and LSW classes.

**LST 91 (2) S**

#### Life Skills to Work Part 1

Course emphasizes the construction of resilience skills and healthy behavioral auto-pilots in order for justice-involved students to positively transition from the criminal justice system to post-secondary education, the workplace and society. The curriculum was designed for students who have experienced childhood trauma, as defined in the CDC-Kaiser Permanente Adverse Childhood Experiences study of 1998, to address student's criminogenic needs through a trauma-informed lens.

**LST 92 (2) S**

#### Life Skills to Work Part 2

Course emphasizes the construction of resilience skills and healthy behavioral auto-pilots in order for justice-involved students to positively transition from the criminal justice system to post-secondary education, the workplace and society. This curriculum was designed for students who have experienced childhood trauma, as defined in the CDC-Kaiser Permanente Adverse Childhood Experiences study of 1998, to address student's criminogenic needs through a trauma-informed lens.

**LST 93 (3) S**

#### Life Skills to Work Part 3

Course emphasizes the construction of resilience skills and healthy behavioral auto-pilots in order for justice-involved students to positively transition from the criminal justice system to post-secondary education, the workplace and society. This curriculum has been designed for students who have experienced childhood trauma, as defined in the CDC-Kaiser Permanente Adverse Childhood Experiences study of 1998, to address student's criminogenic needs through a trauma-informed lens.

**LST 98 (7) S**

#### Moral Reconciliation Therapy

No Description Available

### 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.

### Literature

**LIT 234 (5) C**

#### Telling Stories: Identity in History & Folklore

Analyzes the process of identity creation and declaration in mythology, history and folklore through myths, stories and historical events. Focuses on anecdotes, narratives and humor to delineate individual, national and group identities. Includes quarter-long group and individual projects.

### Marine Technology

**MGO 101 (3) C**

#### Introduction to Shop and Tools

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**

#### Proficiency in 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. Course is Coast Guard approved.

**MGO 105 (2) C**

#### Leadership and Management

Examines relevant concepts and principles in management, leadership and organizational communication as they apply aboard ship. Emphasizes 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 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.

**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**

Introductory course focuses on chart navigation and basic methods of piloting. Emphasis on the use of charts and nautical publications, the IALS 'B' buoyage system and solving standard navigation problems. Learn 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; 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.

**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**

An introductory course in standard electronic equipment and systems used to aid in navigation and communication. Topics covered include radar, gyro compass, depth-sounder, Loran C, RDF, GPS, GMDSS and radiotelephone. Receive specific training in radar piloting and collision avoidance theory using SMA's computer radar simulator.

**MGO 140 (2) C****Nautical Rules of the Road**

Provides a 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 an 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.

**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.

**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.

**MTS 100 (2) C****Rating Forming Part of a Navigation Watch**

Students will learn the basic skills required for the STCW endorsement as Rating Forming Part of a Navigation Watch (RFPNW). Instruction will focus on helm and lookout watchstanding, as well as an introduction to the Collision Regulations (COLREGS).

**MTS 101 (2) C****Engineering for Deck Ratings**

This course is intended to provide deck program students with a survey of basic marine engineering nomenclature, principles, and systems. Emphasis is on subjects of particular relevance to deck crew members, including rounds, maintenance, fueling and other in-port operations, and pollution control.

**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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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 (3) C**  
**Auxiliary Machinery and Ship Design**

Intro to auxiliary machinery. Includes heat exchangers, pumps, air ejectors, steering gear, distilling plants, pressure vessels, piping systems, and cargo handling equipment.

**MTS 217 (3) C**  
**RFPEW Introduction**

This course provides a basic introduction to engineroom watchstanding, with an emphasis on making good rounds, watch handover, log-keeping, and communication. Students will be introduced to principles of diesel engines and steam plants, and will learn common tasks that are routine to engine room operations.

**MTS 221 (4) C**  
**Applied Marine Electricity**

An applied course in AC and CD motors and generator applications. In this course the student will apply AC and DC electrical theory to typical marine equipment. Topics covered include: 3-phase circuits and transformers, DC machines, AC machines, batteries and power electronics. The student receives practical experience in operating marine electrical equipment in the laboratory, on a panel board simulator and aboard ship.

**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**

Basic survey course utilizing lectures, laboratory experiments, and practical demonstrations. Students will perform routine-maintenance, troubleshooting and repair of marine hydraulic equipment. The student will be required to disassemble, analyze and re-assemble various hydraulic components.

**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.

**MTS 263 (3) C**  
**QMED: Diesel Engines**

Provides knowledge and understanding of diesel engine principles and component systems, while providing the student with practical applications/exercises in a laboratory setting to apply understanding of engine monitoring and demonstrate engine maintenance skills.

**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 (4) C**  
**QMED: Steam Applications/Turbines**

Combines theory and applied training in operating steam boilers and propulsion turbines. 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.

**Math**

**MATH& 107 (5) C|N|S**  
**MATH in Society**

Intended for non-science majors; fulfills QSR requirement for AA Degree. Topics include financial computations (e.g. loans and interest), modeling linear and exponential growth (e.g. population growth and disease spread), and basic probability and statistics (e.g. understanding data and risk), with an emphasis on applications. Other topics selected by instructor.

**MATH& 131 (5) N|S**  
**MATH for Elementary Education 1**

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.

**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.

**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.

**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.

**MATH& 146 (5) C|N|S**  
**Introduction to Statistics**

Covers descriptive methods, probability and probability distributions, samples, decisions, hypothesis testing and statistical inferences. Fulfills QSR requirement for A.A. degree

**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, Math& 152 and Math&163 covers limits; differential calculus and its applications; integral calculus and its applications; an introduction to differential equations; Taylor series; vector geometry in three dimensions; multivariable calculus; partial differentiation; and double integrals in Cartesian and polar coordinates, and applications.

**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.

**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.

**MATH 38 (3) C**  
**MATH 98 Support**

Math 038 is a support course designed to be taken concurrently with Math 98 to improve student success in the classroom. Covers prerequisite skills necessary to learn the content of MATH 98, such as arithmetic with real numbers, order of operations, algebraic expressions, slope-intercept form of a linear equation, solving equations, graphing, exponents and radicals and skills for academic success.

**MATH 41 (3) C**  
**MATH 141 Support**

Math 041 is a support course designed to be taken concurrently with Math& 141 to improve student success in the classroom. Covers prerequisite skills needed to learn the content of MATH& 141, such as order of operations, algebraic expressions, solving equations and inequalities, graphing, functions, using graphing calculators, and skills for academic success. This course also provides on-going support for the MATH& 141 course topics.

**MATH 46 (3) C**  
**MATH 146 Support**

Math 046 is a support course to be taken concurrently with MATH& 146, and is intended for students who have not met the MATH& 146 prerequisites. Covers those prerequisite skills necessary to learn the content of MATH& 146, such as numeracy, proportional reasoning, equations/formulas, inequalities, graphs, and skills for academic success.

**MATH 67 (3) C**  
**MATH 107 and 116 Support**

Math 067 is a course taken concurrently with either Math&107 or Math116 to improve student success in the college-level math course.

**MATH 80 (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.

**MATH 81 (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 83 (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.

**MATH 84 (5) N|S**  
**Algebra I**

Basic operations with algebraic expressions; solving and graphing linear equations and inequalities; solving absolute value equations; systems of linear equations; applications of linear equations and systems; laws of exponents; operations on polynomials.

**MATH 85 (5) N|S**  
**Algebra II**

Elementary algebra topics include factoring polynomials, operations on rational and radical expressions, graphing quadratic equations, solving quadratic, rational, and radical equations, and applications.

**MATH 86 (5) S**  
**Geometry I**

Covers points, lines and angles, triangles, parallel lines, polygons, proofs on congruence and similarity of triangles. Calculator required.

**MATH 87 (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.

**MATH 88 (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.

**MATH 89 (1-5) N|S**  
**Independent Study of Basic Math**

Linked with math, physics and chemistry classes. Individual focus of study in arithmetic, algebra, study skills and math anxiety. You must meet with the instructor.

