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3 Convenient Campuses

Oregon City 19600 Molalla Ave. Oregon City, OR 97045

Wilsonville

29353 SW Town Center Loop E. Wilsonville, OR 97070

Harmony

7738 SE Harmony Road Milwaukie, OR 97222

Non-Discrimination

Clackamas Community College does not discriminate on the basis of race, color, religion, gender, sexual orientation, marital status, age, national origin/ancestry, disability, family relationship or any other protected status in accordance with applic-able law. The college's commitment to nondiscrimination applies to curriculum activity and all aspects of operation of the college.

IMPORTANT DATES TO REMEMBER



CLASS START/END DATES + FINANCIAL DEADLINES *	WINTER 2026	SPRING TERM 2026	SUMMER TERM 2026	
Financial aid: All required CCC financial aid documentation due to ensure funding for term	Sept. 29	Jan. 5	March 30	
Registration begins	Nov. 17	Feb. 23	May 11	
Classes begin	Jan. 5	March 30	June 22	
Last day to add classes without instructor consent	Instructor consent required once course begins			
Last day to drop a class with a refund	Jan.18	April 12	July 5	
Last day to drop classes and receive a "W" automatically	Feb. 27	May 22	August 14	
Last day to submit petition for graduation	Feb. 13	May 8	July31	
Last day to change grading option	March 13	June 5	August 28	
Account balance due: \$100 non-payment fee applied if not paid	Feb. 13	May 8	July 31	
Final week	March 16-21	June 8-13	see course syllabus	
Last day of term	March 21	June 13	Sept. 5	
Commencement: GED & Adult High School Diploma / College Certificate and Degree	Friday evening, June 12, 2026			

^{*} Deadlines are the end of the business day unless otherwise noted. All calendar dates are subject to change without prior notice.

HOLIDAYS AND CAMPUS CLOSURES

WINTER TERM: Jan. 1 New Years Day, Jan. 19 MLK Jr. Day, Feb. 16 Presidents Day

SPRING TERM: May 25 Memorial Day

SUMMER TERM: June 19 Juneteenth, July 2 Independence Day Observation

FINAL EXAM SCHEDULE

Refer to your class syllabus or check with your instructor for the final week schedule. The final week schedule will be posted in your myClackamas account as soon as it is available.

CLACKAMAS IN YOUR COMMUNITY

Credit and non-credit courses offered at Clackamas Community College sites near you Winter 2026

Harmony (Community	Campus
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Complete course information available in Credit Course

Listings. In	dicated with: HAR			MEDICAL SERVICES
Biology			English fo	or Speakers of Other La
BI-112	GENERAL BIOLOGY FOR HEALTH	4 CREDITS	ESOL-012	BEGINNING ESOL
	SCIENCES		ESOL-015	BEGINNING READING, W AND GRAMMAR
BI-112L	GENERAL BIOLOGY FOR HEALTH SCIENCES LAB	0 CREDIT	ESOL-020	UPPER BEGINNING GRA
BI-120	INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY	4 CREDITS	ESOL-022	UPPER BEGINNING CONVERSATION
BI-120L	INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY LAB	0 CREDIT	ESOL-024	UPPER BEGINNING REA WRITING
BI-232	HUMAN ANATOMY & PHYSIOLOGY	4 CREDITS	ESOL-030	INTERMEDIATE GRAMM
	II		ESOL-031	INTERMEDIATE GRAMM
BI-232L	HUMAN ANATOMY & PHYSIOLOGY	0 CREDIT	ESOL-033	INTERMEDIATE CONVER
Chemistry	II LAB		ESOL-034	INTERMEDIATE READING WRITING
CH-112	CHEMISTRY FOR HEALTH SCIENCES	4 CREDITS	ESOL-043	UPPER INTERMEDIATE CONVERSATION 2
CH-112L	CHEMISTRY FOR HEALTH SCIENCES LAB	0 CREDIT	ESOL-044	UPPER INTERMEDIATE F WRITING
	SCIENCES LAB		ESOL-046	EDITING FOR BETTER W
Communic	ation Studies		ESOL-051	ADVANCED GRAMMAR E
COMM-111Z	PUBLIC SPEAKING	4 CREDITS	ESOL-053	ADVANCED COMMUNICA
COMM-218Z	INTERPERSONAL COMMUNICATION	4 CREDITS	ESOL-082	SKILLS 2 ASSESS/EVALUATE NEW STUDENTS
Criminal Ju	ıstice		ESOL-083	EDUCATIONAL PLANNIN
CJA-101	CRIMINOLOGY	4 CREDITS	2002 000	RETURNING STUDENTS
CJA-120	INTRODUCTION TO COURTS	3 CREDITS	Environm	ental Science
CJA-122	CRIMINAL LAW	4 CREDITS		
CJA-134	CORRECTIONAL INSTITUTIONS	3 CREDITS	ESR-172	INTRODUCTION TO CLIM CHANGE
CJA-170	CAREERS IN CRIMINAL JUSTICE	3 CREDITS	ESR-172L	INTRODUCTION TO CLIM
CJA-201	JUVENILE DELINQUENCY	4 CREDITS		CHANGE LAB
CJA-203	CRISIS INTERVENTION	3 CREDITS	Food & N	utrition
CJA-211	CRIMINAL INVESTIGATION II	3 CREDITS	FN-110	PERSONAL NUTRITION
CJA-215	SEXUAL ABUSE AND HUMAN TRAFFICKING	3 CREDITS	FN-225	NUTRITION
CJA-222	PROCEDURAL LAW	3 CREDITS	General D	Development Education
CJA-280	CRIMINAL	2-6 CREDITS	GED-011	GED IN ESPAÑOL
	JUSTICE/CORRECTIONS/CWE		GED-015	GED PREPARATION
Dental Ass	sistant		GED-049	LATINO GED & LIFE SKIL
DA-102	DENTAL RADIOLOGY II	2 CREDITS		
 _		_ 00		

DA 4001	DENITAL DADIOLOGY III AD	4 ODEDIT
DA-102L	DENTAL RADIOLOGY II LAB	1 CREDIT
DA-105	CLINICAL PROCEDURES II	2 CREDITS
DA-105L	CLINICAL PROCEDURES II LAB	1 CREDIT
DA-108	DENTAL MATERIALS II	2 CREDITS
DA-108L	DENTAL MATERIALS II LAB	1 CREDIT
DA-120	CLINICAL PRACTICUM II	5 CREDITS
Emergenc	y Medical Technology	
EMT-101	EMERGENCY MEDICAL TECHNICIAN PART I	6 CREDITS
EMT-102	EMERGENCY MEDICAL TECHNICIAN PART II	6 CREDITS
EMT-105	INTRODUCTION TO EMERGENCY MEDICAL SERVICES	3 CREDITS
English fo	r Speakers of Other Languages	
ESOL-012	BEGINNING ESOL	0 CREDIT
ESOL-015	BEGINNING READING, WRITING,	0 CREDIT
	AND GRAMMAR	
ESOL-020	UPPER BEGINNING GRAMMAR	0 CREDIT
ESOL-022	UPPER BEGINNING CONVERSATION	0 CREDIT
ESOL-024	UPPER BEGINNING READING & WRITING	0 CREDIT
ESOL-030	INTERMEDIATE GRAMMAR A	0 CREDIT
ESOL-031	INTERMEDIATE GRAMMAR B	0 CREDIT
ESOL-033	INTERMEDIATE CONVERSATION 2	0 CREDIT
ESOL-034	INTERMEDIATE READING & WRITING	0 CREDIT
ESOL-043	UPPER INTERMEDIATE CONVERSATION 2	0 CREDIT
ESOL-044	UPPER INTERMEDIATE READING & WRITING	0 CREDIT
ESOL-046	EDITING FOR BETTER WRITING	0 CREDIT
ESOL-051	ADVANCED GRAMMAR B	0 CREDIT
ESOL-053	ADVANCED COMMUNICATION SKILLS 2	0 CREDIT
ESOL-082	ASSESS/EVALUATE NEW STUDENTS	0 CREDIT
ESOL-083	EDUCATIONAL PLANNING FOR RETURNING STUDENTS	0 CREDIT
Environme	ental Science	
ESR-172	INTRODUCTION TO CLIMATE	4 CREDITS
	CHANGE	
ESR-172L	INTRODUCTION TO CLIMATE CHANGE LAB	0 CREDIT
Food & Nu	utrition	
FN-110	PERSONAL NUTRITION	3 CREDITS
FN-225	NUTRITION	4 CREDITS
General D	evelopment Education (GED)	
GED-011	GED IN ESPAÑOL	0 CREDIT
GED-015	GED PREPARATION	0 CREDIT
GED-049	LATINO GED & LIFE SKILLS	0 CREDIT

2026/WI

	s In Your Community				2026/WI
Geology			NRS-221	CHRONIC ILLNESS II AND END OF LIFE	4 CREDITS
G-102	GENERAL GEOLOGY	4 CREDITS	NRS-221C	CHRONIC ILLNESS II AND END OF	5 CREDITS
G-102L	GENERAL GEOLOGY LAB	0 CREDIT		LIFE CLINICAL	
G-202	GENERAL GEOLOGY	4 CREDITS	NRS-231	CLINICAL PHARMACOLOGY II	3 CREDITS
G-202L	GENERAL GEOLOGY LAB	0 CREDIT	NRS-232	PATHOPHYSIOLOGICAL PROCESSES I	3 CREDITS
Gerontolog)y		NUR-100	NURSING ASSISTANT I	6.5 CREDITS
GRN-280	GERONTOLOGY/CWE	2-6 CREDITS (VAR)	NUR-100C	NURSING ASSISTANT I CLINICAL	0 CREDIT
		(VAN)	Phlebotom	у	
Health			PHB-125	PROFESSIONALISM IN	1 CREDIT
HE-163	BODY & DRUGS I: INTRODUCTION TO ABUSE & ADDICTION	3 CREDITS	DUD 400	HEALTHCARE	E ODEDITO
	TO ADODE & ADDIOTION		PHB-130	PHLEBOTOMY PRACTICUM	5 CREDITS
Health Pro	fessions		Psycholog	y	
HP-100	HEALTHCARE PROVIDER BLS/CPR,	1 CREDIT	PSY-101	HUMAN RELATIONS	3 CREDITS
	FIRST AID/BLOODBORNE PATHOGENS		PSY-215	INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY	4 CREDITS
HP-110	MEDICAL TERMINOLOGY	4 CREDITS		DEVELOR MENTALT GTORIOLOGI	
HP-130	COMMUNICATIONS AND ETHICAL	2 CREDITS	Small Busi	ness Development Center	
	PRACTICES IN HEALTHCARE SETTINGS		SBM-010	REAL ESTATE BROKER LICENSE	0 CREDIT
High School	ol Diploma (AHSD)		SBM-011	PROPERTY MANAGEMENT PRE- LICENSE	0 CREDIT
ASE-042	JOB SKILLS COMPETENCY LAB	0.5 CREDIT	SBM-020	LAUNCH & GROW: SMALL BUSINESS BASICS	0 CREDIT
Mathemati	cs		SBM-024A	EXIT SMART: RETIRING WITH SELLING & SUCCESSION	0 CREDIT
MTH-060	ALGEBRA I	4 CREDITS		STRATEGIES	
MTH-065	ALGEBRA II	4 CREDITS	SBM-028A	CONTRACTOR ESSENTIALS	0 CREDIT
MTH-111Z	PRECALCULUS I: FUNCTIONS	4 CREDITS	SBM-028B	MANAGEMENT - PART 1 CONTRACTOR ESSENTIAL	0 CREDIT
Medical As				MANAGEMENT - PART 2	
MA-156	PHLEBOTOMY I	1 CREDIT	SBM-029A	NEXT LEVEL CONTRACTING: ADVANCED BUSINESS	0 CREDIT
MA-156L	PHLEBOTOMY I LAB	1 CREDIT		STRATEGIES FOR CONTRACTORS	
MA-160	INSURANCE & HEALTH INFORMATION MANAGEMENT	3 CREDITS	SBM-029B	- PART 1 NEXT LEVEL CONTRACTING:	0 CREDIT
MA-162	EXAMINATION ROOM TECHNIQUES	3 CREDITS		ADVANCED BUSINESS STRATEGIES FOR CONTRACTORS	
MA-162L	EXAMINATION ROOM TECHNIQUES LAB II	1 CREDIT	SBM-029C	- PART 2 NEXT LEVEL CONTRACTING:	0 CREDIT
MA-164	CLINICAL LAB PROCEDURES I	1 CREDIT		ADVANCED BUSINESS	
MA-164L	CLINICAL LAB PROCEDURES I LAB	1 CREDIT		STRATEGIES FOR CONTRACTORS - PART 3	
MA-168	SEMINAR II	2 CREDITS	SBM-030	PROFITABILITY & RESILIENCY SMALL BUSINESS MANAGEMENT	0 CREDIT
Medical Bil	lling and Coding		SBM-031A	SCOREBOARDS IN BUSINESS -	0 CREDIT
MBC-115	INSURANCE BILLING AND REIMBURSEMENT I	4 CREDITS	SBM-031B	PART 1 SCOREBOARDS IN BUSINESS -	0 CREDIT
MBC-120	INTRODUCTION TO MEDICAL CODING	3 CREDITS	SBM-031C	PART 2 SCOREBOARDS IN BUSINESS -	0 CREDIT
MBC-135	LAW AND ETHICS FOR	3 CREDITS	OPINI-0010	PART 3	UUILDII
	HEALTHCARE PROFESSIONS		XSBM-0003	GOING INTO BUSINESS	0 CREDIT
Nursing			XSBM-0005	GOING OUT OF BUSINESS	0 CREDIT
NRS-112	FOUNDATIONS OF NURSING IN	3 CREDITS	XSBM-0010	PREPARING FOR THE CCB EXAM	0 CREDIT
	ACUTE CARE I	0 0.125110	XSBM-0011	QUICKBOOKS PRO: PART I	0 CREDIT
NRS-112C	FOUNDATIONS OF NURSING IN ACUTE CARE I CLINICAL	3 CREDITS	XSBM-0012	QUICKBOOKS PRO: PART II	0 CREDIT

XSBM-0024 CONSTRUCTION BUSINESS		0 CREDIT
	FUNDAMENTALS: ACCURATE	

ESTIMATING & FINANCIAL RECORDS

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vvriting		
WR-121Z	COMPOSITION I	4 CREDITS
WR-122Z	COMPOSITION II	4 CREDITS
WR-227Z	TECHNICAL WRITING	4 CREDITS
WRD-098	INTRODUCTORY COLLEGE READING & WRITING 2	4 CREDITS

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Crs. Fee Instructor Crs. Fee Total Instructor Tuition Total

COURSE LISTING

Credit and non-credit Courses offered Winter 2026

Adult Basic Education (ABE)

ABE-012 ADULT BASIC EDUCATION, 0 CREDIT

Instruction offered to improve reading, writing, and math skills in order to transition to college classes, GED preparatory classes, or career related goal. Students must be 16 years or older. Required: Student Petition.

ABE-012-07 342542 MTWTH 10-11:50 AM D. GREEN \$0.00 \$0.00 \$55.00 \$55.00 Required: Student Petition.

Anthropology

BIOLOGICAL ANTHROPOLOGY, 4 CREDITS

Introduces the study of humans as biocultural beings in the context of modern genetics, evolutionary theory, primate taxonomy, anatomy and behavior, fossil hominines, and the role of the physical anthropologist in

Recommended Prerequisites: WRD-090 or placement in WRD-098

OC NCT	ANT-101-01	342545 TTH	10-11:5	50 AM
	K. BACA	\$520.00	\$52.00 \$0.00	\$572.00
ONL NCT	ANT-101-02	342549		
	K. BACA	\$520.00	\$52.00 \$0.00	\$572.00

CULTURAL ANTHROPOLOGY, 4 CREDITS ANT-103

Introduces the diversity of contemporary human cultures and the ways anthropologists study and compare them in an effort to understand how different societies organize their lives and make sense of the world around them. Explores the interrelationships among the various elements of culture.

Recommended Prerequisites: WRD-090 or placement in WRD-098

OC NCT	ANT-103-01	342553 TTH		1-2:50	PM
	K. BACA	\$520.00	\$52.00	\$0.00	\$572.00

ANTHROPOLOGY/CWE, 2-6 CREDITS (VAR)

Cooperative work experience. Provides students with on-the-job work experience in the field of anthropology (may involve physical anthropology, and/or archaeology, and/or cultural anthropology). Required: Student Petition.

Corequisites: CWE-281

Recommended Prerequisites: WRD-090 or placement in WRD-098

OC NCT ANT-280-01

> K. BACA \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

Art

ART-100A JEWELRY MAKING TECHNIQUES, 1 CREDIT

Various topics will introduce techniques in: construction, forming, fabrication, soldering, inlay, etching, mold making, casting, stone setting, chain making and silversmithing. Students will be encouraged to create and design their own jewelry with both meaning and function. Historical and contemporary issues surrounding jewelry and body adornment will be presented and discussed during the course. May be repeated for up to 3 credits

ос	ART-100A-01	347494 TTH		1-4:20 PM	
	J. IIJIMA	\$130.00	\$13.00	\$125.00	\$268.00
	Meets: 1/6-1/2	2. Focus: Casting	•		
ос	ART-100A-02	347495 TTH		1-4:20 PM	
	J. IIJIMA	\$130.00	\$13.00	\$125.00	\$268.00
	Meets: 2/10-2/2	26. Focus: Ring M	laking.		

ART-101 **ART APPRECIATION, 3 CREDITS**

Discover the fundamentals of thinking about and creating art through readings, class discussions, and gallery and museum (virtual) tours. This course will examine art, architecture, and design from the ancient period through the contemporary moment. The course also considers connections and relationships in art-making, history, and culture.

ONL LCT	ART-101-01	342684			
	C. SIEGFRIED	\$390.00	\$39.00	\$6.00	\$435.00

ART-115 BASIC DESIGN: 2-DIMENSIONAL DESIGN, 4 CREDITS

This course acquaints students with the elements and principles of design and basic color theory. Students develop compositional and analytical skills through projects and critiques. Students examine historical and contemporary issues and ideas related to visual composition and design across multiple fields of expression.

OC LCT	ART-115-01 342	2687 MW		1-3:50 PM	
	C. SIEGFRIED	\$520.00	\$52.00	\$80.00	\$652.00
OC LCT	ART-115-02 342	2690 TTH		1-3:50 PM	
	R. KALMAN	\$520.00	\$52.00	\$80.00	\$652.00

ART-119 TIME-BASED ART, 4 CREDITS

This course introduces students to working with time as a medium, concept, and process. Introduces the strategies, practices, and history of the time-based art including storytelling, performance, body art, animation, video, and sound. Students develop abilities in producing, documenting, and presenting these works.

ONL LCT	ART-119-01	342693	}			
	K. SIMMONS		\$520.00	\$52.00	\$80.00	\$652.00
	Pick up suppli	es Week	1: Tue, 1	/8, 11:00	am-1:00pm	

ART-131 INTRODUCTION TO DRAWING, 4 CREDITS

342695

This course introduces students to basic skills, drawing tools, materials, techniques, and elements of composition; line, shape, and value. Projects will involve observational drawings of still lifes, landscapes, and the figural form. Assignments include drawings, assigned readings, video clips, and group critiques. Historical and contemporary issues of drawing will be examined.

	A. SCHROER		\$520.00	\$52.00	\$80.00	\$652.00
	Pick up supplie	es Week	1: Tue, 1	/8, 11:00	am-1:00p	om.
ONL LCT	ART-131-02	342698	}			
	A. SCHROER		\$520.00	\$52.00	\$80.00	\$652.00
	Pick up supplie	es Week	1: Tue, 1	/8, 11:00	am-1:00p	om.
ос	ART-131-03	342700	MW		9-11:50	AM
	R. KALMAN		\$520.00	\$52.00	\$80.00	\$652.00

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

ART-131-01

ONL LCT

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

OC LCT

ART-205 HISTORY OF ART/ROMANESQUE THROUGH BAROQUE, 4 CREDITS

Examines art, culture, and history from the Romanesque through the Baroque periods in art. This is a broad overview of art history that promotes an understanding of art and its history through readings, discussion, papers and exams.

Recommended Prerequisites: WR-121Z

ONL LCT ART-205-01 342170

J. SIMONE \$520.00 \$52.00 \$21.00 \$593.00

ART-232 LIFE DRAWING (FIGURE EMPHASIS), 4 CREDITS

Develop drawing skills, tools, materials, techniques, elements of composition; line, gesture, and value. Students work from direct observation and description of the figure (clothed and nude) describing volume and form on the two-dimensional plane. Assignments include drawing, assigned readings and group critiques of drawing projects.

Prerequisites: ART-131 or Student Petition

OC LCT ART-232-01 342702 MW 1-3:50 PM R. KALMAN \$520.00 \$52.00 \$80.00 \$652.00

ART-250 CERAMICS/BEGINNING, 4 CREDITS

This course provides a broad general introduction to fundamental ceramic skills and experience, with assignments that foster artistic growth. Students explore different methods of working with clay, including pinching, coiling, slab construction, and throwing on the wheel and are introduced to glazing and firing methods. Students research the history of ceramics and its connection to culture and society.

OC LCT	ART-250-01	342704	TTH		1-3:50 PM	
	N. BRODNICK	l	\$520.00	\$52.00	\$79.00	\$651.00
OC LCT	ART-250-02	342708	TTH		6-8:50 PM	
	N WARRENS		\$520.00	\$52.00	\$79.00	\$651.00

ART-252 CERAMICS/WHEEL-THROWING I, 4 CREDITS

This course is an introduction to ceramic wheel-throwing methods through the creation of functional and artistic forms to develop fundamental skills and clay experience and foster artistic growth. Students are introduced to glazing and firing methods. Students research the history of ceramics and its connection to culture and society.

OC LCT ART-252-01 342710 TTH 9-11:50 AM
N. BRODNICKI \$520.00 \$52.00 \$79.00 \$651.00

ART-253 CERAMICS/INTERMEDIATE, 4 CREDITS

In this course, students further develop ceramic skills and clay experience to foster artistic growth. Students explore and develop different methods of working with clay, including pinching, coiling, slab construction, and throwing on the wheel and refine glazing and firing methods. Students research the history of ceramics and its connection to culture and society.

Prerequisites: ART-250, ART-251, or ART-252, or Student Petition

OC LCT	ART-253-01 342	711 TTH		1-3:50 PM	1
	N. BRODNICKI	\$520.00	\$52.00	\$79.00	\$651.00
OC LCT	ART-253-02 342	712 TTH		6-8:50 PM	1
	N. WARRENS	\$520.00	\$52.00	\$79.00	\$651.00

ART-255 CERAMICS/WHEEL-THROWING II, 4 CREDITS

This course continues the development of ceramic wheel-throwing methods through the creation of functional and artistic forms to develop skills and clay experience and foster artistic growth. Students explore glazing and firing methods. Students also examine the history of wheel thrown ceramics and its connection to culture and society.

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) **HYB:** In-person plus online work

ART-262 DIGITAL PHOTOGRAPHY & PHOTO-IMAGING, 4

Prerequisites: ART-252 or Student Petition

ART-255-01

CREDITS

N. BRODNICKI

Introduces concepts, techniques, practices, aesthetics and ethics of photographic imaging and image-making with digital technology. Students will use imaging software.

342713 TTH

Required: Access to a digital camera with adjustable exposure controls

ONL LCT ART-262-01 342714

S. ELIOT \$520.00 \$52.00 \$80.00 \$652.00

\$520.00 \$52.00

9-11:50 AM

\$651.00

\$79.00

ART-282 PAINTING: THE FIGURE/BEGINNING, 4 CREDITS

Introduces basic painting tools, materials, techniques, and elements of composition, gesture, value, color and space. Students work from direct observation and description of the figure (clothed and nude) describing volume and form on the two-dimensional plane. Course includes painting, readings and group critiques.

Prerequisites: ART-131 or Student Petition

OC LCT ART-282-01 342721 TTH 9-11:50 AM
A. SCHROER \$520.00 \$52.00 \$110.00 \$682.00

ART-285 PAINTING: THE FIGURE/INTERMEDIATE, 4 CREDITS

Learn intermediate painting tools, materials, techniques, and elements of composition, gesture, value, color and space. Students work from direct observation and description of the figure (clothed and nude) describing volume and form on the two-dimensional plane. Course includes painting, readings and group critiques.

Prerequisites: ART-282 or Student Petition

OC LCT ART-285-01 342722 TTH 9-11:50 AM
A. SCHROER \$520.00 \$52.00 \$110.00 \$682.00

ART-292 SCULPTURE (FIGURE EMPHASIS), 4 CREDITS

Explores the human form using traditional and contemporary sculpture techniques and concepts. Use of clay, armatures and other sculpture media will be explored. Sculptural design, concepts and craftsmanship will be explored through projects, lectures, and critiques. Students will work from direct observation and source materials (nude and abstract). The human figure and other life forms in the history of sculpture will be examined.

OC LCT ART-292-01 342724 MW 1-3:50 PM K. SIMMONS \$520.00 \$52.00 \$80.00 \$652.00

Auto Body/Collision Repair and Refinishing

Must have ANSI approved eye protection first day and comply with College safety policy.

AB-112 COLLISION REPAIR WELDING I, 2 CREDITS

This class focuses on auto collision damage repair. Emphasis is on Metal Inert Gas (MIG), Gas Metal Arc Welding (GMAW), welding on light gauge metals, and oxygen-acetylene cutting.

oc AB-112-01 342586 F 8-12:20 PM
C. DAHLSRUD- \$260.00 \$26.00 \$230.00 \$516.00
RIVERA
J. PHELPS

AB-113 COLLISION REPAIR I/NONSTRUCTURAL, 6 CREDITS

Other Coding Translations: ESI

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text NCT: No-Cost Text

Campus Locations:

OC: Oregon City Campus

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

Provides basic instruction in collision repairs, including shop safety and chemical hazard safety; proper and safe use of tools; basic metal work and finishing; use of filler; door removal, replacement and alignment; and replacement and alignment of bolt-on front end sheet metal parts.

Prerequisite or Corequisite: AB-112 and ABR-125

AB-113-01 342588 MT 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00

M. HOUSE

COLLISION REPAIR WELDING II, 2 CREDITS AB-123

Training in light gauge metal repair: Gas Metal Arc Welding (GMAW), Plasma Arc Cutting (PAC), Squeeze Type Resistance Spot Welding (ST-RSW), and other advanced welding techniques specific to collision

Prerequisites: AB-112

AB-123-01 342592 F 8-12:20 PM \$260.00 \$26.00 \$158.00 C. DAHLSRUD-\$444.00 **RIVERA**

J. PHELPS

AB-133 COLLISION REPAIR II/STRUCTURAL, 6 CREDITS

Repair major body damage using modern frame repair equipment. Includes repair and replacement of bolt-on, bonded, and welded components using the latest technology. Includes introduction to computerized measuring and damage analysis.

Prerequisites: AB-113

AB-133-01 342593 MT 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

AB-150 COLLISION REPAIR COMPUTERIZED ESTIMATING -AUDATEX, 2 CREDITS

Provides detailed instruction in the use of modern computerized estimating systems in the collision repair field. Focus is on Audatex software.

Prerequisites: AB-149

AB-150-01 342594 T 1:30 -5:20 PM A. YAGER-ROUNDS \$260.00 \$26.00 \$154.00 \$440.00

COLLISION REPAIR III/ADVANCED STRUCTURAL, 6 AB-222 CREDITS

Major collision repair with a systems approach: frame and structure, panels, suspension and brakes, electrical and cooling systems. Emphasis on frame and unibody repair, replacement of welded body panels, and diagnosis and repair of related damage.

Prerequisites: AB-133

AB-222-01 342597 MT 7-12:20 PM OC M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1.195.00 M. HOUSE

AB-224 COLLISION REPAIR IV/ADVANCED STRUCTURAL, 6 CREDITS

Advanced frame and Unibody repair procedures. Electronic measurement and dimensioning, repair documentation, brakes, suspension, and alignment as they relate to collision repair.

Prerequisites: AB-222

oc AB-224-01 342600 MT 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

AB-226 COLLISION REPAIR V/ADVANCED STRUCTURAL, 6 CREDITS

Uses the latest high quality, productive techniques and equipment to repair vehicles to pre-collision condition. Covers the refined collision repair processes for today's workplace.

Prerequisites: AB-224

AB-226-01 342601 MT 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

AB-235 COLLISION REPAIR WELDING III, 2 CREDITS

Aluminum welding for collision damage repair. Gas Metal Arc Welding (GMAW) and Gas Metal Arc Welding (GMAW) on silicon bronze are learned, along with related welding techniques and equipment/safety procedures.

Prerequisites: AB-123

342602 F 8-12:20 PM AB-235-01 C. DAHLSRUD-\$260.00 \$26.00 \$170.00 \$456.00 **RIVERA** J. PHELPS

COLLISION REPAIR/CWE, 2-6 CREDITS (VAR) AB-280

Cooperative work experience. Work-based learning experience in an auto body repair shop. Required: Student Petition.

Corequisites: CWE-281

AB-280-01 342605

M. HOUSE \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

ABR-125 COLLISION REPAIR/REFINISHING I, 6 CREDITS

Covers shop safety, fire prevention, selection and use of paint products, abrasives, fillers, basic application of primers, sealers, and top coats.

Prerequisite or Corequisite: AB-112 and AB-113

ABR-125-01 342608 WTH 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

ABR-127 COLLISION REPAIR/REFINISHING II, 6 CREDITS

Application of solvent and waterborne finishes, including spot repairs, color matching, complete refinishing, and problem solving. Introduction to computerized color information retrieval and mixing.