**MATH 90 (1-5) N|S**  
**Mathematical Modules**

This is a review and/or refresher course on different topics in math ranging from basic math to college algebra. It is in module form and can be taken anytime during the quarter. Computer with broadband connection required.

**MATH 91 (5) C**  
**Descriptive Statistics with Algebra 1**

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.

**MATH 92 (5) C**  
**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.

**MATH 94 (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.

**MATH 96 (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.

**MATH 97 (5) N**  
**Elementary Algebra**

Includes linear and quadratic equations and graphs, inequalities, exponents, polynomials, and an introduction to rational expressions and radicals, all covered at an accelerated pace.

**MATH 98 (5) C|N|S**  
**Intermediate Algebra**

Covers real number system, polynomial, rational, radical, exponential and logarithmic expressions and equations, linear and quadratic graphs, linear systems of equations and intro to functions.

**MATH 99 (2) N**  
**Essentials of Intermediate Algebra**

Co-requisite course for Math& 107, Math in Society, and Math& 146, Introduction to Statistics. Covers algebra topics needed for students to be successful in Math& 107 or Math& 146. Topics include percents, ratios, rates, linear equations, function notation, negative and fractional exponents, and an introduction to exponential and logarithmic functions.

**MATH 102 (5) 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).

**MATH 110 (3) C|S**  
**Applied Math for Technicians**

Emphasizes application of mathematics in professional technical courses.

**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 136 (5) C**  
**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.

**MATH 140 (5) 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.

**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. Prereq: MATH 116 or MATH& 141 with a 2.0 or higher, or placement test.

**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.

**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.

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

Independent study of problems or topics of special interest.

**Medical Assisting****AMA 117 (5) N****Medical Terminology**

This course covers the terminology surrounding anatomy, physiology, pathology, tests, and treatments. 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. Contact the Workforce Instruction Division at (206) 934-3790 or Advising at (206) 934-3658 for information and to register. Note: This course replaces AHI 100 Introduction to Medical Vocabulary. Permission required.

**Meteorology****MEY 100 (5) C****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.

**Multi-Occupation in Engineering and Technology****MOET 100 (20) S****MOET On the Job Training**

Course that recognizes the on the job training portion of the Multi Occupation in Engineering and Technology Degree. Credit is evaluated based on a portfolio developed documenting 6,000 hours of related industry on the job training.

**MOET 101 (1-5) S****Multi Occupation Engineering & Tech Orientation**

Introductory course for students pursuing the Multi Occupation in Engineering & Technology (MOET) AAS-T degree. Course orients students to the college and program including introduction to learning technology, college systems, preparation of portfolio, and preparation for learning in an online and classroom environment.

**MOET 210 (4) S****Capstone in Engineering & Technology**

The MOET Capstone is the culmination of the degree where students engage in a hands-on project related to sustainable technology.

**Music****MUSC& 105 (5) C|N|S****Music Appreciation**

Every culture on the planet creates and appreciates music. This course explores the deep human connections to music through the study of a variety of musical styles as they relate to history, culture, ethics, aesthetics, and technology. Students will develop listening skills and philosophical frameworks to increase their enjoyment and understanding of music.

**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.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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****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 111 (5) C****All About That Beat: Hip Hop and Jazz Syntheses**

This course explores the musical, cultural, genre melding connections of Urban Hip Hop with Jazz. Examines both isolated collaborations and ongoing points of influence, such as rhythm and beats, while identifying the different ways in which Hip Hop and Jazz Artists have embraced other styles, cultures in their own music.

**MUSC 113 (5) 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 I - Early Influences Through 1970**

Examines rock music as a musical, social, cultural, economic and political force. Emphasizes the early years of rock music development through 1970. Highlights include the first wave of rock & roll in the 1950s, black pop of the 1960s (Motown and Stax Records), and psychedelic rock. Fulfills the Integrated Studies and US Cultures requirement.

**MUSC 117 (5) S****Rock Music II: Rock Music 1970 - Present**

Examines rock music as a musical, social, cultural, economic and political force. Emphasizes rock music evolution post-1970. Highlights include heavy metal, punk rock, dance oriented pop, grunge, and indie - as well as rock music influences on other genres such as country and hip hop. Fulfills the Integrated Studies and US Cultures requirement. Rock Music I is not a prerequisite.

**MUSC 118 (5) C****Electronic Music: Origins to Edm**

The course will survey the history of Electronic Music from its early Twentieth Century roots to present day Electronic Dance Music (EDM). The course will focus on technological innovations and the applications of those technologies resulting in compelling electronic music compositions and respective electronic music genres world-wide.

**MUSC 119 (2) C****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.

**MUSC 124 (1-5) C****Create Music From Beats to Melody**

A fun and interactive approach to the study of basic musicianship and music fundamentals. Students learn the essential musical elements such as rhythm, melody, harmony, and to interpret them by ear and on the written page. Students are encouraged to use a digital audio workstation to create original music. This is a music class for beginning level students. No prior musical training is required.

**MUSC 125 (5) N****Creative Music Fundamentals**

Introduces basic music theory topics including music notation, meter, rhythm, scales, and key signatures, along with introductory piano and musical composition skills.

**MUSC 126 (5) C|S****Group Piano - Level 1**

As an introduction to piano in a group setting, students in this course develop foundations in piano technique and reading (music notation), along with improvisation and songwriting/composition basics. MUSC126 is the first in a sequence of group piano courses. No musical experience necessary. This course has an additional fee to cover course materials, practice room access, and take-home practice instruments.

**MUSC 127 (5) C|S****Group Piano - Level 2**

Students in this course continue to build their piano technique and reading (music notation) skills, and are introduced to new approaches to improvisation and songwriting/composition. MUSC127 is the second in a sequence of group piano courses. This course has an additional fee to cover course materials, practice room access, and take-home practice instruments.

**MUSC 128 (5) C|S****Group Piano - Level 3**

Students in this course continue to build their piano technique and reading (music notation) skills, and are introduced to new approaches to improvisation and songwriting/composition. MUSC128 is the third in a sequence of group piano courses. This course has an additional fee to cover course materials, practice room access, and take-home practice instruments.

**MUSC 130 (1-2) C|N|S****Individual Instruction: Voice**

Private instruction in vocal performance (singing) with a focus on technique, repertoire, and expressive musicianship. Instructor & student meet weekly for 10 lessons (1 cr. = 30 min/week; 2 cr. = 60 min/week) and co-create curriculum based on student's interests & goals. Open to all levels & may be repeated for credit. ADDITIONAL FEE charged for all individual instruction.

**MUSC 135 (1-2) N|S****Individual Instruction: Drums/Percussion**

Private instruction in drum set, hand percussion, and mallet percussion (when available). Instructor & student co-create curriculum based on student's interests & goals. Open to all levels & may be repeated for credit. Credit hours vary. ADDITIONAL FEE charged for all individual instruction.

**MUSC 136 (1-2) N|S****Individual Instruction: Songwriting/Composition**

Private instruction in songwriting and composition. Instructor & student co-create curriculum based on student's interests & goals. Open to all levels & may be repeated for credit. Credit hours vary. ADDITIONAL FEE charged for all individual instruction.

**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 154 (1-2) N****Symphonic Band**

Features the finest in Wind band literature, both contemporary and traditional. Membership by audition.

**MUSC 160 (5) S****Blues to Hip Hop**

Explores the blues and other early African American musical styles, with a focus on how these styles influenced the development of rock, soul, funk, pop, and hip hop music and culture. Musical study in this course is placed within the historical context of social, economic and political forces within American society.

**MUSC 167 (5) S****Introduction to Songwriting**

In this course, students learn how to write songs in a variety of musical styles. Those with prior experience will further refine their songwriting craft. While the piano will be our primary instrument in class, students are encouraged to utilize other instruments they have experience with and/or access to. Piano keyboards will be available for students to check out for the duration of the quarter. No musical experience necessary, just bring your excitement to create new music!

**MUSC 171 (1-2) C|N|S****Individual Instruction: Piano**

Private instruction in piano. Instructor & student co-create curriculum based on student's interests & goals. Open to all levels & may be repeated for credit. Credit hours vary. ADDITIONAL FEE charged for all individual instruction.

**MUSC 185 (5) C|N****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 Song Writing**

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.

**MUSC 193 (5) N****Black Musical Expression & Identity: U.S.**

This course takes a cultural historical perspective on the musical expressions, and development of an ethnic identity (through music) by people of African descent in the United States. The course traces a variety of musical styles such as early slave songs, spirituals, gospel blues, jazz, funk and soul, rap and hip hop. It also explores the traditions of the rural South at the turn of the century and the oral expressions found on the streets of urban America throughout the United States

**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 221 (2) C****Group Piano - 4th Quarter**

Continuation of MUSC128. Technique, repertoire, and theory, with emphasis on classical compositions.

**MUSC 222 (2) C****Group Piano - 5th Quarter**

Continuation of MUSC 221.

**MUSC 223 (2) C****Group Piano - 6th Quarter**

Continuation of MUSC 222.

**MUSC 299 (1-5) C****Practicum in Music**

Research musical performance in an area of interest determined by student and instructor.

**Network Infrastructure****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.

**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.

**NTI 460 (5) C****DevOps Practicum, BASIT 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.

**NTI 470 (5) C****Internship/Capstone Project, BASIT 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.

**New Media****NME 110 (6) C****New Media I**

Course provides students with authentic tasks and projects preparing them for real-world work demands encountered in their respective fields. Students work collaboratively in a project-based curriculum, exploring the role of communications in the context of New Media and society. Additional objectives of New Media are to develop skills that form the basis for future career work in the creative arts disciplines—all of which relate to general media—and to begin to establish professional contacts.

**NME 120 (6) C****New Media II**

This interdisciplinary SCCC Creative Academy course, second of a three-course series, brings together Graphic Design and Photography students to apply skills to complete integrative design assignments. Students are given authentic tasks and projects preparing them for real-world work demands encountered in their respective fields. Students work collaboratively in this project-based curriculum, exploring the role and interplay of design and communications in the context of New Media and society.

**NME 130 (6) C****New Media III**

This is the final of a three course series in which advanced techniques will be applied and explored. The course provides students from Design and Photography with authentic tasks and projects preparing them for real-world work demands encountered in their respective fields. Students work collaboratively in a project-based curriculum, exploring the role of communications in the context of New Media and society.

**Nursing – Associate in Nursing DTA/MRP****NURS 101 (4) C****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****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****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****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****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****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****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****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**  
**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**  
**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.

**Nursing****NURS 101 (4) C**  
**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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**NURS 102 (3) C**  
**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**  
**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**  
**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**  
**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**  
**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**  
**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**  
**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**  
**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**  
**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****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**  
**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.

**OCEA& 101 (5) C**  
**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.

**Parent Ed****FAM 49 (1-3) S**  
**Parent Education Child Study Lab: 0-12 Months**  
No Description Available**FAM 51 (1-3) C**  
**Parent Education: 12-24 Months**  
For parents and toddlers ages 1-2 years**FAM 52 (1-3) C**  
**Parent Education: 12-24 Months**  
No Description Available**FAM 53 (1-3) S**  
**Parent Education Child Study Lab: 12-24 Months**  
No Description Available**FAM 54 (1-3) S**  
**Parent Education Child Study Lab: 12-24 Months**  
No Description Available**FAM 55 (1-3) S**  
**Parent Education Child Study Lab: 12-24 Months**  
No Description Available**FAM 61 (3) C**  
**Parent Education: 24-36 Months**  
For parents and older infants ages 6 months-1 year**FAM 62 (1-3) C**  
**Parent Education: 24-36 Months**  
No Description Available**FAM 63 (1-3) S**  
**Parent Education Child Study Lab: 24-36 Months**  
No Description Available

**FAM 64 (1-3) S**  
**Parent Education Child Study Lab: 24-36 Months**  
 No Description Available

**FAM 65 (1-3) S**  
**Parent Education Child Study Lab: 24-36 Months**  
 No Description Available

**FAM 71 (1-3) C**  
**Parent Education: 36-48 Months**  
 No Description Available

**FAM 72 (1-3) C**  
**Parent Education: 36-48 Months**  
 No Description Available

**FAM 73 (1-3) S**  
**Parent Education Child Study Lab: 36-48 Months**  
 No Description Available

**FAM 74 (1-3) S**  
**Parent Education Child Study Lab: 36-48 Months**  
 No Description Available

**FAM 75 (1-3) S**  
**Parent Education Child Study Lab: 36-48 Months**  
 No Description Available

**FAM 81 (1-3) C**  
**Parent Education: 48-60 Months**  
 No Description Available

**FAM 82 (1-3) C**  
**Parent Education: 48-60 Months**  
 No Description Available

**FAM 83 (1-3) S**  
**Parent Education Child Study Lab: 48-60 Months**  
 No Description Available

**FAM 84 (1-3) S**  
**Parent Education Child Study Lab: 48-60 Months**  
 No Description Available

**FAM 85 (1-3) S**  
**Parent Education Child Study Lab: 48-60 Months**  
 No Description Available

**FAM 93 (1-3) S**  
**Parent Education Child Study Lab: 24-60 Months**  
 No Description Available

**FAM 145 (1-3) N**  
**Parent Education: 0-12 Months**

Students with children, birth through 12 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 146 (1-3) N**  
**Parent Education: 0-12 Months**

Students with children, birth through 12 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 147 (1-3) N**  
**Parent Education: 0-12 Months**

Students with children, birth through 12 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 148 (1-3) N**  
**Parent Education: 0-12 Months**

Students with children, birth through 12 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 149 (1-3) N**  
**Parent Child Study Lab II**

Students are parents of children, birth through six years of age, who enroll in Parent Education/Child Study Laboratory. The 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 Early Childhood. This class is intended primarily for a second parent of a child in a Parent Education/Child Study Laboratory to enroll, with the first parent enrolled in a FAM 146-147-148, 156-157-158, 166-167-168, 176-177-178, or 187-188 course.

**FAM 155 (1-3) N**  
**Parent Education: 12-24 Months**

Students with children, 12 through 24 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**FAM 177 (1-3) N**  
**Parent Education: 36-60 Months**

Students with children, 36 through 60 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 178 (1-3) N**  
**Parent Education: 36-60 Months**

Students with children, 36 through 60 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 184 (5) N**  
**Understanding Children**

This course is designed for students with children birth through 18 years of age in their care. The course enables students to extract and adopt principles applicable to parenting, teaching, and child development. There will be a different focus of study each quarter. Tuition is \$80.00 plus a \$35 Distance Learning fee for a total of \$115.00. For questions contact: beth.goss@seattlecolleges.edu, Mara.Mulcahy@seattlecolleges.edu or Betty Williams at (206) 934-4571. This course replaces FAM 180 Special Topics for Parents of Young Children.

**FAM 186 (1-3) N**  
**Parent Ed: 48-72 Months**

Students with children, 48 through 72 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 187 (1-3) N**  
**Parent Education: 48-72 Months**

Students with children, 48 through 72 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 188 (1-3) N**  
**Parent Education: 48-72 Months**

Students with children, 48 through 72 months of age, enroll in Parent Education/Child Study Laboratory classes. The students attend the laboratory class one day a week with their child and one evening each month. The Parent Education/Child Study Laboratory is financed by student fees in addition to required college tuition. Participation and attendance in these classes are required. The student is also expected to fulfill specific obligations of individual classes. Students are welcomed and encouraged to attend any other related workshops or classes offered in Parent Education or Early Childhood.

**FAM 196 (1-3) N**  
**Parent Ed: 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 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 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 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 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 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.