Prerequisites: ABR-125

oc ABR-127-01 342611 WTH 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

ABR-129 COLLISION REPAIR/REFINISHING III, 6 CREDITS

Application of solvent and waterborne basecoats and tri-coats and urethane topcoats, using both foreign and domestic refinish systems. Includes complete refinishing, spot and panel painting, color matching and problem solving.

Prerequisites: ABR-127

ABR-129-01 342612 WTH 7-12:20 PM M GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

ABR-225 PRODUCTION SHOP TECHNIQUES, 6 CREDITS

Designed for students who wish to gain additional hands-on experience in refinishing, using the most up-to-date methods and materials.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	Course Title, Co	edits					Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
Prerequisi	tes: ABR-129						ос	AM-133-01	342650	MTWTH		1-5:50 PM	
ос	ABR-225-01 M. GRIFFITH	342613		\$78.00	7-12:20 P \$337.00			J. LEUCK Meets: 1/12-2		\$650.00	\$65.00	\$211.00	\$926.00
	M. HOUSE		ψ. σσ.σσ	ψ. σ.σσ	φουσ	Ψ1,100.00	ос	AM-133-02 J. LEUCK		MTWTH \$650.00		1-5:50 PM \$211.00	\$926.00
ABR-227	RESTORATION	ON PRA	CTICES,	6 CREDI	TS			Meets: 2/16-3	/20.				

AM-242

Designed for students who wish to broaden their skills base in the upper end refinish market. Projects will be considerably more challenging, with standards and expectations set higher.

Prerequisites: ABR-225

ABR-227-01 342616 WTH 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

Automotive Service Technology

Must have ANSI approved eye protection first day and comply with College safety policy.

INTRO TO AUTOMOTIVE SERVICE TECHNOLOGY, 2 AM-101 **CREDITS**

This course will prepare students for success in the Automotive Service Technology Program. Shop orientation and automotive industry safety training will be provided. Students can earn industry-recognized certificates. Students will be exposed to industry-recognized online service information. Students will also be introduced to tasks that align with the Auto Service Excellence Education Foundation (ASEEF) Master Automotive Service Technician (MAST) program accreditation.

Corequisites: AM-129, AM-130, AM-131, AM-133, AM-135, or AM-142 Prerequisites: MTH-020 or placement in MTH-050, and placement in WRD-090

342629 MTWTHF 1-5:50 PM oc AM-101-01

N. ROBERTS \$260.00 \$26.00 \$22.00 \$308.00 Meets: 1/5-1/9.

AM-131 SUSPENSION SYSTEMS, 5 CREDITS

In this theory and lab course, students will learn the design, construction, service, and repair of front and rear suspension systems, wheels and tires, steering systems, and alignments. Students will service and repair these systems in the hands-on lab.

Prerequisites: MTH-020 or placement in MTH-050, and placement in WRD-090

Recommended Prerequisites: AM-101 with a C or better, or Student Petition

OC AM-131-01 342644 MTWTH 1-5:50 PM W. VAN RIPER \$650.00 \$65.00 \$211.00 \$926.00 Meets: 1/12-2/13 ΔM-131-02 OC

342648 MTWTH 1-5:50 PM W. VAN RIPER \$650.00 \$65.00 \$211.00 \$926.00

Meets: 2/16-3/20.

AM-133 **ENGINE SYSTEMS, 5 CREDITS**

This course is designed to provide students with the entry-level skills necessary to repair automobile engines. Includes general engine diagnosis; cylinder head and valve train diagnosis and repair; engine block assembly diagnosis and repair; and lubrication and cooling systems diagnosis and repair.

Prerequisites: MTH-020 or placement in MTH-050, and placement in WRD-090

Recommended Prerequisites: AM-101 with a C or better, or Student Petition

This course is the second of two engine performance courses. In this course the students will receive training in advanced lab scope diagnostics, advanced level scan tool usage, power train reprogramming and the opportunity to do real world diagnostics. On board diagnostics 2 (OBD2) readiness monitors and how they work will be discussed. Training and practical application of all monitored systems of the OBD2 system will be performed.

ENGINE PERFORMANCE II, 5 CREDITS

Prerequisites: AM-142

7-11:50 AM AM-242-01 342658 MTWTH N. ROBERTS \$650.00 \$65.00 \$211.00 \$926.00 Meets: 1/5-2/5. AM-242-02 OC 342668 MTWTH 7-11:50 AM N. ROBERTS \$650.00 \$65.00 \$211.00 \$926.00 Meets: 2/9-3/13.

AM-245 **AUTOMATIC TRANSMISSION SYSTEMS, 5 CREDITS**

This course covers the theory and physical description of the automatic transmission. The student will have the opportunity to acquire practical experience and learn the proper procedures for overhaul, service, and diagnosis of an automatic transmission.

Prerequisites: AM-129

OC AM-245-01 342670 MTWTH 7-11:50 AM D. BLACKMON \$650.00 \$65.00 \$174.00 \$889.00 Meets: 1/5-2/5. OC AM-245-02 342672 MTWTH 7-11:50 AM D. BLACKMON \$650.00 \$65.00 \$174.00 \$889.00 Meets: 2/9-3/13.

AUTO MECHANICS/CWE, 1-6 CREDITS (VAR) AM-280

Cooperative work experience. Work-related learning experience in an auto repair shop or auto dealership. Required: Student Petition.

Corequisites: CWE-281

oc AM-280-01

N. ROBERTS \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

Biology

BI-101 **GENERAL BIOLOGY; CELLULAR BIOLOGY, 4 CREDITS**

An inquiry-based laboratory course focusing on cellular biology, genetics, epigenetics, biotechnology and natural selection. Class uses student centered activities in a collaborative learning environment to enhance appreciation of the biological world.

Corequisites: BI-101L

Recommended Prerequisites: MTH-060 or MTH-098 or placement in MTH-065; and WRD-098 or placement in WR-121Z

OC LCT 342728 MW BI-101-01 9-10:20 AM F DFRFY \$520.00 \$52.00 \$55.00 \$627.00 This section has an in-person lab. ONL LCT BI-101-40 342733

E. DEBEY \$520.00 \$52.00 \$55.00 \$627.00

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Course Listing 2026/W Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total ONL BI-101-41 342735 Corequisites: BI-112L T. BLACKWELL \$520.00 \$52.00 \$55.00 \$627.00 Recommended Corequisite: CH-112 Recommended Prerequisites: MTH-060 or MTH-098 or placement in **GENERAL BIOLOGY; CELLULAR BIOLOGY LAB, 0** BI-101L MTH-065, and WRD-098 or placement in WR-121Z CREDIT BI-112-01 342760 TTH 11-12:20 PM Lab course for BI-101 J. BOWN \$520.00 \$52.00 \$55.00 \$627.00 Corequisites: BI-101 HAR BI-112-15 342761 MW 9-10:20 AM P. JONES \$520.00 \$52.00 \$55.00 \$627.00 342736 MW 10:30 -11:50 AM OC BI-101L-01 BI-112-20 ONL 342764 E. DEBEY \$0.00 \$0.00 \$0.00 \$0.00 S KELSEY \$520.00 \$52.00 \$55.00 \$627.00 ONL BI-101L-40 342737 342765 ONI BI-112-40 \$0.00 F DFBFY \$0.00 \$0.00 \$0.00 M. ANDURI- FLYNN \$520.00 \$52.00 \$55.00 \$627.00 ONI BI-101L-41 342738 T. BLACKWELL \$0.00 \$0.00 \$0.00 \$0.00 **BI-112L GENERAL BIOLOGY FOR HEALTH SCIENCES LAB, 0** CREDIT BI-102 **GENERAL BIOLOGY; ANIMAL SYSTEMS, 4 CREDITS** Lab course for BI-112 An inquiry-based laboratory course focusing on human and animal body systems; including teratogens, Hox genes and hormone mimics in Corequisites: BI-112 embryonic development. Activities emphasize comparisons across BI-112L-01 342766 T 1-3:50 PM animal phyla to better understand the diversity of life. The class uses M. PLUMMER \$0.00 \$0.00 \$0.00 \$0.00 student centered activities in a collaborative learning environment to oc BI-112L-02 342767 TH 8-10:50 AM enhance appreciation of the animal kingdom. J. BOWN \$0.00 \$0.00 \$0.00 \$0.00 Corequisites: BI-102L BI-112L-15 10:30 -11:50 AM HAR 342768 MW Recommended Prerequisites: MTH-060 or MTH-098 or placement in P. JONES \$0.00 \$0.00 \$0.00 \$0.00 MTH-065; and WRD-098 or placement in WR-121Z BI-112L-20 6-8:50 PM HAR 342771 TH K. OSTLUND \$0.00 \$0.00 \$0.00 \$0.00 OC BI-102-01 342739 MW 1-2:20 PM E. DEBEY \$520.00 \$52.00 \$55.00 \$627.00 ONI BI-112L-40 342772 M. ANDURI- FLYNN \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following BI-102L-01, BI-102L-02, BI-102L-03. **BI-120** INTRODUCTION TO HUMAN ANATOMY AND OC BI-102-02 342744 TTH 9:20 -10:40 AM PHYSIOLOGY, 4 CREDITS \$520.00 \$52.00 \$55.00 S. SOLL \$627.00 Corequisite: Take 1 of the following BI-102L-01, BI-102L-02, This course is designed to serve students as an overview introductory BI-102L-03. course to human anatomy and physiology. Material covered includes the structure and function of the human body. Basic chemistry and cell BI-102-40 342749 structures are covered, as well as the organization of tissues, organs, S. SOLL \$520.00 \$52.00 \$55.00 \$627.00 BI-102-41 342751 and organ systems. Correlations can then be made between this ONL material and disease states commonly encountered in health care. K. OSTLUND \$520.00 \$52.00 \$55.00 \$627.00 Dissection of animal tissues is required. **GENERAL BIOLOGY; ANIMAL SYSTEMS LAB, 0 CREDIT** BI-102L Corequisites: BI-120L Lab course for BI-102 HAR BI-120-15 342775 MW 1-2:20 PM Corequisites: BI-102 P JONES \$520.00 \$52.00 \$55.00 \$627.00 oc BI-102L-01 342752 MW 2:30 -3:50 PM BI-120L INTRODUCTION TO HUMAN ANATOMY AND E. DEBEY \$0.00 \$0.00 \$0.00 \$0.00 PHYSIOLOGY LAB, 0 CREDIT Corequisite: Take 1 of the following BI-102-01, BI-102-02. Lab course for BI-120 BI-102L-02 10:50 -12:10 PM oc 342754 TTH Corequisites: BI-120 S. SOLL \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following BI-102-01, BI-102-02. BI-120L-15 342777 MW 2:30 -3:50 PM oc BI-102L-03 342756 TTH 1-2:20 PM P. JONES \$0.00 \$0.00 \$0.00 \$0.00 N. SEFCIKOVA \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following BI-102-01, BI-102-02. BI-165D **NATURAL HISTORY OF THE WESTERN DESERTS, 4** ONL BI-102L-40 342758 **CREDITS** S. SOLL \$0.00 \$0.00 \$0.00 \$0.00 A lecture and lab course studying plants, animals, geology, ecology and ONL BI-102L-41 342759 environmental issues of western deserts. This intensive nine-day field K. OSTLUND \$0.00 \$0.00 \$0.00 \$0.00 course travels through western desert regions. Required: Student Petition. **GENERAL BIOLOGY FOR HEALTH SCIENCES, 4 BI-112** Corequisites: BI-165DL **CREDITS** Prerequisites: WRD-098 or placement in WR-121Z A one-term preparatory course that introduces the Health Occupations Recommended: One term of college-level science

Campus Locations:

231 and BI-234.

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

student to the scientific method, molecular and cellular biology, principles of inheritance, homeostasis, natural selection, tissues, and organ systems. Topics and skills covered prepare students to enter BI-

> REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total
ос	BI-165D-01	342778	MTWTH	IFSSU		
			M		6-7:20 P	M
	J. BOWN		\$520.00	\$52.00	\$450.00	\$1,022.00
	A. KOTASH					
	Required: Stu	ident Pet	ition. Stud	dents will	travel to D	Death
	Valley to stud	y desert	processe	s during s	Spring Bre	ak
	(3/20/26-3/28	/26). In a	ddition, 4	meeting	s are requ	ired.
	Meeting Date	s: 1/12, 2	2/2, 2/23.	Individua	I meetings	s (3/2-
	3/13). Contac				ckamas.ec	lu) for
	more informa	tion. Req	uired Fee	: \$450.		

BI-165DL NATURAL HISTORY OF THE WESTERN DESERTS LAB, 0 CREDIT

Lab course for BI-165D Corequisites: BI-165D

OFF **342780 MTWTHFSSU** BI-165DL-01

J. BOWN \$0.00 \$0.00 \$0.00 \$0.00 Required: Student Petition. Students will travel to Death Valley to study desert processes during Spring Break (3/20/26-3/28/26). Contact Jennifer Bown (jenb@clackamas.edu) for more information. Required Fee: \$450.

BI-204 ELEMENTARY MICROBIOLOGY, 4 CREDITS

A lab class with environmental focus. This class explores microscopic life and its importance in the environment and in industry. We also learn about the causes and implications of waterborne pathogens. Labs will provide practice with aseptic techniques and introduce tools and current methodologies used in the study of microorganisms.

ос	BI-204-01	342781 MW	9-11:50 AM		
	J. NURMI	\$520.00	\$52.00	\$50.00	\$622.00
	Remote option	ons available with th	nis sectio	n.	
ОС	BI-204-02	342783 TTH		9-11:50	AM
	J. NURMI	\$520.00	\$52.00	\$50.00	\$622.00

BI-216 GENERAL ZOOLOGY, 4 CREDITS

A lecture and lab course covering the maintenance of the cellular, tissue, & organ levels of invertebrates, evolution of animal systems and the diversity of the invertebrate animal phyla.

Corequisites: BI-216L

Prerequisites: MTH-095 with a C or better or placement in MTH-111Z Recommended Prerequisites: WRD-098 or placement in WR-121Z

BI-216-01 347560 MW OC 10:30 -11:50 AM J. BOWN \$520.00 \$52.00 \$55.00 \$627.00

BI-216L **GENERAL ZOOLOGY LAB, 0 CREDIT**

Lab course for BI-216 Corequisites: BI-216

OC BI-216L-01 347561 W 1-3:50 PM J. BOWN \$0.00 \$0.00 \$0.00 \$0.00

BI-222LZ PRINCIPLES OF BIOLOGY: ORGANISMS LAB, 0 CREDIT

Lab course for BI-222Z Corequisites: BI-222Z

OC: Oregon City Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

OC BI-222LZ-01 342789 TH 8-10:50 AM \$0.00 \$0.00 T. BLACKWELL \$0.00 \$0.00 Corequisite: Take 1 of the following BI-222Z-01, BI-222Z-02. OC BI-222LZ-02 342790 TH 1-3:50 PM

\$0.00 \$0.00 T. BLACKWELL \$0.00 \$0.00 Corequisite: Take 1 of the following BI-222Z-01, BI-222Z-02.