**Pharmacy Technician (AHI)****PHA 115 (3) N****Orientation to Pharmacy Practice**

This course will review the contributions made by nations of the world to the practice of pharmacy past and present. Course will review the role of professional pharmacy organizations, past and present, to improving the practice of pharmacy and the role of pharmacy personnel. Students will also learn about new drug development, drug distribution, and the role of the pharmacy technician in drug procurement. Course material will cover the types of sites which currently employ pharmacy technicians including an analysis of the role of pharmacy technicians in these various job settings. Current trends which may effect the future direction for pharmacy technicians will also be discussed. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 120 (3) N****Pharmacy Calculations**

Covers mathematics review with an introduction to calculations encountered in pharmacy practice. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 130 (2) N****Over the Counter Drugs**

In this course students will learn common disorders in which consumers seek advice about self-treatment. This course reviews the use of non-prescription drugs for these selected disorders. Students also learn questions to ask consumers which will help the pharmacist determine whether self-treatment is indicated or additional medical care should be sought. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 140 (3) N****Sterile Products and Aseptic Technique I**

Introduction to sterile products and aseptic techniques in hospital settings. The devices and manipulation techniques necessary to maintain sterility and mechanics of a hospital pharmacy are discussed and practiced in laboratory exercises. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 141 (3) N****Sterile Products and Aseptic Technique II**

Continuation of PHA 140. Focus on the preparation of cardiac and other titerable drips, IV antibiotics, chemotherapy, IVPs and TPNs. Intro to hospital application software. Includes lab. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 146 (2) N****Communications in Pharmacy Practice**

This course will examine communication processes to see how they are influenced by the values, behaviors and beliefs that are defined by culture. It will also explore communication within the pharmacy setting incorporating law.

**PHA 150 (3) N****Pharmacology I**

This course will review the principals of drug action including introduction to pharmacokinetics and pharmacodynamics. Students will also study the anatomy and physiology of the nervous system and discuss drugs used in the treatment of disorders of the nervous system. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 151 (2) N****Pharmacology II**

This course is a continuation of PHA 150. Students will briefly study the anatomy and physiology of the cardiovascular system, gastrointestinal system, endocrine system, respiratory system. Emphasis will be placed on treatment of diseases of cardiovascular, gastrointestinal, and respiratory systems. Students will also discuss treatment of bacterial and viral infections. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 160 (3) N****Pharmacy Technology I**

This course will review the history of computers in pharmacy, current practice applications, and future trends. Legal and ethical issues surrounding information collection and retrieval will also be addressed. The laboratory component of this course is designed to provide students with the skills and knowledge needed to process prescriptions using pharmacy software. Students will gain proficiency in the use of ambulatory care prescription processing software. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 161 (3) N****Pharmacy Technology II**

This course is designed to introduce students to the TOP 200 drugs. Skills gained in PHA 160 will be integrated into this course. Students will use pharmacy software to process real prescriptions in the pharmacy lab. Computerized insurance billing and report generation will be explored. Students will be introduced to hospital and nursing home application software. Registration is limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 170 (5) N****Pharmacy Records Management**

This course is designed to provide skills required to practice effectively in an ambulatory care practice setting. Students learn to interpret prescription contents, top 100 drugs, inventory control procedures, tasks associated with procurement of pharmaceuticals, to complete and file records for third party reimbursement and requirements for completing and filing prescription records. Registration limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 180 (2) N****Healthcare Systems, Insurance and Billing**

Introduction to healthcare systems, pharmacy billing, and the contractual relationships between pharmacies, manufacturers, and wholesalers. Course covers basics of US healthcare, insurance overview, and current billing practices. Course will include workshops for practical skill development, such as billing insurance, problem-solving adjudication issues, prior authorization submissions and allocating resources for affordable patient medication costs.

**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**

The pharmacy technician practicum is designed to enable students to obtain hands on experience in a pharmacy setting. Students are introduced to all aspects of the pharmacy technicians job at the site in which they have been placed. Students will be placed in at least two different settings (an inpatient setting and an ambulatory care setting). Inpatient settings include: nursing home, inpatient hospital, and home infusion. Ambulatory care settings include: chain pharmacy, independent pharmacy, and outpatient hospital/clinic pharmacy. Registration is limited to students enrolled in the Pharmacy Technician program. Permission required.

**PHA 191 (1) N**  
**Job Skills and National Exam Preparation**

This course will cover job hunting skills, resume, and cover letter writing techniques and the interview process. In addition, it will provide the necessary information for the students to complete the national exam.

**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& 120 (5) C|N**  
**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.

**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|S**  
**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 131 (1) C**  
**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**  
**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 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 298 (1-5) C**  
**Independent Study in Philosophy**

Independent study in selected philosophical topics under faculty supervision.

**Physical Education****PEC 90 (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 131 (2) 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 135 (2) N****Circuit Training**

Circuit Training incorporates a variety of activities in each session to target cardio stamina, and muscular strength & endurance development. In class, exercises working all the major muscle groups will be assigned at separate stations. At a given station, the student will perform a specific activity for a specific time period, and then rotate to subsequent stations, where different activities and challenges will be completed. Fundamental fitness and nutrition information will be 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 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) N|S****Walking for Fitness**

Develops cardio-respiratory fitness through progressive workouts including warm-ups, walking sessions and cool-downs. Covers safety, walking technique, workout design, 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) 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 165 (2) 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 183 (2) C|N****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 199 (2) N****Independent Fitness**

Basic instruction in developing and maintaining an individualized fitness program. Includes equipment usage and safety, and how fitness-related activity affects the body. Students are required to meet the first two weeks, for one week at mid-term, and one week at end of term, as scheduled. Students will complete lab participation at the NSC Wellness Center during its drop-in hours. Appropriate attire and shoes are required at all sessions. Participation at all scheduled meetings is required.

**PEC 299 (1-2) S****Independent Study**

Independent study of approved topics in physical education.

**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.

**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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**PHYS& 116 (5) C|N|S**  
**General Physics III with Lab**

Continuation of series. Covers mechanical oscillations, sound, optics, atomic and nuclear physics.

**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.

**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.

**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.

**PHYS 299 (1-5) C|N**  
**Independent Study**

Independent study of physics problems or topics. Prereq: Permission.

**Political Science**

**POLS 90 (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 1900s 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& 201 (5) S**  
**Introduction to Political Theory**

Examines the philosophical foundations of politics and power. Utilizes texts in political philosophy/theory to introduce concepts including justice, citizenship, legitimate authority, power, liberty, rights, and equality.

**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.

**POLS 111 (5) N**  
**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 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 210 (5) S**  
**Cannabis & Social Justice**

This course explores issues of justice, criminalization, history, and inequities of drug prohibition/policies in the United States. Specifically, it considers the evolution of federal and state policies on cannabis. This requires a thorough understanding of prohibition, the 'War on Drugs,' disproportionate enforcement, and long-term impacts on communities of color.

**POLS 298 (1-5) C**  
**Independent Study in Political Science**

Independent research and writing on selected political science topics under faculty supervision.

**Professional Technical Teacher Education**

**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 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.

## Psychology

**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. Prereq: ENGL&101 or instructor permission.

**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.

**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 132 (2) C**  
**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 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.

**PSYC 210 (5) C**  
**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.

**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.

**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**  
**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.

**PSYC 245 (5) C|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.

**PSYC 257 (5) C**  
**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**  
**Independent Study in Psychology**

Independent study in selected psychology topics under faculty supervision.

**Real Estate****RES 100 (5) N**  
**Real Estate Fundamentals**

Learn the fundamental elements of the real estate industry, including sales and listing practices, financing, appraising, title, real estate law, escrow and property management. Great introduction class for anyone interested in a real estate related career or investing in real estate. RES 100 and RES 140 Real Estate Sales Practices prepare students for the Washington State Real Estate Broker Licensing Exam. (Fulfills 60 DOL pre-licensing clock hours.)

**RES 106 (1) N**  
**Real Estate Fraud**

Become aware of the extent of real estate fraud within the real estate sales, finance and appraisal industries. Gain an overview of numerous past and present fraud cases, the local and national extent of the problem, and the impact on the market place. Find out how to avoid potential fraudulent acts. Don't be part of the problem, be part of the solution! (Fulfills 10 DOL and DFI continuing education clock hours.) Recommend RES 100 which may be taken concurrently.

**RES 120 (2) N**  
**Real Estate Principles of Maintenance and Repair**

Study the 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. (Fulfills 15 DOL continuing education clock hours.)

**RES 125 (2) N**  
**Applications of Real Estate Math**

Develop skills in basic real estate mathematics using the Hewlett Packard HP10BII programmable calculator. Apply a variety of principles for real estate transactions, valuation, finance and other investment analysis. Students purchase and bring to the first day of class HP10BII calculator or may borrow an HP10BII from the Real Estate Program while supplies last. (Fulfills 20 DOL continuing education clock hours.) Recommend RES 100 taken concurrently.

**RES 130 (3) N**  
**Green Real Estate**

Learn how environmental sustainability applies to real estate home sales and listings. Class focuses on an introduction to sustainable design, water and energy efficiency and conservation, smart material choices that affect indoor air quality and occupant health, sustainable site selection, and how to recognize green home buyers - the demographics of green minded consumers. Class qualifies as preparation for the Built Green Real Estate Professional Designation exam. (30 DOL clock hours.)

**RES 140 (3) N**  
**Real Estate Sales and Practice**

Pre-license course prepares the student for the Washington Real Estate Broker's License Exam and to enter the residential real estate sales industry. Highlights of what you will learn include: 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. (Fulfills 30 DOL pre-licensing educational requirement.) Prerequisites: RES 100 or RES 210 (or concurrent enrollment) or real estate experience or by instructor permission.

**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 that can also be taken concurrently. (Fulfills 50 DOL continuing education 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 Washington State regulations thereof. (Fulfills 30 DOL continuing education clock hours.) Prerequisites: RES 100 or RES 110 or real estate experience, or instructor permission.

**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. (Fulfills 22 DOL continuing education clock hours.)

**RES 197 (3) N**  
**Real Estate Title & Escrow**

Covers methods of clearing title. Provides a foundation in title insurance, various types of liens, encumbrances and other items 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. Prerequisite: RES 100 or concurrent enrollment.

**RES 202 (3) N**  
**Multi-Family Property Management**

This course teaches important functions in rental property management, property analysis, rental policies, rental surveys, lease provisions, inspection, building codes, tenant relations, operating policies and financial result analysis. (Fulfills 30 DOL continuing education 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 217 (3) N**  
**Real Estate Development and Sustainability**

Explore the fundamental principles and procedures involved in developing residential, commercial and industrial real estate. The stages of a development project from its initiation to completion will be discussed in some detail. Although the course is oriented toward the development-related professions, it is also appropriate for people whose main interest is on investments or other aspects of development. (Fulfills 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, taxations, etc., in the Puget Sound Region. (Fulfills 30 DOL continuing education clock hours.) Prerequisites: RES 100, or RES 110, or RES 180 or RES 210 which can be taken concurrently, or real estate experience, or real estate license or instructor permission.

**RES 235 (3) N**

### Sales and Marketing

Increase your 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.

## Residential/Commercial Property Management Bachelor of Applied Science

**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 302 (4) N**

### Stakeholder Relations & Prof Development

Prepare property management students as professionals in a global community. Role-play emphasis on professional presentation, etiquette, culture, business communication, problem identification and solving, network and relationship building with all stakeholders.

**RCPM 303 (3) N**

### Intro to Development and Construction Management

An introduction to the fundamental principles and procedures of real estate development, sustainable construction, and vendor relationships to broaden student understanding of the scope of construction within property management field. Topics include development process, construction management, and tenant improvements.

**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. Prerequisite: Acceptance into the Residential and Commercial Property Management BAS Program.

**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. Prerequisite: Acceptance into the Residential and Commercial Property Management BAS Program.

**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 350 (2) N**

### Revenue Management for Property Management

Study of accounting for corporations, methods of raising capital, analysis of financial statements, introduction to management accounting, product cost accounting systems, profit planning, management performance measures, and capital budgeting.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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 402 (4) N**  
**Supervision and Management**

Organization and coordination of personnel practices and methods. Consideration given to communication, employment, staff orientation and training, working conditions, supervision, performance evaluation, collective bargaining, salary administration, and health and well-being of a diverse work force employed in domestic and international settings

**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.

**RCPM 494 (4) N**  
**Practicum Portfolio**

The property management practicum project is the opportunity for the student to demonstrate the application of RCPM BAS program course content, processes, and principles. Student projects focus on a specific asset type and location. Faculty guide and supervise the student's property management field project, which will be compiled in a portfolio and culminate in a professional presentation.

## Respiratory Care Bachelor of Applied Science in Allied Health

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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 (5) 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 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 advance mechanical ventilation across the age spectrum.

**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 451 (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.

**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.

**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.

**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.

**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.

**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.

**RCP 479 (2) C**  
**Senior Capstone Project I**

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.

**RCP 480 (2) C**  
**Senior Capstone Project II**

Second in a series after RCP 479. 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 interests.

**Science****SCI 90 (5) S**  
**Science**

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 91 (5) S**  
**Science**

No Description Available

**SCI 111 (1) 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 121 (5) N**  
**Natural Disasters**

We live in a very scary place. We live in earthquake central, just west of volcano junction, along the tsunami coast, where the mudflows meet the sea. We have regional-scale floods, world-class landslides, record-setting avalanches, and truly horrific forest fires. This course examines the science behind these and other natural disasters, here and around the world, exploring the disciplines of geology, meteorology, oceanography and astronomy in the process. We will be using a combination of hands on labs, open source data sets and online tools to investigate the potential hazards in our own back yards. This is a five-credit course which satisfies the lab science requirement for the AA degree. Lab fee applies.

**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. Counts towards the Natural World requirement. Lab science.

**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.

**SCI 296 (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 (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.

**Science, Technology, Engineering & Math**

STEM 111 (3) S

**Stem Exploration: IT All Begins with a Question!**

Covers science process skills such as graphing, data analysis, experimental design, scientific communication, and collaborative work. These are the fundamental skills that scientists and engineers use daily and are needed by students to succeed in any STEM class. The course will use topics from Biology, Chemistry, and/or Physics, but is designed in such a way as to be suitable for students with no science background.

STEM 118 (2) C|S

**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.).

**Service Learning**

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 106 (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 107 (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 108 (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 110 (1-2) C

**Service Learning: Communications**

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 111 (2) C

**Service Learning: Communications**

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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 226.

**SLN 112 (2) C**

**Service Learning: Communications**

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 113 (2) C**

**Service Learning: Communications**

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 115 (1-2) C**

**Service Learning: English**

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 116 (1-2) C**

**Service Learning: English**

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 117 (2) C**

**Service Learning: English**

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 118 (2) C**

**Service Learning: English**

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 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 127 (2) C**

**Service Learning: Hospitality & Culinary Arts**

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 128 (2) C**

**Service Learning: Hospitality & Culinary Arts**

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 130 (1-2) C****Service Learning: Humanities**

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 131 (1-2) C****Service Learning: Humanities**

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 132 (1-2) C****Service Learning: Humanities**

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 133 (2) C****Service Learning: Humanities**

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 135 (2) C****Service Learning: International Program**

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 136 (2) C****Service Learning: International Program**

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 137 (2) C****Service Learning: International Program**

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 138 (2) C****Service Learning: International Program**

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 140 (1-2) C****Service Learning: Languages & Cultures**

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 141 (2) C**  
**Service Learning: Languages & Cultures**

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 142 (2) C**  
**Service Learning: Languages & Cultures**

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 143 (2) C**  
**Service Learning: Languages & Cultures**

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 145 (1-2) C**  
**Service Learning: Math**

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 146 (2) C**  
**Service Learning: Math**

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 147 (2) C**  
**Service Learning: Math**

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 148 (2) C**  
**Service Learning: Math**

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 150 (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 151 (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 (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 (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 (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 (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 299 (2) N**  
**Service Learning Independent Study**

This independent study provides the opportunity for students to earn credit for service to the college and/or community. Activities may include but is not limited to fieldwork, observations, scholarship, and volunteer positions.