Campus Locations: **Distance Education Notification:** HAR: Harmony Community Campus

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

BI-222Z PRINCIPLES OF BIOLOGY: ORGANISMS, 5 CREDITS

Tuition

Crs Reg.

Explores fundamental biological concepts and theories about the structure and function of diverse organisms (including plants and animals), evolution and development, transformation of energy and matter, and body systems at a multicellular organismal level. Intended for science majors.

Corequisites: BI-222LZ

Course No Course Title, Credits Section No

Instructor

Prerequisite or Corequisite: CH-105, or CH-222Z and CH-228Z

BI-222Z-01 342786 MW 8-9:50 AM T. BLACKWELL \$650.00 \$65.00 \$55.00 \$770.00 Corequisite: Take 1 of the following BI-222LZ-01, BI-222LZ-02.

ONL BI-222Z-02 342788

T. BLACKWELL \$650.00 \$65.00 \$55.00 \$770.00 This section requires an in-person lab. Corequisite: Take 1 of the following BI-222LZ-01, BI-222LZ-02.

Days (M,T,W,TH.F,S,SU)

Time

Crs. Fee

Total

BI-231 HUMAN ANATOMY & PHYSIOLOGY I, 4 CREDITS

A lab course designed for students entering the physical education or medically-related fields. Includes body organization, terminology, tissues and systemic study of the integumentary, skeletal and nervous systems. Animal organ dissection required.

Prerequisites: BI-112 (preferred), or BI-101 and BI-102, or BI-221Z

Corequisites: BI-231L

Prerequisites: CH-112 (preferred), or CH-104 and CH-105, or CH-221Z,

CH-227Z, CH-222Z and CH-228Z

ос нув	BI-231-01 342791 M 2:30			2:30 -5:0	0 PM		
	B. KOP		\$520.00	\$52.00	\$55.00	\$627.00	
	Corequisite: T	ake 1 of	the follow	ing BI-23	31L-01, BI-	-231L-02.	
OC HYB	BI-231-02 342797 T			1-2:50 PM			
	M. PATTERS	NC	\$520.00	\$52.00	\$55.00	\$627.00	
	Corequisite: T	ake 1 of	the follow	ing BI-23	31L-01, BI-	-231L-02.	
OC HYB	BI-231-20	342798	Т		6:30 -9:0	0 PM	
	B KOP		\$520.00	\$52.00	\$55.00	\$627.00	

BI-231L HUMAN ANATOMY & PHYSIOLOGY I LAB, 0 CREDIT

Lab course for BI-231 Corequisites: BI-231

ос	BI-231L-01	342799 TH		2:30 -5:2	20 PM
	J. GALLEGOS	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Ta	ake 1 of the follo	wing BI-2	31-01, BI-2	231-02.
ОС	BI-231L-02	342800 T		3:30 -6:2	20 PM
	J. GALLEGOS	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Ta	ake 1 of the follo	wing BI-2	31-01, BI-2	231-02.
ОС	BI-231L-20	342803 TH		6:30 -9:2	20 PM
	J. GALLEGOS	\$0.00	\$0.00	\$0.00	\$0.00

BI-232 **HUMAN ANATOMY & PHYSIOLOGY II, 4 CREDITS**

Lab course covering structure and function of the muscular, cardiovascular, lymphatic, and respiratory systems. Animal organ dissection required.

Prerequisites: BI-231 with a C or better

Corequisites: BI-232L

ос нув BI-232-01 342804 M 10-11:50 AM M. PATTERSON \$520.00 \$52.00 \$55.00 \$627.00 Corequisite: Take 1 of the following BI-232L-01, BI-232L-02. OC HYB BI-232-02 342808 T 2-4:30 PM B. KOP \$520.00 \$52.00 \$55.00 \$627.00

Corequisite: Take 1 of the following BI-232L-01, BI-232L-02.

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	Course Title, Credits							
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	/,TH.F,S,SU)	Time Crs. Fee	Total		
HAR	BI-232-15	342810	TTH		9-10:20 AM	Л		
	M. PATTERSO	N	\$520.00	\$52.00	\$55.00	\$627.00		
OC HYB	BI-232-20	342812	M		6:30 -9:20	PM		
	B. KOP		\$520.00	\$52.00	\$55.00	\$627.00		

BI-232I **HUMAN ANATOMY & PHYSIOLOGY II LAB, 0 CREDIT**

Lab course for BI-232 Corequisites: BI-232

Source No. Course Title Credite

LOCI DI LOL					
BI-232L-01	342814	М		1-3:50 PM	
M. PATTERSO	N	\$0.00	\$0.00	\$0.00	\$0.00
Corequisite: Ta	ake 1 of	the follow	ing BI-23	32-01, BI-232-0)2.
BI-232L-02	342825	W		9-11:50 AM	
M. PATTERSO	N	\$0.00	\$0.00	\$0.00	\$0.00
Corequisite: Ta	ake 1 of	the follow	ing BI-23	32-01, BI-232-0)2.
BI-232L-15	342827	TTH		10:30 -11:50	AM
M. PATTERSO	N	\$0.00	\$0.00	\$0.00	\$0.00
BI-232L-20	342828	W		6:30 -9:20 PM	Л
J. GALLEGOS		\$0.00	\$0.00	\$0.00	\$0.00
	BI-232L-01 M. PATTERSC Corequisite: Ta BI-232L-02 M. PATTERSC Corequisite: Ta BI-232L-15 M. PATTERSC BI-232L-20	BI-232L-01 342814 M. PATTERSON Corequisite: Take 1 of BI-232L-02 342825 M. PATTERSON Corequisite: Take 1 of BI-232L-15 342827 M. PATTERSON	BI-232L-01 342814 M M. PATTERSON \$0.00 Corequisite: Take 1 of the follow BI-232L-02 342825 W M. PATTERSON \$0.00 Corequisite: Take 1 of the follow BI-232L-15 342827 TTH M. PATTERSON \$0.00 BI-232L-20 342828 W	BI-232L-01 342814 M M. PATTERSON \$0.00 \$0.00 Corequisite: Take 1 of the following BI-23 BI-232L-02 342825 W M. PATTERSON \$0.00 \$0.00 Corequisite: Take 1 of the following BI-23 BI-232L-15 342827 TTH M. PATTERSON \$0.00 \$0.00 BI-232L-20 342828 W	BI-232L-01 342814 M 1-3:50 PM M. PATTERSON \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following BI-232-01, BI-232-0 BI-232L-02 342825 W 9-11:50 AM M. PATTERSON \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following BI-232-01, BI-232-0 BI-232L-15 342827 TTH 10:30 -11:50 M. PATTERSON \$0.00 \$0.00 \$0.00 BI-232L-20 342828 W 6:30 -9:20 PM

BI-233 **HUMAN ANATOMY & PHYSIOLOGY III, 4 CREDITS**

Lab course covering neuroendocrine control, digestive, excretory and reproductive systems. Study of fluid, electrolyte and acid-base balance. Animal organ dissection required.

Prerequisites: BI-232 with a C or better

Corequisites: BI-233L

OC HYB	BI-233-01	342831 T		9-10:50	AM
	B KOP	\$520.00	\$52 00	\$55.00	\$627.00

BI-2331 **HUMAN ANATOMY & PHYSIOLOGY III LAB, 0 CREDIT**

Lab course for BI-233 Corequisites: BI-233

ос	BI-233L-01	342839 T		11:30 -	·2:20 PM
	J. GALLEGOS	\$0.00	\$0.00	\$0.00	\$0.00

INTRODUCTORY MICROBIOLOGY, 4 CREDITS BI-234

An introductory microbiology lab course required for health science and science majors. Includes characteristics, physiology and growth requirements of microorganisms, interactions between humans and microorganisms, immunology, infection, and principles of microbial control. This course emphasizes critical thinking and analytical skills in a collaborative laboratory environment.

Prerequisites: BI-101, BI-112 or BI-221Z

Corequisites: BI-234L

Prerequisites: CH-104, CH-112, or CH-221Z and CH-227Z

OC LCT	BI-234-01	342846	TTH		1-2:20 PM	
	S. SOLL		\$520.00	\$52.00	\$55.00	\$627.00
OC LCT	BI-234-20	342851	TTH		6-7:20 PM	
	M. PLUMMER		\$520.00	\$52.00	\$55.00	\$627.00
ONL LCT	BI-234-40	342855				
	A KAPILA		\$520.00	\$52.00	\$170.00	\$742.00

BI-234L INTRODUCTORY MICROBIOLOGY LAB, 0 CREDIT

Lab course for BI-234 Corequisites: BI-234

ос	BI-234L-01	342857	TTH		2:30 -3	:50 PM
	S. SOLL		\$0.00	\$0.00	\$0.00	\$0.00
ОС	BI-234L-20	342859	TTH		7:30 -8	:50 PM
	M. PLUMMER		\$0.00	\$0.00	\$0.00	\$0.00
ONL	BI-234L-40	342861				
	A. KAPILA		\$0.00	\$0.00	\$0.00	\$0.00

Business Administration

Course No Course Title, Credits Section No

Instructor

BA-101Z INTRODUCTION TO BUSINESS, 4 CREDITS

Crs Reg.

Days (M,T,W,TH.F,S,SU)

Fee

Tuition

Time

Crs. Fee

Total

Presents an integrated view of both established and entrepreneurial businesses by studying their common characteristics and processes in a global context. Introduces theory and develops basic skills in the areas of accounting, finance, management, and marketing, with an emphasis on social responsibility and ethical practices. Explores how businesses can create value for themselves and society by addressing environmental and social challenges.

Recommended Prerequisites: WRD-090 or placement in WRD-098

OC LCT	BA-101Z-01	342709	MW		8-9:50 AM		
	J. EICHENBEF	RGER	\$520.00	\$52.00	\$5.00	\$577.00	
OC HYB LCT	BA-101Z-02	342715	W		10-11:50 A	M	
	J. EICHENBEF	RGER	\$520.00	\$52.00	\$5.00	\$577.00	
OC HYB LCT	BA-101Z-03	342716	TH		10-11:50 A	M	
	J. AMAN		\$520.00	\$52.00	\$44.38	\$616.38	
Online textbook included in section fees.							
ONL LCT	BA-101Z-04	342717					
	S. RAHN		\$520.00	\$52.00	\$44.38	\$616.38	
	Online textboo	k include	ed in secti	on fees.			
ONL LCT	BA-101Z-05	342718					
	K. HEINIG		\$520.00	\$52.00	\$44.38	\$616.38	
	Online textboo	k include	ed in secti	on fees.			
ONL NCT	BA-101Z-06	342719					
	C. CHATTERT	ON	\$520.00	\$52.00	\$5.00	\$577.00	

BA-111 GENERAL ACCOUNTING I, 3 CREDITS

Introduces the terminology and processes of full-cycle, modified cash and accrual basis bookkeeping for small service and merchandising businesses with inventory. Focus is on how to analyze and record financial transactions, reconcile accounts and trial balances, and prepare basic financial statements. Additional topics include cash management, bank reconciliations, accounting for sales and purchase discounts. Emphasizes procedure and practice.

Recommended Prerequisites: Placement in MTH-020

ос	BA-111-01 3427	23 W		1-3:50 PM			
	J. SAN-CLAIRE	\$390.00	\$39.00	\$134.99	\$563.99		
	Online textbook inclu	ided in secti	on fees.				
ONL	BA-111-02 3427	25					
	J. SAN-CLAIRE	\$390.00	\$39.00	\$134.99	\$563.99		
	Online textbook included in section fees.						

BA-112 **GENERAL ACCOUNTING II, 4 CREDITS**

Provides a more in-depth look at general accounting principles and practices for small business. Topics include payroll, recording bad debt, notes receivable and payable, inventory adjustment, and long-term asset valuation. Accounting practices for partnerships and manufacturing structures are examined, and financial analysis is introduced as a tool for evaluating the health and wealth of a business.

Prerequisites: BA-111 or BA-211Z

Prerequisite or Corequisite: BA-131 or some knowledge of Excel

ONL	BA-112-01 342	726			
	J. SAN-CLAIRE	\$520.00	\$52.00	\$134.99	\$706.99
	Online textbook inc	uded in sect	ion fees.		

PROJECT MANAGEMENT PRACTICES, 2 CREDITS BA-119

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

Basic course in project management, intended for non-project management students. Students gain a basic understanding of project management principles and techniques, with emphasis on scope planning, scheduling, and resource management. Students learn practical application of cost control, time management, and communication in project environments.

ONI BA-119-01 342727 C. PLOWMAN \$260.00 \$26.00 \$5.00 \$291.00 ONI BA-119-02 342729 C. PLOWMAN \$260.00 \$26.00 \$5.00 \$291.00

BA-120 PROJECT MANAGEMENT FUNDAMENTALS, 4 CREDITS

Foundational course in project management. Students gain an introduction to project management principles and techniques, including identifying project life cycle phases, generating a project charter, learning and applying stakeholder management techniques, generating work/task breakdowns, network diagrams and identifying the critical path. Students will also learn and apply risk management techniques, resource allocation, and project monitoring and controlling methodologies.

Recommended: Working knowledge and access to MS Excel and MS Word

ONL BA-120-01 342730 \$520.00 \$52.00 \$5.00 S. RAHN \$577.00

PROJECT MANAGEMENT: AGILE & CHANGE BA-127 MANAGEMENT, 4 CREDITS

This course introduces students to the basic concepts and principles of Agile and Change Management. Students explore the foundation of the Agile approach for managing projects, the Agile Manifesto and Agile principles & values. Students work in small teams to experience an Agile project team environment. Value-driven delivery and adaptive project planning are defined. Students will gain an understanding in how being agile in business practices can ease the implementation of organizational change. This course will also instruct students in how to identify what drives organizational change and how to lead & communicate through change. Students will learn about creating and sustaining an organizational culture for change and moving forward.

Prerequisites: BA-120 and BA-125

ONL BA-127-01 342731

> C. PLOWMAN \$520.00 \$52.00 \$5.00 \$577.00

BA-128 PROJECT MANAGEMENT: LEADERSHIP STRATEGIES, 4 **CREDITS**

This course is an introductory course for students to explore different leadership styles. Through introspective exercises/assignments, students will have opportunities to find their leadership voice. Topics include the comparisons among various leadership versus management paradigms, mediation and negotiation techniques, employee engagement, team building, mentor-ship, tactical planning, creative decision-making, managing crisis conversations, and emotional intelligence.

ONL NCT BA-128-01 342732

> S. RAHN \$520.00 \$52.00 \$20.00 \$592.00

BA-131 INTRODUCTION TO BUSINESS COMPUTING, 4 CREDITS

Introductory course using Microsoft Word, Excel, Access, and PowerPoint applications to create business documents.

Required: Access to the following: personal computer or laptop with MS Windows Operating System (Windows 10 or 11), Office 365 OR MS Office 2021, internet access (including email), or access to the CCC Dye Academic Computer Lab for completion of coursework

Recommended Prerequisites: WRD-090 or placement in WRD-098

BA-131-01 342734 TTH \$702.00 F. MEYERS \$520.00 \$52.00 \$130.00 Office 2021 version is used. Online textbook included in section fees. BA-131-02 342740 TH 10-11:50 AM OC HYB

> \$520.00 \$52.00 \$130.00 \$702.00 F. MEYERS Office 2021 version is used. Online textbook included in section fees.

REM BA-131-03 342741 M 6-7:50 PM \$520.00 \$52.00 \$130.00 \$702.00 J. AMAN Office 2021 version is used. Online textbook included in section fees.

BA-131-04 ONL 342742

B. FORNEY \$520.00 \$52.00 \$130.00 \$702.00 Office 2021 version is used. Online textbook included in section fees

ONL BA-131-05 342743

> D. HEINIG \$520.00 \$52.00 \$130.00 \$702.00 Office 2021 version is used. Online textbook included in section fees.

ONL BA-131-06 342745

\$520.00 \$52.00 \$130.00 \$702.00 T. FRANK Office 2021 version is used. Online textbook included in section fees

BA-169Z DATA ANALYSIS USING MICROSOFT EXCEL, 4 CREDITS

Covers Microsoft Excel software skills necessary for evidence-based problem-solving, including workbook editing, formula creation, charting, and pivot tables. Emphasizes hands-on learning using Excel functions to perform data analysis to enhance decision-making.

Prerequisites: BA-131 or CS-120 or higher or placement into BA-169Z

BA-169Z-30 ONI 342346 D. CARINO \$520.00 \$52.00 \$84.13 \$656.13

Online textbook included in section fees.

BA-169Z-31 347539 D. HEINIG \$520.00 \$52.00 \$84.13 \$656.13 Online textbook included in section fees.

BA-177 PAYROLL ACCOUNTING, 3 CREDITS

This course introduces the student to the basic payroll procedures and transactions that are necessary for recording business transactions that compensate personnel. Included in this introduction are wage, salary, and commission or bonus computation and recording, as well as coverage of the federal laws that affect payroll, taxation, and payroll deductions.

Prerequisites: BA-111 or BA-211Z

ONI

Recommended Prerequisites: BA-131 or some knowledge of Excel

ONL BA-177-01 342746

> \$390.00 \$39.00 \$107.50 I. SETO \$536.50

Online textbook included in section fees.

BUSINESS COMMUNICATIONS WITH TECHNOLOGY, 4 BA-205 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Crs. Fee Instructor Total Instructor Tuition Fee Total

Students practice critical skills for successful communication in a business environment by employing a structured writing process, analyzing audience needs, and identifying and using appropriate communication channels and modalities. Students also work individually to produce a PowerPoint presentation with embedded narration and as team members to manage a comprehensive project and complete a business research paper.

Recommended Prerequisites: BA-131 and WR-121Z

ONL NCT BA-205-01 342748

C. CHATTERTON \$520.00 \$52.00 \$5.00 \$577.00

BA-206 MANAGEMENT FUNDAMENTALS, 4 CREDITS

Concepts and theories of management with focus on planning, organizing, leading, and controlling. Decision making, planning principles, global management, managing people and teams, effective communication, and motivation are included.

Prerequisites: WRD-090 or placement in WRD-098 **Recommended Prerequisites:** BA-101Z and BA-251

ONL BA-206-01 342750

J. AMAN \$520.00 \$52.00 \$123.20 \$695.20 Online textbook included in section fees.

BA-208 EMPLOYEE AND LABOR RELATIONS, 4 CREDITS

Provides a legal and historical overview of employee and labor relations in both union and non-union environments. Presents a realistic picture of collective bargaining and labor relations situations and highlights contemporary issues in employee relations, unions, bargaining units, and employee group representation.

ONL LCT BA-208-01 342753

M. MOISO \$520.00 \$52.00 \$48.75 \$620.75 Online textbook included in section fees.

BA-211Z PRINCIPLES OF FINANCIAL ACCOUNTING, 4 CREDITS

Imparts an understanding of the purpose of accounting, common financial statement items, and the principles of internal controls. Focuses on recording the impact of economic events on account balances using U.S. Generally Accepted Accounting Principles, and the creation and analysis of financial statements to aid in external decision making.

Prerequisites: BA-101Z and BA-131

Recommended Prerequisites: BA-111, and MTH-050 or higher

OC HYB BA-211Z-01 342755 T 1-3:50 PM 1. SETO \$520.00 \$52.00 \$134.99 \$706.99

Online textbook included in section fees.

ONL BA-211Z-02 342762

J. SAN-CLAIRE \$520.00 \$52.00 \$134.99 \$706.99

Online textbook included in section fees.

BA-213Z PRINCIPLES OF MANAGERIAL ACCOUNTING, 4 CREDITS

Builds an understanding of the role of managerial accounting in a business, focusing on the development and use of information to evaluate production costs and operational performance in support of short- and long-term organizational decision-making.

Prerequisites: BA-211Z with a C or better

ONL BA-213Z-01 342769

J. SAN-CLAIRE \$520.00 \$52.00 \$134.99 \$706.99
Online textbook included in section fees.

BA-216 COST ACCOUNTING, 4 CREDITS

Cost accounting extends the content of BA-213Z, which focused on managerial accounting. Specifically, job order and process costing are examined in depth, including: variances and cost estimations; standard and variable costing in the manufacturing environment; inventory and capacity analysis; customer-profitability analysis; spoilage, rework and scrap; and performance measurement.

Prerequisites: BA-213Z

ONL BA-216-01 342773

T. FRANK \$520.00 \$52.00 \$134.99 \$706.99

Online textbook included in section fees.

BA-218 PERSONAL FINANCE, 4 CREDITS

Analysis and application of basic principles of personal finance including budgeting and spending, financial decision-making, use of credit, saving and investing, home purchase, taxes, risk management, retirement planning, estate planning, and other major personal finance topics.

Prerequisites: MTH-050 or higher and WRD-098

ONL BA-218-01 342774

J. AMAN \$520.00 \$52.00 \$134.99 \$706.99

Online textbook included in section fees.

BA-223 PRINCIPLES OF MARKETING, 4 CREDITS

Offers a comprehensive investigation of strategic marketing in a global environment. Topics covered will include research, ethics, consumer behavior, product strategy, distribution strategy, promotional strategy and pricing strategy.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL BA-223-01 342776

K. HEINIG \$520.00 \$52.00 \$5.00 \$577.00

BA-224 HUMAN RESOURCE MANAGEMENT, 4 CREDITS

Focuses on a practical, real world approach to Human Resource Management for line managers and Human Resource Managers. Introduces history and current legal environment of Human Resource Management and applies current practice in the functions of staffing, human resource development, compensation, safety and health, and employee and labor relations in both union and non-union environment.

ONL LCT BA-224-01 342779

M. MOISO \$520.00 \$52.00 \$54.99 \$626.99

Online textbook included in section fees.

BA-226Z INTRODUCTION TO BUSINESS LAW, 4 CREDITS

Provides a comprehensive overview of U.S. business law, including the legal system, contracts, torts, intellectual property, agency, employment, and business organization forms. Emphasizes practical legal knowledge and explores how laws impact business operations, with a focus on risk management, contract disputes, business formation, and compliance with government regulation. Introduces legal challenges in business through real cases and legal terminology.

ONL BA-226Z-01 342782

M. MOISO \$520.00 \$52.00 \$69.13 \$641.13

Online textbook included in section fees.

ONL BA-226Z-02 347541

M. MOISO \$520.00 \$52.00 \$69.13 \$641.13

Online textbook included in section fees.

BA-239 ADVERTISING, 4 CREDITS

Emphasizes a strategic and integrated approach to promotion where traditional and non-traditional techniques of promotion are explored. The relationship and role of advertising to marketing will be stressed throughout the course.

Campus Locations:

HAR: Harmony Community Campus
OC: Oregon City Campus
WILS: Wilsonville Training Center
OFF: Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class ESPAÑOL: Enseñado en español

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Total Instructor Tuition Crs. Fee Total

Recommended Prerequisites: BA-101Z, and WRD-090 or placement in WRD-098

ONL BA-239-01 342785

J. EICHENBERGER \$520.00 \$52.00 \$5.00 \$577.00

BA-251 SUPERVISORY MANAGEMENT, 3 CREDITS

Addresses the role and responsibilities of the first-line supervisor or manager. Includes planning and controlling, dealing with change, performance management, leadership, decision-making, communication, and managing teams.

Recommended Prerequisites: WRD-090 or placement in WRD-098

BA-251-01

\$390.00 \$39.00 \$48.75 K HEINIG \$477 75

Online textbook included in section fees.

BA-256 INCOME TAX ACCOUNTING, 4 CREDITS

Detailed review of the federal tax structure, as it relates to the preparation of individual tax returns, including those with business and investment activities. This course briefly overviews corporate tax returns.

Prerequisites: BA-211Z or financial accounting experience

BA-256-01 ONI 342792

> L. LEWIS \$520.00 \$52.00 \$134.99 \$706.99

Online textbook included in section fees.

PROJECT MANAGEMENT TOOLS, 3 CREDITS BA-264

This course introduces students to three tools used in managing projects: Microsoft Teams, Microsoft Planner, and Microsoft Project. Students examine the criteria for selecting the right project management tool for task management, work management, and project management. Students learn how to use these tools for communicating and collaborating with project team members and stakeholders; planning a project, adding project tasks, assigning resources and costs; building a project schedule, moving tasks to different phases, tracking project progress, and properly closing out a project. Students will also gain an understanding of how to share project information across applications using dashboards and reports. In addition, students will briefly explore cloud-based options as alternative project management tools.

Prerequisites: BA-120

ONL BA-264-01 342793

S. RAHN \$390.00 \$39.00 \$0.00 \$429.00

APPLIED PROJECT DEMONSTRATION, 3 CREDITS BA-268

Students demonstrate the ability to manage a real-world project from initiation through closing. Course deliverables include project scope statement, communication management plan, risk management plan, status report with Gantt chart, and 'Lessons Learned' report and presentation. The project as well as a comprehensive exam will demonstrate knowledge acquired in prerequisite classes required for the Project Management AAS. Required: Student Petition.

Prerequisites: BA-120, BA-125, and BA-127

OC HYB BA-268-01 6-8:20 PM S RAHN \$390.00 \$39.00 \$5.00 \$434.00 Required: Student Petition.

SOCIAL MEDIA MARKETING, 4 CREDITS

This is an introductory course that provides an overview of social media and its role in marketing. Nearly everything consumers do is tracked online and this level of marketing analytics is assisting organizations develop a better understanding of consumer and market needs and trends. This course will seek to develop an understanding to how social media compliments marketing.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL NCT BA-270-01 342795

> \$520.00 \$52.00 \$5.00 C. CHATTERTON \$577.00

BUSINESS/CWE, 2-6 CREDITS BA-280

Cooperative work experience. On-the-job experience in a business related to the student's major course of study. Under supervision of instructor and employer. May be repeated for up to 6 credits. Required: Student Petition.

Corequisites: CWE-281

ONL NCT BA-280-01 342796

> **B. FORNEY** \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

342801 ONI NCT BA-280-02

\$780.00 \$78.00 \$45.00 S RAHN \$903 00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

BA-285 HUMAN RELATIONS IN BUSINESS. 4 CREDITS

Introduces the theory and practical application of human relations at the individual, group, and organizational levels. Emphasizes psychological principles that help build relationships among employees and employers. Includes goal setting, motivation, communication, leadership, conflict management, and individual and group behavior.

ONL LCT BA-285-01 342802 M. MOISO \$520.00 \$52.00 \$48.75 \$620.75 Online textbook included in section fees. ONL LCT BA-285-02 342805

T DANFI \$520.00 \$52.00 \$48.75 \$620.75 Online textbook included in section fees.

Business Technology

BT-120 PERSONAL KEYBOARDING, 2 CREDITS

Basic instruction on electronic alphanumeric keyboard. Provides practice for speed and accuracy within an individual program. Students will also develop the necessary skills to effectively use the Internet, use email, and create simple documents within a Google email profile and/or Microsoft Word.

ONL BT-120-01 342806 S. SIMMONS \$260.00 \$26.00 \$10.00 \$296.00 ONL BT-120-02 342807 S. SIMMONS \$260.00 \$26.00 \$10.00 \$296.00

BT-121 **DATA ENTRY, 1 CREDIT**

This course is designed to teach the computer numeric keypad by touch with speed and accuracy using industry standards for data entry. This skill is especially helpful to people in the fields of data entry, accounting, office administration, insurance, banking and finance, and any other work that requires numeric input.

ONL BT-121-01 342809 S. SIMMONS \$130.00 \$13.00 \$10.00 \$153.00 ONL BT-121-02 342815 S. SIMMONS \$130.00 \$13.00 \$10.00 \$153.00

KEYBOARDING SKILLBUILDING, 2 CREDITS BT-122

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Total Instructor Tuition Fee Crs. Fee Total

Designed to improve keyboarding proficiency using the standard keyboarding by touch method established within BT-120. Speed and accuracy on the keyboard will be further refined. Proper formatting of various types of business communication will be reviewed and established(emails, memos, block-style business letters). Students will utilize Microsoft Word and/or Google documents to create letters and memos.

Prerequisites: BT-120

 ONL
 BT-122-01
 342817

 S. SIMMONS
 \$260.00
 \$10.00
 \$296.00

 ONL
 BT-122-02
 342829
 \$260.00
 \$26.00
 \$10.00
 \$296.00

 S. SIMMONS
 \$260.00
 \$26.00
 \$10.00
 \$296.00

BT-124 BUSINESS EDITING I, 3 CREDITS

Course builds business communication skills through the study of the written communication process and the correct use of grammar, spelling, vocabulary, types of written business communication, and basic editing principles.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL BT-124-01 342832

S. SIMMONS \$390.00 \$39.00 \$10.00 \$439.00

BT-125 BUSINESS EDITING II, 3 CREDITS

This course continues the study of professional editing and writing in a business office. The continued and correct use of acceptable spelling, grammar, and formatting of business documents will be covered indepth, with increased practice in writing and editing skills in the composition of letters, memos, emails, reports, and presentations. Functional business reports will be covered in relation to written reports and proposals, as well as customer service phone etiquette and the creation of professional presentations for the workplace.

Prerequisites: BT-124 with a C or better

ONL BT-125-01 342834

S. SIMMONS \$390.00 \$39.00 \$10.00 \$439.00

BT-216 OFFICE PROCEDURES, 4 CREDITS

Applies critical thinking, problem solving, and collaborative learning skills and knowledge to business office operations. Operational areas include communications, technology, records management, safety, travel, meeting management, mail procedures, reprographics, and career planning.