**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.

**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.

**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.

**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.

**SHS 101 (2) C**  
**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.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**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.

**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.

**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.

**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.

**SHS 130 (5) C****Foundations of Gerontology**

Provides an interdisciplinary overview of the field of gerontology. Psychological, physiological, and biological processes, as well as social theories and ethical practices, are examined in a diverse context.

**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 (3) 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.

**SHS 199 (4) 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 205 (5) C****Crisis Intervention and Trauma Informed Care**

Intro to crisis intervention and trauma-informed care techniques for the beginning mental health/human services professional. Students will develop assessment techniques and interviewing skills with populations experiencing mental health concerns, physical health concerns, substance abuse, sexual assault, intimate partner and domestic violence, bereavement, suicide, and other crises.

**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.

**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.

**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.

**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.

**SHS 231 (5) C****Pharmacology of Addictions**

Studies pharmacological addictions of alcohol and other drugs. Explores the physiological and psychological effects of drugs, clinical signs, symptoms, and behaviors associated with addiction, effects of drug and alcohol use on the nervous system, drug classifications and medication assisted treatment (MAT). Prereq: SHS 235 with 2.0 GPA; eligibility for ENGL&099, and Math 087 or 091. Meets educational requirements for courses for Substance Use Professional included in WAC 246-811-030.

**SHS 232 (5) C****Addiction, Adolescents and Family Systems**

Explores adolescent and family addiction issues from developmental, clinical, social, cultural and treatment perspectives. Focus is on family theories and conceptual frameworks, the impact of addiction on adolescent and family development, assessment and diagnosis, the progression of addiction/disease for families and adolescents, implications for treatment, aftercare and relapse.

**SHS 233 (5) C****Addictions Counseling**

Introduction to addiction counseling. Evidence-based therapeutic methods such as SBIRT, Motivational Interviewing, Cognitive Behavioral Therapy (CBT), Trauma Informed Care, Relapse Prevention and Seeking Safety will be investigated in the context of cultural diversity. Prerequisites: SHS 235 with 2.0; eligible for ENGL099; and MATH087 or MATH091. Meets educational requirements for courses relating to the substance use disorder professional included in WAC 246-811-030.

**SHS 235 (5) C****Drug Addiction and Society**

Introduction to misuse of and addiction to psychoactive drugs. Includes history, theories, current research, and treatment practices, and the nature of successful recovery as well as prevention concepts.

**SHS 255 (5) C****Mental Health and Co-occurring Disorders**

Overview of mental health and co-occurring disorders. Identification of referral processes, treatment options, barriers unique to this population, services available to the co-occurring disorder consumer in the context of culture, race and ethnicity

**SHS 270 (5) C****Ethics in Human Services and Addiction Studies**

Explores the WA Administrative Codes, federal codes, and professional codes of ethics that apply to human services and substance use disorder professionals. Examines ethical theory, ethical decision-making, and ethical practice in a multicultural context. Meets educational requirements for courses for Substance Use Professional included in WAC 246-811-030.

**SHS 280 (3) C****Case Management in SHS and Addiction Studies**

Examines the roles of human services and substance use disorder professional case managers. Students explore all aspects of case management, including service coordination, screening, ASAM Criteria, assessment and treatment planning.

**Social Sciences Resources****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 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.

**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.

**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& 201 (5) C****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 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****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 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 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****Sociology of Gender & Sexuality**

Explores the social construction of sex, sexuality, and gender over time and across cultures. Students critically examine the idea that sex, sexuality, and gender are fixed biological realities and investigate patterns of inequality associated with sex, sexuality, and gender. Sociology courses are web enhanced. Web enhanced courses have a traditional classroom (on campus) structure with an added web component to enhance communication and collaboration.

**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 235 (5) C****Sociology of Health and Medicine**

Examines social factors related to health, healing, and health care. Analyzes impact of culture on definition, treatment, and subjective experience of illness. Emphasizes social determinants of health, including inequities, stress, environment, trauma, and access to resources. Compares health care systems and approaches to social change.

**SOC 240 (5) C****Sociology of Education**

Identifies structural influences on schooling and critically assesses how education works and for whom. Explores issues of school culture, socialization, inequities, power, difference and social change in the organization, practices and effect of education in both US and global contexts. Researches educational inequalities and proposes reforms and improvements.

**SOC 245 (5) 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 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.

**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.

**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.

**Specialty Desserts****BAK 101 (4) C****Baking Theory I: Introductory Principles**

An introduction to mixing and baking methods, and to the scientific principles used in this field. This course covers mise en place; ingredient characteristics and functions; tool and equipment identification, usage, and safety; and trade terminology. Includes discussions on mixing, cooking, and baking methods for: cakes, cookies, quick breads, pastries, pies, tarts, creams, icings, syrups, and sauces. Also includes information on baking history and trade opportunities.

**BAK 102 (3) C****Baking Theory II: Breads and Viennoiserie**

Presents baking theory and ingredients. Includes scientific principles that determine 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, whole grain baking, European and non-European breads, laminated doughs, and artistic design doughs.

**BAK 103 (4) C****Desserts and Confections Theory I**

Introduces students to three areas: desserts, chocolate and confection work, and decorative media. Covers plated and banquet dessert theory, churn and still frozen desserts, entremet components (including glazes and hydrocolloidal thickeners), and confectionery work with an emphasis on cacao and chocolate. Also introduce students to decorative media used for cakes, entremets, and confections.

**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.

**BAK 108 (3) C****Baking Theory III: Grains and Sugars**

Explore the unique properties associated with a wide variety of fresh-milled and whole grains as applied to baking as well as alternative sugars in pastry work. Learn scientific principles applied to yeast products, fermented foods, flour and grains.

**BAK 111 (9) C****Baking Lab I**

Covers the fundamentals of professional baking and standard production techniques in a fully functioning bakeshop. Includes mixing, baking, and finishing of cakes, cookies, quick breads, pastries, pies, tarts, creams, icings, syrups, and sauces. Heavy emphasis on: sanitation and safety; professionalism and work ethic; teamwork and personal responsibility; and building organizational skills. Includes training in retail operations, customer service, and product marketing and display.

**BAK 112 (9) C****Baking Lab II: Breads and Viennoiserie**

Artisan bread and viennoiserie production with a focus on professional production. This course covers yeasted and levain breads, rye and whole-grain baking, and laminated and non-laminated enriched doughs. There is heavy emphasis on: sanitation and safety; professionalism and work ethic; teamwork, personal responsibility; and organizational skills. Includes training in retail operations, customer service, and product marketing and display.

**BAK 113 (9) C****Pastry I: Intermediate Techniques**

Builds upon and refines competencies and techniques developed in BAK 111 and BAK 112, and introduces new concepts and methods, including traditional and plated desserts, frozen desserts, garnishing and decorative techniques, advanced mousse cakes, and petit gateaux. Students will gain production experience as they work in teams to provide desserts for banquets, buffets, fine dining, café dining, and a retail display cases. Advanced customer service is covered.

**BAK 115 (1) C****Restaurant Baking: Practicum**

For culinary arts students. Production of baked goods including ganache, custards, creams, puddings, mousses and purees.

**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.

**BAK 117 (2) C****Introduction to Lacto Fermentation**

This course takes you behind the scenes of the everyday fermented food products we take for granted. Learn the scientific principles of cheesemaking and fermentation-based pickling, as well as fermented ingredients and beverages. Understand the differences between yeast and bacterial fermentation; learn cheese production, including sanitation and safety; become familiar with the processes for making European-style butter, kombucha, vinegar, and other fermented products.

**BAK 118 (8) C****Bakery Lab II - Advanced Techniques & Leadership**

Builds upon skills and knowledge obtained throughout previous quarters in preparation for a capstone practicum. Students will review and practice topics from prior coursework along with introductions to new concepts in advanced-level pastry work, storeroom management, and higher-level organizational skills. They will help manage retail operations and assist with the training of freshman students in the program.