Prerequisites: BA-131

ONL BT-216-01 342842

B. FORNEY \$520.00 \$52.00 \$10.00 \$582.00

Chemistry

CH-104 INTRODUCTORY CHEMISTRY, 5 CREDITS

A lab transfer course for students in nursing, allied health fields and liberal arts. Topics include: observation, measurement, composition, stoichiometry, atomic structure, periodic table, bonding and nomenclature.

Corequisites: CH-104L and CH-104S

Prerequisites: MTH-065 or MTH-098 or placement in MTH-095; and

WRD-090 or placement in WRD-098

ONL CH-104-40 342877

X. DONG \$650.00 \$650.00 \$765.00 Each student is required 3 hours of lab time in DJ-242 per week. The available lab hours are W & F: 9 AM- 4 PM, TH 9 AM-8 PM For further information, please e-mail the instructor

at george.burgess@clackamas.edu.

Campus Locations: Distance Education Notification:

HAR: Harmony Community Campus

ONL: Online Only

OC: Oregon City Campus
WILS: Wilsonville Training Center
OFF: Other Off-Campus Location

REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

CH-104L INTRODUCTORY CHEMISTRY LAB, 0 CREDIT

Lab course for CH-104

Corequisites: CH-104 and CH-104S

oc CH-104L-40 342885 TBA

G. BURGESS \$0.00 \$0.00 \$0.00 \$0.00 Each student is required 3 hours of lab time in DJ-242 per week. The available lab hours are W & F: 9 AM- 4 PM, TH 9 AM-8 PM For further information, please e-mail the instructor

at george.burgess@clackamas.edu.

CH-104S INTRODUCTORY CHEMISTRY SEMINAR, 0 CREDIT

Seminar course for CH-104

Corequisites: CH-104 and CH-104L

oc CH-104S-40 342887 TH 2-2:50 PM
X. DONG \$0.00 \$0.00 \$0.00 \$0.00
Each student is required 3 hours of lab time in DJ-242 per
week The available lab hours are W & F: 9 AM- 4 PM TH 9

week. The available lab hours are W & F: 9 AM- 4 PM, TH 9 AM-8 PM For further information, please e-mail the instructor at george.burgess@clackamas.edu.

CH-105 INTRODUCTORY CHEMISTRY, 5 CREDITS

A lab course discussing heat; molecular and ionic interactions in solids, liquids, gases, and solutions; chemical reactions including acid-base, electron transfer, and equilibrium.

Prerequisites: CH-104

Corequisites: CH-105L and CH-105S

ONL CH-105-40 342904

X. DONG \$650.00 \$65.00 \$50.00 \$765.00 Each student is required 3 hours of lab time in DJ-242 per week. The available lab hours are W & F: 9 AM- 4 PM, TH 9 AM-8 PM For further information, please e-mail the instructor at george.burgess@clackamas.edu. Corequisite: Take the

following CH-105L-40, CH-105S-40.

CH-105L INTRODUCTORY CHEMISTRY LAB, 0 CREDIT

Lab course for CH-105

Corequisites: CH-105 and CH-105S

oc CH-105L-40 347581 TBA

G. BURGESS \$0.00 \$0.00 \$0.00 \$0.00

CH-105S INTRODUCTORY CHEMISTRY SEMINAR, 0 CREDIT

Seminar course for CH-105

Corequisites: CH-105 and CH-105L

oc CH-105S-40 347559 TH 1-1:50 PM

TBA \$0.00 \$0.00 \$0.00 \$0.00

Corequisite: Take the following CH-105L-40, CH-105-40.

CH-112 CHEMISTRY FOR HEALTH SCIENCES, 4 CREDITS

One-term preparatory chemistry course for students who want to take BI-231 and/or BI-234. Includes measurement; atomic structure; periodic table; bonding; nomenclature; heat; molecular and ionic interactions in solids; liquids and solutions; chemical reactions including acid-base; organic chemistry; and biochemistry.

Corequisites: CH-112L

Prerequisites: MTH-065 or MTH-098 with a C or better or placement in

MTH-095

Prerequisites: WRD-090 or placement in WRD-098

Recommended Corequisite: BI-112

Other Coding Translations:

TBA: To be arranged: contact department first class **VAR:** Variable credit class

ESPAÑOL: Enseñado en español

Course No	Course Title, C	redits					Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T,\ Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	,W,TH.F,S,SU) Fee	Time Crs. Fee	Total
ос	CH-112-01	342914	MW		1-2:20 PM		ос	CH-222SZ-02	342999	W		1-1:50 PM	
	S. MCDONAL	.D	\$520.00	\$52.00	\$50.00	\$622.00		D. MYERS		\$0.00	\$0.00	\$0.00	\$0.00
	This section h Take 1 of the					quisite:		Corequisite: Ta 01, CH-228Z-0		the follov	ving CH-2	22Z-01, CH-2	28Z-
ONL	CH-112-15	342921					ОС	CH-222SZ-20	343002	TH		6-6:50 PM	
	N. DAS		\$520.00	\$52.00	\$50.00	\$622.00		J. DU BOULAY	1	\$0.00	\$0.00	\$0.00	\$0.00
ONL	CH-112-20	342923	3				ос	CH-222SZ-40	343003	F		1-1:50 PM	
	D. PAUL		\$520.00	\$52.00	\$50.00	\$622.00		J. DU BOULAY	1	\$0.00	\$0.00	\$0.00	\$0.00
HAR HYB	CH-112-40	342924	TBA					Corequisite: Ta	ake 2 of	the follov	ving CH-2	28Z-01, CH-2	28Z-
	D. PAUL		\$520.00	\$52.00	\$50.00	\$622.00		02, CH-222Z-0)1.		-		

CH-112L CHEMISTRY FOR HEALTH SCIENCES LAB, 0 CREDIT

Lab course for CH-112 Corequisites: CH-112 oc CH-112L-01 342927 W 9-11:50 AM X DONG \$0.00 \$0.00 \$0.00 \$0.00 oc 342932 TH 1-3:50 PM CH-112L-02 S. MCDONALD \$0.00 \$0.00 \$0.00 \$0.00 HAR CH-112L-15 342933 TH 1-3:50 PM N. DAS \$0.00 \$0.00 \$0.00 \$0.00 CH-112L-20 342936 W 6-8:50 PM HAR D. PAUL \$0.00 \$0.00 \$0.00 \$0.00 ONL CH-112L-40 342937 \$0.00 \$0.00 D. PAUL \$0.00 \$0.00

CH-221SZ GENERAL CHEMISTRY I SEMINAR, 0 CREDIT

Seminar course for CH-221Z

Corequisites: CH-221Z and CH-227Z

ОС	CH-221SZ-01 3429		11:30 -12:20 PM		
	S. MCDONALD	\$0.00	\$0.00	\$0.00	\$0.00
ОС	CH-221SZ-40 3429	68 W		2-2:50 PM	
	D. MYERS	\$0.00	\$0.00	\$0.00	\$0.00
ОС	CH-221SZ-41 3429	70 W		1-1:50 PM	
	R. KHALIFE	\$0.00	\$0.00	\$0.00	\$0.00

CH-221Z GENERAL CHEMISTRY I, 4 CREDITS

Explores and applies principles and applications of chemistry. Emphasis on measurement, components of matter, atomic and molecular structure, quantitative relationships including foundational stoichiometry, and major classes of chemical reactions. CH-221Z is a lecture course; CH-227Z is the laboratory component.

Prerequisites: CH-104 and CH-105, or CH-150, with a C or better; or a year of high school chemistry within five academic years of beginning CH-221Z (passed all terms with C or higher)

Corequisites: CH-227Z and CH-221SZ

oc	CH-221Z-01	345101	MW		10-11:20 A	M.
	S. MCDONAL	D	\$520.00	\$52.00	\$0.00	\$572.00
ONL	CH-221Z-40	345102				
	D. MYERS		\$520.00	\$52.00	\$0.00	\$572.00
	This section h	as an in-	person lal	b and se	minar requir	ement.
ONL	CH-221Z-41	345103				
	R. KHALIFE		\$520.00	\$52.00	\$0.00	\$572.00
	This section h	as an in-	person lal	b and se	minar requir	ement.

CH-222SZ GENERAL CHEMISTRY II SEMINAR, 0 CREDIT

Seminar course for CH-222Z

Corequisites: CH-222Z and CH-228Z

ос	CH-222SZ-01	342994 W		11:30 -12	2:20 PM
	D. MYERS	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Ta	ke 2 of the follow	wing CH-	222Z-01, C	H-228Z-
	01, CH-228Z-0	2.			

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

CH-222Z GENERAL CHEMISTRY II, 4 CREDITS

Explores and applies principles presented in CH-221Z to the study of the solid, liquid, and gaseous states of matter. Principles of stoichiometry, thermochemistry, kinetics, and foundational equilibrium are explored and applied to the study of aqueous and gas-phase chemical reactions. CH-222Z is a lecture course; CH-228Z is the laboratory component.

Prerequisites: CH-221Z with a C or better Corequisites: CH-228Z and CH-222SZ

ос	CH-222Z-01	345107	MW		10-11:20	AΜ
	D. MYERS		\$520.00	\$52.00	\$0.00	\$572.00
	Corequisite: T	ake 2 of	the follow	ing CH-2	228Z-01, Ch	1-228Z-
	02, CH-222SZ	-01, CH	-222SZ-02	2.		
ONL	CH-222Z-20	345108				
	J. DU BOULA	Y	\$520.00	\$52.00	\$0.00	\$572.00
ONL	CH-222Z-40	345109				
	J. DU BOULA	Y	\$520.00	\$52.00	\$0.00	\$572.00
	This section h	as an in-	person la	b and se	minar requi	rement.

CH-227Z GENERAL CHEMISTRY I LABORATORY, 1 CREDIT

Experiments correspond to the topics covered in CH-221Z including the fundamentals of chemical measurements, quantitative relationships in chemical analysis, and understanding atomic and molecular structure. CH-227Z is the laboratory component; CH-221Z is the lecture course.

Corequisites: CH-221Z and CH-221SZ

ос	CH-227Z-01	345104 T		9-11:50 A	M
	S. MCDONAL	D \$130.00	\$13.00	\$50.00	\$193.00
ос	CH-227Z-40	345105 T		1-3:50 PM	Л
	D. MYERS	\$130.00	\$13.00	\$50.00	\$193.00
ос	CH-227Z-41	345106 W		2-4:50 PM	И
	R. KHALIFE	\$130.00	\$13.00	\$50.00	\$193.00

CH-228Z GENERAL CHEMISTRY II LABORATORY, 1 CREDIT

Experiments correspond to the topics covered in CH-222Z including the fundamentals of intermolecular interactions, stoichiometric relationships, chemical equilibria and their application to the synthesis, identification, and analysis of chemical compounds. CH-228Z is the laboratory component; CH-222Z is the lecture course.

Prerequisites: CH-221Z or CH-227Z with a C or better

Corequisites: CH-222Z and CH-222SZ

J. DU BOULAY

ос	CH-228Z-01	345110	TH		9-11:50 Al	И
	D. MYERS		\$130.00	\$13.00	\$50.00	\$193.00
	Corequisite: Ta 222SZ-01, CH			ing CH-2	22Z-01, CH	 -
ос	CH-228Z-02	345111	TH		1-3:50 PM	
	D. MYERS		\$130.00	\$13.00	\$50.00	\$193.00
	Corequisite: Ta 222SZ-01, CH			ing CH-2	22Z-01, CH	 -
ОС	CH-228Z-20	345112	TH		7-9:50 PM	
	J. DU BOULAY	′	\$130.00	\$13.00	\$50.00	\$193.00
ос	CH-228Z-40	345113	F		2-4:50 PM	

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text NCT: No-Cost Text

\$193.00

\$130.00 \$13.00 \$50.00

Course No Course Title, Credits Course No Course Title, Credits Crs Reg. Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Days (M,T,W,TH.F,S,SU) Time Crs. Fee Instructor Crs. Fee Total Instructor Tuition Fee Total

ORGANIC CHEMISTRY II, 5 CREDITS CH-242

Second term of transfer sequence meeting organic chemistry requirement for premedical, dental, veterinary, pharmacy, chiropractic medicine, chemical engineering and biology majors.

Prerequisites: CH-241

Corequisites: CH-242L and CH-242S

OC CH-242-01 343005 MW 1-2:20 PM G. BURGESS \$650.00 \$65.00 \$50.00 \$765.00

CH-242L ORGANIC CHEMISTRY I LAB, 0 CREDIT

Lab course for CH-242

Corequisites: CH-242 and CH-242S

OC CH-242L-01 343009 F 9-11:50 AM \$0.00 G BURGESS \$0.00 \$0.00 \$0.00

CH-242S ORGANIC CHEMISTRY II SEMINAR, 0 CREDIT

Seminar course for CH-242

Corequisites: CH-242 and CH-242L

CH-242S-01 343013 W 2:30 -3:20 PM G. BURGESS \$0.00 \$0.00 \$0.00 \$0.00

College and Career Guidance

EL-103 **TAKING EFFECTIVE NOTES, 1 CREDIT**

Designed to help students develop effective note-taking skills. Several note-taking systems are introduced and practiced.

Prerequisites: Placement in WRD-090 or higher

ONL FI -103-13 342963

> B. MALONEY \$130.00 \$13.00 \$0.00 \$143.00

COLLEGE STUDY SKILLS, 3 CREDITS EL-111

Emphasizes time management, listening/notetaking, testing skills/anxiety, college resources, learning styles, reading strategies, textbook reading, and concentration skills.

Prerequisites: Placement in WRD-090 or higher

OC HYB EL-111-01 342966 T 1-2:50 PM **B. MALONEY** \$390.00 \$39.00 \$15.00 \$444.00 Meets: 1/19-3/21.

HD-102 **SERVICE LEARNING EXPERIENCE, 1-6 CREDITS**

Provides students with a service learning experience in a community setting. Students complete 30-180 hours of volunteer work and participate in ongoing journaling as well as reflection exercises to connect volunteer work with an area of study. May be repeated for up to 6 credits. Required: Student Petition.

HD-102-01

OC: Oregon City Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

J. GINSBURG \$780.00 \$78.00 \$0.00 \$858.00V Required: Student Petition.

HD-140 **CAREER EXPLORATION, 3 CREDITS**

Students use information about themselves (values, interests, personality and skills) and information about the world of work (careers and industries) to explore and make long term career decisions.

HD-140-01 L. MARTINEZ \$390.00 \$39.00 \$10.00 \$439.00

PROCRASTINATION & TIME MANAGEMENT, 1 CREDIT HD-157

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

TBA: To be arranged: contact department first class

Other Coding Translations:

ESPAÑOL: Enseñado en español LCT: Low-Cost Text NCT: No-Cost Text

Provides students the opportunity to study their procrastination habits and time management patterns. Course focuses on components of time organization, choices regarding procrastination, and methods to improve overall use of time.

345513 ONL HD-157-01

> T. BOYLE-\$130.00 \$13.00 \$10.00 \$153.00

GALESTIANTZ Meets: 1/26-2/9.