**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.

**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.

**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.

**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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN ..... Watch Technology

**COURSE TO PREFIX**

Watch Technology ..... HIN

Common Course Numbering explanation is on page 226.

**BAK 127 (1) C**

**Chef of the Day Capstone**

Students will demonstrate the combined knowledge and skills obtained from all their previous practical and theoretical SDB training. Over the course of six days, students will prepare a variety of bread, pastry, and dessert items, then present them to a panel of evaluators for critique. Along with the baked items, students will provide written information about their projects that includes recipes, production schedules, food cost, and waste reports.

**BAK 130 (3) C**

**Confections Lab I: Chocolate and Décor**

This course utilizes theoretical knowledge gained from BAK 103 for practical applications in the kitchen. Students will learn different chocolate tempering and decorative techniques; work with sugar and nut pastes for decorative purposes; cook basic crystalline and non-crystalline candies; and learn to make ganaches for molding and enrobing. This class will also touch on non-nutritive sugar substitutes for decorative work.

**BAK 299 (1-5) C**

**Special Projects/Commercial Baking**

Independent study course for individual projects in the Commercial Baking/Pastry field. Prereq: instructor permission.

**Supervision and Management**

**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.

**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.

**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.

**SURG 115 (2) C**

**Clinical Orientation**

Covers observation of the environment, routines, supplies and equipment, patient-team interaction and application of scientific principles.

**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.

**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.

**SURG 125 (4) C**

**Clinical Practice I**

Provides clinical practice, with focus on development of entry-level skills.

**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.

**SURG 135 (10) C**

**Clinical Practice II**

Provides advanced clinical practice to develop entry-level skills.

**Sustainable Building Science Technology**

**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 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 489 (4) S**  
**Sustainable Building Science Technology Capstone**

Develop a project based on previous classes and internship experiences.

**SBST 499 (1-10) S**  
**SBST Independent Study**

Independent study course. Student will conduct individual research and/or special projects related to discipline under the direction of the designated faculty member within the Sustainability Building Science Technology Program.

**Undergraduate Research****UGR 214 (3) C|N**  
**Introduction to Scientific Research**

Prepares students to successfully complete their own independent research project. Topics include application of the scientific method, research methods, critical analysis of primary literature, ethics in research, 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 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.

**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.

**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.

**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 achievement through self-evaluation and faculty and supervisor evaluations.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**Watchmaker****HIN 111 (6) N****Introduction to Watch Technology**

In this introductory course, students will survey the history of time measurement and the watch and clock trade. Students will learn the fundamentals of safe shop practices including lab hazard, accident prevention and first aid. Introduction to trade terminology associated with tools, equipment, technical drawing and measuring devices used in the trade. Use of technical documents to learn terminology and functions of watch components of modern manual wind watch movements.

**HIN 112 (6) N****Watch Technology I: Tools, Equipment & Measurement**

This course will focus on applying knowledge of tools and equipment including care and maintenance in a lab setting. Students will learn the types and appropriate use of jeweler's saw, tweezers, screw drivers, files and the watchmaker's lathe. Students learn the fundamentals of hardening, tempering and annealing steel and measuring techniques and applying the metric system in the use of instruments and gauges. Students will make technical drawings and manufacture tools and parts using drawings.

**HIN 113 (10) N****Watch Technology I: Practicum**

This is a 10 credit practicum where students begin to apply the information and knowledge gained in HIN 111 and HIN 112. In a lab environment, students will develop basic skills in the manufacture and repair of tools and parts for timepieces. Identification and application of tool and equipment use while exercising safety precautions in a watchmaker's shop will provide the context for this direct learning experience.

**HIN 121 (6) N****Watch Technology II: Professional Knowledge**

Students will learn the formulas used in the manufacturing and repair of the oscillator, barrel, and gear train. The class will also cover cutting geometry, finishing techniques, and watch movement adjustments.

**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**HIN 122 (6) N**

**Watch Technology II: the Watchmakers Lathe**

Students will learn advanced lathe techniques using the cross-slide and milling attachment on their watchmaking lathes. Building upon HIN 121, students will undertake projects with increasingly smaller dimensions and tighter tolerances. Students will learn how to produce simple watch components, apply finishing techniques, and practice the competencies assessed on the SAWTA I intermediate exam.

**HIN 123 (10) N**

**Watch Technology II: Practicum**

Practicum where students apply the information and knowledge gained in HIN 121 and HIN 122. In a lab environment, students will further work on the manufacture of tools and parts for timepieces. Students will also continue to work on movement service, adjustments, oiling, and related tasks. Students will practice the competencies assessed on the SAWTA I exam.

**HIN 131 (6) N**

**Watch Technology III: Winding and Setting Mechan**

In this course students learn to correct common errors in the mainspring barrel, the barrel bridge and mainplate. Introduction to common types of setting mechanisms and practice correct disassembly, assessment and adjustment, re-assembly and lubrication procedures. Students learn the mathematical formulas for determining correct size of mainsprings. Pre-req: HIN 121, 122 and 123. Co-req: HIN 132 and 133.

**HIN 132 (6) N**

**Watch Technology III: Watch Gear Trains**

Students are introduced 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. Students learn to dismantle, assemble, maintain and repair the gear train of a watch. Pre-req: HIN 121, 122 and 123. Co-req: HIN 131 and 133.

**HIN 133 (10) N**

**Watch Technology III: Practicum**

This is a ten-credit practicum in which students will apply the information and knowledge gained in HIN 131 and HIN 132. In lab environment students will practice jewel setting and adjusting. Skills will be developed to prepare for and complete the third WOSTEP intermediate exam (winding, setting, gear train). Students will continue to develop their skills of identification and application of the appropriate tools and equipment while exercising safety precautions in a horological repair shop. Pre-req: HIN 121, 122 and 123. Co-req: HIN 131 and 132.

**HIN 141 (4) N**

**Watch Technology IV: Escapements**

Students are introduced to the role of escapement in the watch. History and development of different escapements and their influence on timekeeping are explored.

**HIN 142 (4) N**

**Watch Technology IV: External Parts**

Students learn about the different case styles and the parts that complete the case including crystals, crowns, push buttons, dials, hands, and gaskets.

**HIN 143 (8) N**

**Watch Technology IV: Practicum**

This is an eight-credit practicum where students apply the information and knowledge gained in HIN 141 and HIN 142.

**HIN 211 (6) N**

**Watch Tech V: Introduction to Precision Timing**

Students are introduced to the concepts of precision timing with emphasis on the eight influences of isochronisms (friction, external influence, regulating pins, escapement, magnetism, temperature, poisoning of balance wheel, poisoning of hairspring). Students will apply the theoretical concepts of precision timing to practice analyzing errors and making corrections to improve the timekeeping of the watches. Heavy focus will be on the escapement and hairspring (theory and adjustments).

**HIN 212 (6) N**

**Watch Tech: Introduction to Automatic Watches**

This course introduces the various self-winding (automatic) mechanisms for watches. Students practice testing, adjusting, disassembly and assembly of automatic mechanisms and study the history and development of these mechanisms.

**HIN 213 (10) N**

**Watch Tech V: Practicum**

Students build upon HIN 211 and HIN 212 coursework, gaining further experience with precision timing, automatic movement service, and the repair/replacement of external casing components. Students will be introduced to customer repairs and short jobs (battery, crystal, crown & stem replacement). They will continue working on case and bracelet refinishing, theory knowledge.

**HIN 221 (6) N**

**Watch Technology VI: Precision Timing II**

Students continue studying the theory and practical application of precision timing principles. Areas of focus include the hairspring, balance, and escapement. Students will work on checking and adjusting these components, fitting them into the overall service of mechanical automatic watches.