HD-202 **LIFE TRANSITIONS, 3 CREDITS**

Examines process and stages of life transitions. Helps re-entry adults identify personal strengths and barriers related to success in education and employment. Offers opportunities to practice interpersonal skills. Provides information about CCC campus and community resources which can assist students in reaching their goals.

Corequisites: HD-208

343120 T oc HD-202-01 9-11:50 AM L. NIELSON \$0.00 \$0.00 \$40.00 \$40.00 Meets: 1/20-3/17.

HD-208 **CAREER & LIFE PLANNING, 3 CREDITS**

Helps re-entry adults identify interests, abilities, values, and transferable skills and apply this information to goal setting and career decisions. Students identify and explore options for training, education, and employment. Covers job search skills such as interviewing, resume writing, and developing a career portfolio. Each student develops an action plan identifying goals and next steps.

Corequisites: HD-202

oc HD-208-01 343126 TH 9-11:50 AM C. SIMS \$0.00 \$0.00 \$40.00 \$40.00 Meets: 1/22-3/19.

LEADERSHIP AND BUILDING COMMUNICATIONS HD-221 **SKILLS, 2 CREDITS**

Develops leadership skills with an emphasis on navigating challenging conversations. Addresses finding common vision and goals, managing conflict, and collaboration within interpersonal communication. Promotes development of equitable spaces for inclusive conversations. Required for some members of CCC's Associated Student Government. Highly recommended for Peer Assistants, New Student Mentors, and workstudy students in Student Services departments. Also recommended for club leaders.

ос	HD-221-03	343137	М		3-4:50 PM	
	M. BAKER		\$260.00	\$26.00	\$0.00	\$286.00
REM	HD-221-04	343139	TH		8-9:50 AM	
	J. GINSBURG		\$260.00	\$26.00	\$0.00	\$286.00

Communication Studies

сомм-**INTRODUCTION TO COMMUNICATION, 4 CREDITS** 100Z

COMM-100Z is a survey course offering an overview of the communication discipline that emphasizes the development of best communication practices in different contexts.

OC LCT	COMM-100Z- 01	342264 TTH		10-11:50 A	М
OC NCT	L. HANN COMM-100Z- 02	\$520.00 342268 TTH	\$52.00	\$0.00 1-2:50 PM	\$572.00
	A. SAMBOR	\$520.00	\$52.00	\$0.00	\$572.00

Course No	Course Title, Ci	edits					Course No	Course Title, Cr	eaits				
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,) Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC NCT	COMM-100Z-	342270) MW		3-4:50 PM		Recommer	nded Prerequis	ites: WF	RD-098 o	r placeme	ent in WR-	121Z
	03 L. HANN		\$520.00	\$52.00	\$0.00	\$572.00	ONL LCT	COMM-212-01 K. DOSS		\$520.00	\$52.00	\$10.00	\$582.00

COMM-**PUBLIC SPEAKING, 4 CREDITS** 111Z

COMM-111Z emphasizes developing communication skills by examining and demonstrating how self-awareness, audience, content, and occasion influence the creation and delivery of speeches and presentations.

Prerequisites: WRD-098 or placement in WR-121Z

Recomme	ended Prerequis	site or C	orequisit	e: FYE-1	01	
OC NCT	COMM-111Z- 01					
REM NCT	K. HUGHES COMM-111Z- 02	342281	\$520.00 MW	\$52.00	\$20.00 8-9:50 AM	\$592.00
OC NCT	J. SMITH		\$520.00	\$52.00	\$20.00 8-9:50 AM	\$592.00
REM NCT	A. SAMBOR	342285	\$520.00 TTH	\$52.00	\$20.00 8-9:50 AM	\$592.00
OC NCT	K. HUGHES COMM-111Z-	342288	\$520.00 MW	\$52.00	\$20.00 10-11:50 A	\$592.00 . M
OC NCT	K. HUGHES COMM-111Z-					
REM NCT		342294	\$520.00 MW	\$52.00	\$20.00 10-11:50 A	\$592.00 M
OC NCT	J. SMITH COMM-111Z-		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	K. MCCONNE	LL	\$520.00	\$52.00		\$592.00
REM NCT	09 A. SAMBOR		\$520.00	\$52 00	\$20.00 10-11:50 A	\$592.00 M
OC NCT	K. HUGHES		\$520.00	\$52.00	\$20.00 1-2:50 PM	\$592.00
ос	11 L. HANN COMM-111Z-	345510	\$520.00 TTH	\$52.00	\$20.00 1-2:50 PM	\$592.00
	12 L. HANN		\$520.00	\$52.00	\$20.00	\$592.00
REM	COMM-111Z- 14 A. MOSEY					
HAR NCT	COMM-111Z-	342308	MW		6-7:50 PM	
HAR NCT	J. NETZER COMM-111Z-	342306	\$520.00 TTH	\$52.00	\$20.00 1-2:50 PM	\$592.00
	J. HULT				\$20.00	

сомм-**MASS MEDIA & SOCIETY, 4 CREDITS** 212

This course takes students through a critical study of the production and consumption of mass media, including television, radio, books, film, news, advertising and the internet. Students also examine the economic and social organization of mass media, the growth of new media technologies, and the relationship between media and the public.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

сомм-**INTERPERSONAL COMMUNICATION, 4 CREDITS** 218Z

COMM-218Z increases the knowledge and use of competent communication skills to better understand oneself, others, and the role of communication in interpersonal relationships.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	COMM-218Z- 01	342313	MW		1-2:50 PM	
HAR NCT	M. WILLIAMS COMM-218Z-		\$520.00 TTH	\$52.00	\$0.00 10-11:50 A	\$572.00 \M
	30 J. HULT		\$520.00	\$52.00	\$0.00	\$572.00

сомм-SPEECH/CWE, 2-6 CREDITS 280

Cooperative work experience. Provides students with on-the-job experience in the field of communications. Required: Student Petition.

Corequisites: CWE-281

ONL NCT COMM-280-01 342322

\$780.00 \$78.00 \$45.00 K. HUGHES \$903.00V

Required: Student Petition.

Computer Science

CS-120 **SURVEY OF COMPUTING, 4 CREDITS**

A computer competency course to familiarize students with computer concepts, software applications and the implications of living in the digital age. Introduces students to computer concepts, including, but not limited to the Microsoft Windows environment, Microsoft Office Applications, hardware terminology, social media and the Internet.

Prerequisites: WRD-098 or placement in WR-121Z

OC HYB CS-120-01 342327 W 10-11:50 AM 10-11:50 AM M. SORRENTINO \$520.00 \$52.00 \$179.99 \$751.99 Section meets Mondays remote via Zoom from 10:00-11:50am. Section meets in-person on campus on Wednesdays from 10:00-11:50am. Office 2021 version used. Online textbook included in section fees.

CS-125H HTML & WEB SITE DESIGN, 4 CREDITS

Hands-on approach to planning, design, and developing published web sites using HTML tags in a text editor. The class focuses on basic HTML coding using HTML 5 models. Hyperlinks, images, cascading style sheets, forms, accessibility and design principles will be covered, as well as tools such as FTP clients, accessibility checkers, and validators.

Prerequisites: BA-131 or CS-120 or higher or placement into CS-125H

ONL CS-125H-30 342338 M. SORRENTINO \$520.00 \$52.00 \$20.00 \$592.00

FRONT-END JAVASCRIPT I, 4 CREDITS CS-133J

Design, programming, testing of scripted web pages using JavaScript for client-side applications and to call PHP-based server-side applications. Introduction to fundamental concepts of interactive web pages and server-side connectivity. Covers the Document Object Model (DOM) and programming constructs like variables, operators, functions, control structures, and exception handling. Emphasis on creating and consuming object literals and JSON objects.

> ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Course No	Course Title, C	redits					Course No	Course Title, C	Credits				
	Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
Prerequis	sites: CS-125H						ONL	CS-161-03	342358				
ос нув	CS-133J-01	342339	9 T TH		1-2:50 PM	=	ONL	J. MILLER CS-161-04	347542	\$520.00	\$52.00	\$20.00	\$592.00
	D. CARINO		\$520.00	\$52.00	\$20.00	\$592.00		J. MILLER		\$520.00	\$52.00	\$20.00	\$592.00
	Section meets	s Tuesda	avs remot	e via Zoo	m from 1:00)-							

ADVANCED WEB DESIGN, 4 CREDITS CS-135I

from 1:00-2:50pm.

Plan and publish a professional, standards-based, accessible web site via a variety of tools. Complete market and user-needs analysis to best target site content and design. Create a graphical web site mock-up, then use CSS (including a framework and pre-processors), scripts, and multimedia to realize site goals. Emphasizes professional design techniques.

2:50pm. Section meets in-person on campus on Thursdays

Prerequisites: CS-125H

ос нув	CS-135I-01	342343	W		1-2:50 PM	l
NCT			M		1-2:50 PM	l
	D. CARINO		\$520.00	\$52.00	\$20.00	\$592.00
	Section meets	Monday	s remote	via Zoon	n from 1:00	-2:50pm.
	Section meets 1:00-2:50pm.	in-perso	on on cam	ipus on V	Vednesday	s from

CS-151 **NETWORKING 1. 4 CREDITS**

This course introduces students to networking architectures, models, protocols, and components. These components facilitate the connection of users, devices, applications, and data through the internet and across modern computer networks. This course, along with CS-152 and CS-153, covers the topics of the Cisco CCNA certification exam.

Prerequisites: CS-140 or CS-160, or Student Petition

ос нув	CS-151-01	342349 T		1-2:50 P	М				
NCT		TH		1-2:50 P	M				
	R. CARINO	\$520.00	\$52.00	\$20.00	\$592.00				
	Section meet	s Tuesdays remot	e via Zoo	m from 1:	00-				
	2:50pm. Section meets in-person on campus on Thursdays								
	from 1:00-2:5	0pm.							

COMPUTER SCIENCE ORIENTATION, 4 CREDITS CS-160

Examines foundational computing subjects used in Computer Science and Information Technology. Topics include computer architecture, electronic logic, data representation, networking, algorithms and programming, which are used in successive Computer Science courses. Information about degrees in Computer Science and Information Technology is also covered.

Recommended Prerequisites: MTH-060 or placement in MTH-065

ONL NCT	CS-160-01	342351
	R. ALBERS	\$520.00 \$52.00 \$20.00 \$592.00
ONL NCT	CS-160-02	342353
	R. ALBERS	\$520.00 \$52.00 \$20.00 \$592.00

CS-161 **COMPUTER SCIENCE I, 4 CREDITS**

Introduction to fundamental concepts of structured programming, including problem solving, algorithm and program design, data types, loops, control structures, subroutines, and arrays. Learn to write structured programs in a high level programming language.

Prerequisites: MTH-111Z or placement in MTH-112Z, or 4 years high school math

ос	CS-161-01	342355 TTH	10-11:50	AM
	J. MILLER	\$520.00	\$52.00 \$20.00	\$592.00
ONL	CS-161-02	342357		
	J. MILLER	\$520.00	\$52.00 \$20.00	\$592.00

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class

CS-162 COMPUTER SCIENCE II, 4 CREDITS

Introduces fundamental concepts of object oriented programming and dynamic memory management. Covers objects, classes, pointers, dynamic memory allocation, linked lists, and program correctness, verification, and testing.

Prerequisites: CS-161

ос	CS-162-01	342359 MW	1-2:50 PM
ONL	R. ALBERS CS-162-02	\$520.00 342361	\$52.00 \$20.00 \$592.00
ONL	R. ALBERS	·	\$52.00 \$20.00 \$592.00

CS-181 **CMS WEB DEVELOPMENT, 4 CREDITS**

Explores creating dynamic and interactive websites via the use of a current content management systems (CMS). Includes installation of CMS/database, working with templates, creating efficient site navigation, enhancing sites using components, modules, plugins, and extensions, including shopping cart utilities and the creation of custom themes.

Prerequisites: CS-125H

OC HYB	CS-181-01	342363 F		3-4:20 PM	
	D. EDGING	\$520.00	\$52.00	\$20.00	\$592.00

CS-182 **INTRO TO CLOUD COMPUTING, 4 CREDITS**

This course is an overview of foundational cloud computing concepts and practices. Topics include compute, storage, connectivity, security, and automation on cloud provider platforms. This course covers the topics of the CompTIA Cloud+ certification exam.

Prerequisites: CS-151 and CS-240W

Recommended Prerequisites: CS-153 and CS-240L

OC HYB	CS-182-01	347677	W		10-11:50	D AM
			M		10-11:50	D AM
	D. CARINO		\$520.00	\$52.00	\$20.00	\$592.00
	Section meets	Monday	s remote	via Zoor	n from 10	:00-
	11:50am. Section meets in-person on campus on Wednesdays from 10:00-11:50am.					
	vveunesuays	110111 10.0	JU-11.50a			

CS-205 SYSTEM PROGRAMMING AND ARCHITECTURE, 4 **CREDITS**

Introduces how high-level software runs on a computer system. Covers C programming and the assembly that C code becomes. Presents the fundamentals of computer architecture and how instructions and data are represented at the machine level. Provides experience analyzing compiled code to build necessary skills for future work in cybersecurity. operating systems, compilers, and other CS topics involving low-level computation.

Prerequisites: CS-162

ОС	CS-205-01	342365 MW		10-11:5	O AM
	R. ALBERS	\$520.00	\$52.00	\$20.00	\$592.00

CS-228 **COMPUTER OS MAINTENANCE & REPAIR, 4 CREDITS**

An in-depth course in operating system maintenance and troubleshooting. Covers configuration, maintenance, and troubleshooting of desktop and mobile operating systems, the fundamentals of cloud computing, and client network configuration and troubleshooting. This course, in conjunction with CS-227, covers the topics on the CompTIA A + certification exam.

Prerequisites: CS-227

Course No	Course Title, Credits							
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition	/,TH.F,S,SU) Fee	Time Crs. Fee	Total		
ос	CS-228-01	342368	MW		9-11:50	AM		
	E. MCBRIDE		\$520.00	\$52.00	\$20.00	\$592.00		

CS-234W FULL-STACK WEB DEVELOPMENT II, 4 CREDITS

Students will complete the stack by exploring a user-interface framework to create interactive, reusable, data-connected web components using React, JSX, and a variety of React Frameworks. Students will complete a MERN (MongoDb, Express, React, Node) portfolio application.

Prerequisites: CS-233W

ос нув	CS-234W-01	347678	W		10-11:50) AM		
			M		10-11:50) AM		
	D. CARINO		\$520.00	\$52.00	\$20.00	\$592.00		
	Section meets Mondays remote via Zoom from 10:00- 11:50am. Section meets in-person on campus on							

CS-240W WINDOWS DESKTOP ADMINISTRATION, 3 CREDITS

Wednesdays from 10:00-11:50am.

Covers the fundamentals of installing, configuring, troubleshooting, and supporting the Windows operating system. Topics include: installation, managing disks and file systems, file access security, users, profiles and policies, groups, security, backup, remote access, printing, and troubleshooting. This course covers the topics of the Microsoft Configuring Windows Devices certification exam.