**HIN 222 (6) N**

**Watch Technology VI: Automatic Watches II**

Students continue practicing the service of self-winding (automatic) mechanisms in watches. These tasks include testing, adjustment, disassembly/re-assembly, oiling, dialing, and casing. Theory will cover the history, development, and mechanisms behind various types of automatic systems.

**HIN 223 (10) N**  
**Watch Technology VI: Practicum**

Students build upon HIN 221 and HIN 222 coursework, gaining more experience with precision timing, automatic movement service, and the repair/replacement of external casing components. Students will continue working on customer repairs and short jobs, refinish more complex styles of cases and bracelets, and further develop their understanding of related theory.

**HIN 231 (6) N**  
**Watch Technology VII: Advanced Precision Timing**

Students refine the art of precision timing. In this course students synthesize all the previous work in precision timing. The precision of a watch is dependent upon each unit of the watch being clean and well adjusted. In this class students use all the skills developed throughout the program, checking each unit systematically so that repairs are made in a timely fashion. Pre-req: HIN 221, 222 and 223. Co-req: HIN 232 and 233.

**HIN 232 (6) N**  
**Watch Technology VII: Chronographs**

Students learn to repair the main types of chronographs those with column wheels and those with cams. The following material is covered: the function of chronographs, identification of the components of chronographs, checking the general condition of the components, checking the correct fitting of all the components, understanding and correct application of lubrication, identifying errors and carrying out required corrections. Pre-req: HIN 221, 222 and 223. Co-req: HIN 231 and 233.

**HIN 233 (10) N**  
**Watch Technology VII: Practicum**

This a ten-credit practicum in which students will apply the information and knowledge gained in HIN 231 and HIN 232. In lab environment students will practice repairing chronograph watches and continue working on precision timing. Students will further develop their skills of identification and application of the appropriate tools and equipment while exercising safety precautions in a horological repair shop. Pre-req: HIN 221, 222 and 223. Co-req: HIN 231 and 232.

**HIN 241 (4) N**  
**Watch Technology VIII: After-Sales Service**

Students learn the range of skills necessary to manage a watch repair shop.

**HIN 242 (4) N**  
**Watch Technology VIII: Review of Courses**

Highlights of the two-year Watch Technology Program are reviewed in preparation for the final exams.

**HIN 243 (8) N**  
**Watch Technology VIII: Practicum**

This is an eight-credit practicum where students apply the information and knowledge gained in HIN 241 and 242. In a lab environment, students will practice repairing all types of watches and review the theory of watchmaking.

**Welding Fabrication****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.

**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 nondestructive testing.

**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.

**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.

**WFT 125 (6) S**  
**FCAW Flux Core Arc Welding**

Lab practice and competencies with equipment, multiple positions and applications of FCAW uses (Inner shield/Duel Shield). Combines weld theory, operation of OXY-Acetylene, and SMAW processes, using mild steel, low alloy and stainless steel.

**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.

**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.

**WFT 201 (6) S****Intermediate Welding 1**

Practice intermediate level configurations and positions for welding. Choose between SMAW, GMAW, FCAW, or GTAW process on mild steel plate or pipe. Students will cut and bevel plate or pipe and fit up in preparation for welding, using oxy fuel and hand tools. Safely set up and use electric arc welding equipment to deposit multi-pass welds.

**WFT 202 (6) S****Advanced Welding 1**

Practice welding technique in preparation for welder certification testing, using SMAW, GMAW, FCAW, or GTAW process on steel plate or 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)

**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 (6) S****Intermediate Welding 2**

A project-oriented set of practical exercises that conveys knowledge of common shop equipment along with theory of operation and applications of the SMAW, GMAW, FCAW, and GTAW processes. Student may fabricate project from choice of provided blueprints or design and create their own preapproved fabrication 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 (6) S****Advanced Welding 2**

Improve fabrication skills including design and development, blueprint reading, layout, cutting processes, fit up, tack welding, final welding and finishing, and product assessment. Student will fabricate project from choice of provided blueprints or design and create their own approved fabrication 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)

**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)

**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)

**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)

**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)

**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)

**WFT 297 (1-12) S****Special Topics in Welding Fabrication**

Special topics for an individual or group in welding fabrication field.

## Wine Technology

**WIN 101 (4) S**

### Introduction to Enology & Viticulture

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 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 104 (4) S**

### Elements of Wine Production II

Intermediate course in topics in winemaking that will emphasize the theories and practices of various fermentation process, theories of racking, topping, aging, and preservation methods. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 105 (4) S**

### Elements of Wine Production III

Advanced overview of topics in winemaking. Emphasizes the final stages of wine production including the usage and maintenance of barrels, introduction to blending wines, and topics in bottling and packaging. Students must be 18 years of age to participate in wine tasting. Wine Program lab fees apply.

**WIN 107 (5) S**

### Winery Production I

Practical application of theories and principles of grape harvest/processing & wine fermentation activities studied and discussed in WIN 103, Elements of Wine Production. This course combines real-time lecture and hands-on practicum. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 108 (4) S**

### Winery Production II

Practical application of theories and principles of winter winemaking activities studied and discussed in WIN 104, Elements of Wine Production II. This course combines real-time lecture and hands-on practicum. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 109 (4) 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.

**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.

**WIN 122 (4) 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.

**WIN 123 (4) S**

### Sensory Evaluation

An introduction to wine sensory evaluation methods including statistical analysis of trials, philosophy of wine styles and the common evaluation methods of representative wines used in sensory testing.. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 130 (4) S**

### Wine Tourism Introduction

Practical application of principles of tourism to winery brand and sales. Students will engage in a quarter-long practicum for specific case and provide pitch with accompanying research and implementation materials. Wine program fee applies. Students must be over 18.

**WIN 131 (4) 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 (4) 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 141 (4) 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 (4) 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.



**FINDING COURSES**

Course names and course prefixes are cross-referenced in an index beginning on page 227. For example:

**PREFIX TO COURSE**

HIN . . . . . Watch Technology

**COURSE TO PREFIX**

Watch Technology . . . . . HIN

Common Course Numbering explanation is on page 226.

**WIN 143 (4) 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.

**WIN 145 (4) 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 150 (2) S**  
**Winery Compliance**

A practice-oriented overview of the common compliance issues faced by winery businesses, including: entity formation, licensing, operational compliance, marketing compliance, and taxation. This course will focus on federal and Washington State laws and regulations, and will also introduce key differences in Oregon and California State regulatory schemes. Materials fee will be assessed. Students must be 18 years of age to participate in wine tasting.

**WIN 151 (4) 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.

**WIN 152 (4) 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.

**WIN 160 (4) 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.

**WIN 170 (4) S**  
**Food & Wine Pairing: Other Ferments**

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 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.

**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 receptors, 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.

**WIN 233 (4) S**  
**Advanced Wines of the World - France & Spain**

In depth study of France and Spain'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 each class. Materials fees will be assessed. Students must be 18 years of age to participate in wine tasting. Prerequisites: WIN 133

**WIN 235 (4) 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.

**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 varieties, 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.

**WIN 257 (4) S****Food & Wine Pairing: Cheeses & Desserts**

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.

**Women's Studies**

See *Gender & Women's Studies*, page xxx.

**Wood Construction****WCO 197 (1-8) C****Work Experience-Wood Construction**

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

**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: WTC 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: WTC 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: WTC 131 and WTC 132 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: WTC 131 and WTC 132 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.

**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.

**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.

**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.

**WTC 142 (4) C****Introduction to Carpentry and Blueprint Reading**

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.

**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 appropriate materials, products, tools and best practices for sustainable residential and light commercial construction.

**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.

**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.

**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.

**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.

**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.

**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.

**WTC 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.

**WTC 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.

**WTC 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.

**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 (1-2) C**  
**Construction Job Readiness**

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 (2) 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/AED**

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.

**WTC 167 (9) 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**  
**Construction Tools & Materials**

Focuses on construction-related hand and power tools, equipment and materials. Students learn proper use and terminology, and practice hands-on skills training in the safe and appropriate use of construction related hand and power tools, equipment and materials.

**WTC 177 (1) 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.