Prerequisites: CS-140

OC HYB	CS-240W-01	342372 T		10-11:50) AM
		TH		10-11:50) AM
	R. CARINO	\$390.00	\$39.00	\$20.00	\$449.0

.00 Section meets Tuesdays remote via Zoom from 10:00-11:50am. Section meets in-person on campus on Thursdays from 10:00-11:50am.

CS-250 **DISCRETE STRUCTURES I, 4 CREDITS**

Students will be introduced to discrete structures and techniques for computing. The course, which is the first in the two-term sequence, aims to convey the skills in discrete mathematics that are used in the study and practice of computer science. Topics include: Sets; Graphs and trees; Functions: properties, recursive definitions, solving recurrences; Relations: properties, equivalence, partial order; Proof techniques: inductive proof; Counting techniques and discrete probability.

Prerequisites: MTH-251Z

ОС	CS-250-01	342374 TTH		3-4:50 F	PM
	J KUOHA	\$520.00	\$52 00	\$20.00	\$592.00

CS-275 **DATABASE DESIGN, 3 CREDITS**

Focuses on design of a relational database management systems (RDMS). Topics will include database development using the a) requirement, b) design, c) implementation model, database theory from flat table design to relational systems, entity-relationship models, one-toone, one-to-many, and many-to-many relationships, referential integrity, normalization of tables, database programming and querying with SQL, and database security. Although other platforms may be demonstrated, the majority of work will be done with MySQL Server.

Prerequisites: CS-120 or placement into CS-275

from 10:00-11:50am.

		p					
ос нув	CS-275-01	342377 T		10-11:50) AM		
		TH		10-11:50) AM		
	D. CARINO	\$390.00	\$39.00	\$20.00	\$449.00		
	Section meets Tuesdays remote via Zoom from 10:00-						
	11:50am. Se	ction meets in-pers	son on ca	mpus on ⁻	Thursdavs		

COMPUTER SCIENCE/CWE, 1-6 CREDITS CS-280

Cooperative work experience. This course provides supervised work experience to supplement the academic classroom environment. Work examples include user support, work with computer applications or programming languages, installation or management PC computer systems, and developing websites. May be repeated for up to 9 credits. Required: Student Petition.

Crs Reg. Days (M,T,W,TH.F,S,SU)

Fee

Tuition

Time

Crs. Fee

Total

Corequisites: CWE-281

ONL NCT CS-280-01 342380

Course No Course Title, Credits Section No

Instructor

J. MILLER \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Restricted to Computer Science students. Corequisite: Take the following CWE-281-05.

NETWORK SECURITY, 3 CREDITS CS-284

This course provides an introduction to the core security skills needed for monitoring, detecting, investigating, analyzing and responding to security events, thus protecting systems and organizations from cybersecurity risks, threats and vulnerabilities. This course covers the topics of the Cisco CyberOps Associate certification exam.

Prerequisites: CS-151

Recommended Prerequisites: CS-240L and CS-240W

CS-284-30 342384

R. CARINO \$390.00 \$39.00 \$20.00 \$449.00

Computer-Aided Drafting Technology

Call 503-594-3318 for more information, or contact Advising, 503 *-594-3475.*

CDT-103 COMPUTER-AIDED DRAFTING I, 3 CREDITS

Introduction to drafting applications using AutoCAD. Instruction includes problem solving, drawing layout, orthographic multi-view projection, line types, geometric construction and current drafting techniques. Use industry standards for CAD drawing, editing, file management, dimensions and notes.

Recommended Prerequisites: CDT-102

OC HYB	CDT-103-01	342863 TTH		9-11:50	AM
	TBA	\$390.00	\$39.00	\$153.75	\$582.75

CDT-108A INTRODUCTION TO SOLIDWORKS, 3 CREDITS

This course is an introduction to the SolidWorks parametric mechanical software. Students will design 3D solid parts, sheet metal parts and assemblies, and develop 2D documentation from them.

REM	CDT-108A-01	342869 TTH		5-7:50 PM	
	M. ROTUNDO	\$390.00	\$39.00	\$153.75	\$582.75

CDT-130 INTRODUCTION TO FUSION, 2 CREDITS

This course is an introduction to parametric modeling in Autodesk Fusion. Students will design 3-D solid parts and assemblies and then develop 2-D drawing and CNC machining processes from these models.

ос	CDT-130-01 3428	372 MW		12-1:50	0 PM
	J. CABLSTON	\$260.00	\$26.00	\$0.00	\$286.00

Cooperative Work Experience

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Total Instructor Tuition Fee Crs. Fee Total

All students must register for the appropriate CWE course and a CWE Seminar as listed in the following section - Cooperative Work Experience Seminar. Instructor approval is required for all CWE courses. Note: day and time of CWE classes are arranged according to the student's work hours on the job. Students may earn a maximum of 6 CWE credits per term or a maximum of 12 CWE credits per year. Visit the department website at https://www.clackamas.edu/cwe or call 503-594-3511 for more information.

CWE-281 **COOPERATIVE WORK EXPERIENCE SEMINAR, 0 CREDIT**

The seminar provides an opportunity to develop the career management skills necessary to obtain, sustain, and advance in employment. Prepares students for career success. Variable Hours: 11-16 hours.

Corequisites: Program specific CWE course

CWE-281-01 REM 342189 T 11:30 -12:20 PM M. LAFORCE \$0.00 \$0.00 \$0.00 \$0.00 Restricted to Water Environmental Technology students. Contact: laforce@clackamas.edu or 503-594-3148 for more information.

ONI CWE-281-05 342190

> J. MILLER \$0.00 \$0.00 \$0.00 \$0.00 Required: Student Petition. Restricted to Computer Science students. Contact: jen.miller@clackamas.edu or 503-594-3138

ONI CWE-281-06 342191

J. STAPLETON \$0.00 \$0.00 \$0.00 \$0.00

Criminal Justice

For more information on Criminal Justice, Corrections, credit for completion of D.P.S.S.T. or law enforcement academies contact Joanna Crawford at joanna.crawford@clackamas.edu or 503-594-6229.

CRIMINOLOGY, 4 CREDITS CJA-101

Examines the social problem of crime, including the process of making and breaking laws as well as society's reaction to the phenomenon. Provides a multidisciplinary study of the causes of crime, including its distribution across social strata and demographics. Focuses on theories of criminal behavior and specific types of crime.

CJA-101-01 T. MUSGRAVE \$520.00 \$52.00 \$0.00 \$572.00 ONL LCT CJA-101-02 342175 A. MCMILLAN \$520.00 \$52.00 \$0.00 \$572 00

CJA-120 **INTRODUCTION TO COURTS, 3 CREDITS**

342174

Studies the judicial process from arrest through appeals, including search and seizure; interrogation; roles of defense attorneys, prosecutors, juries, grand juries, and judges; plea bargaining and guilty pleas; rights of criminal defendants at trial; appeals and habeas corpus.

ONL LCT CJA-120-01 342177

> S. HEALY \$390.00 \$39.00 \$0.00 \$429.00

CJA-122 CRIMINAL LAW, 4 CREDITS

This course examines the elements, purpose and functions of criminal, traffic, juvenile and liquor laws. Studies historical development, philosophy of law, and constitutional provisions. Examines definition and classification of crime, application of administration of justice, legal research, study of case law, methodology and concepts of law as a social force

ONI CJA-122-01 347573

> T. MUSGRAVE \$520.00 \$52.00 \$0.00 \$572.00

CJA-134 CORRECTIONAL INSTITUTIONS, 3 CREDITS

Analyzes prisons, jails and other correctional institutions. Discusses punishment history and rationale. Identifies the functions of the custodial staff and describes institutional procedures: reception, classification, program assignment and release. Studies prison management systems and examines juvenile facilities.

ONL LCT CJA-134-01 342178

> G. RONNING \$390.00 \$39.00 \$0.00 \$429.00

CJA-170 **CAREERS IN CRIMINAL JUSTICE, 3 CREDITS**

Prepares students for pursuing a career in the Criminal Justice field. Explores careers in the criminal justice system, including law enforcement, the practice of law, courts, corrections, and private security. Addresses hiring processes, promotions, and workplace ethics. Students will begin creating an e-portfolio. As part of the e-portfolio process, students will analyze first year CJA courses and second year fall term CJA courses for assessment purposes. Provides information on choosing Cooperative Work Experience or Service learning placement in preparation for Criminal Justice Capstone course.

HAR HYB CJA-170-01 342179 M 8-8:50 AM

T. MUSGRAVE \$390.00 \$39.00 \$0.00 \$429.00

CJA-201 **JUVENILE DELINQUENCY, 4 CREDITS**

Surveys the nature, extent, and causes of delinquent behavior focusing on theories of criminal behavior as they apply to juveniles. Studies historical and contemporary perspectives on juvenile offenders. Provides a multidisciplinary study of the causes of juvenile delinquency. Describes laws, enforcement, court, and correctional procedures within the juvenile system, and explores the differences between adult and juvenile practices.

ONL CJA-201-01 342180

G. RONNING \$520.00 \$52.00 \$0.00 \$572 00

CJA-203 **CRISIS INTERVENTION, 3 CREDITS**

Examines crisis intervention as it applies to emergency service workers. Includes the psychodynamics of family crisis; alcohol/drug related problems; suicide; sexual assault victims; domestic violence; mentally disturbed individuals; neglected, battered, and abused children.

HAR HYB CJA-203-01 342181 M 10:30 -11:50 AM

> T. MUSGRAVE \$390.00 \$39.00 \$0.00 \$429.00

CRIMINAL INVESTIGATION II, 3 CREDITS CJA-211

Continues the study and application of investigative techniques for specific offenses, including: death investigations, domestic violence, elder abuse and sexual offenses. Identifies similarities, differences, and elements of proof needed under state statutes and documentation of investigations through comprehensive reports.

Prerequisites: CJA-210 with a C or better

CJA-211-01 345571 M 9-10:20 AM

T. MUSGRAVE \$390.00 \$39.00 \$0.00 \$429.00

Campus Locations:

ONL LCT

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Section No Crs Reg. Days (M.T.W.TH.F.S.SU) Time Instructor Tuition Fee Crs. Fee Total		Section No Instructor Crs Reg. Days (M,T,W,TH,F,S,SU) Time Tuition Fee Crs. Fee Total	ı
CJA-215 SEXUAL ABUSE AND HUMAN TRAFFICKING, 3 CREDITS	HAR	DA-102L-01 342194 M 9-11:50 AM K. HIATT \$130.00 \$13.00 \$0.00 \$143.0	00
This course will explore various aspects of sexual abuse cases and human trafficking in the state of Oregon and the U.S., including	HAR	A. KOBYLINSKY DA-102L-02 342195 M 1-3:50 PM	
discussion of societal and historical perspectives, responses to victim trauma, sexual offenders and law enforcement response to these crimes.		K. HIATT \$130.00 \$13.00 \$0.00 \$143.0 A. KOBYLINSKY)0

HAR CJA-215-01 347574 W 6-8-50 PM S. HEALY \$429.00 \$390.00 \$39.00 \$0.00

CJA-222 **PROCEDURAL LAW, 3 CREDITS**

Course No Course Title, Credits

This course discusses the constitutional and statutory provisions related to arrest, search and seizure. The course includes use of deadly force, admissions, interrogations, plain view limitations, law of stop and frisk, and officer testimony.

Prerequisites: CJA-122 with a C or better

HAR	CJA-222-01	342183 T		6-8:50 PN	Λ
	S. HEALY	\$390.00	\$39.00	\$0.00	\$429.00

CJA-280 CRIMINAL JUSTICE/CORRECTIONS/CWE, 2-6 CREDITS

Cooperative work experience. Supervised experience in criminal justice, corrections, juvenile corrections, or related occupations. May be repeated for up to 6 credits. Required: Student Petition.

Prerequisites: CJA-170 Corequisites: CWE-281

ONL CJA-280-01 342184

G. RONNING \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

Dental Assistant

For more information, contact Health Sciences at healthsciences@clackamas.edu

DA-102 **DENTAL RADIOLOGY II, 2 CREDITS**

Alternative radiographic techniques are discussed as students develop their knowledge in the following areas: bisecting, extra-oral radiography, techniques for children, and patients with special needs. This course provides an in-depth study of the purpose and uses of panoramic imaging, digital imaging, three-dimensional digital imaging, and occlusal examinations. Identification of radiographic interpretation and infection control procedures will also be covered.

Required: Acceptance into Dental Assistant program

Prerequisites: DA-101 with a C or better

Corequisites: DA-102L

HAR DA-102-01 342193 TH 12-1:50 PM \$260.00 \$26.00 \$310.00 K HIATT \$596.00

DA-102L DENTAL RADIOLOGY II LAB, 1 CREDIT

Knowledge and skills in alternative radiographic techniques are taught as students demonstrate exposure techniques and corrective measures of various alternative radiographic techniques. Students meeting radiographic proficiency on the x-ray mannequin prepare for the Radiation Health and Safety (RHS) proficiency exam. Candidates for the RHS proficiency exam will follow all RHS, Dental Assisting National Board (DANB) and Oregon examination requirements in preparation of patient radiographs.

Required: Acceptance into Dental Assistant program

Prerequisites: DA-101 with a C or better

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Corequisites: DA-102

OC: Oregon City Campus

Campus Locations:

Distance Education Notification: ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

CLINICAL PROCEDURES II, 2 CREDITS DA-105

A foundational course in preventive dentistry. Examines the study of preventive education, oral hygiene instruction, nutrition, fluoride agents, coronal polishing and sealants. The continuation of oral evacuation and isolation techniques will also be covered.

Required: Acceptance into Dental Assistant program

Prerequisites: DA-104 with a C or better

Corequisites: DA-105L

ONI DA-105-01 342196

Course No Course Title, Credits

M. BUTKOVICH \$260.00 \$26.00 \$225.00 \$511.00

DA-105L **CLINICAL PROCEDURES II LAB, 1 CREDIT**

Furthers the development of chairside skills and introduces the application of preventive procedures such as coronal polishing, fluoride treatment and oral hygiene instruction. Basic knowledge in the application of dental sealants is also taught. Lab skills such as the placement and removal of matrix retainers and rubber dams are taught to provide preparation for chairside dental assisting functions. Aseptic procedures are practiced during all lab skills.

Required: Acceptance into Dental Assistant program

Prerequisites: DA-104L with a C or better

Corequisites: DA-105

HAR DA-105L-01 342197 F 9-11:50 AM A. KOBYLINSKY \$130.00 \$13.00 \$0.00 \$143.00 Lunch and Learn Friday 1/16 from 12-1. Lunch provided. HAR DA-105L-02 342198 F 1-3:50 PM A. KOBYLINSKY \$130.00 \$13.00 \$0.00 \$143.00 Lunch and Learn Friday 1/16 from 12-1. Lunch provided.

DENTAL MATERIALS II, 2 CREDITS DA-108

This course focuses on in-depth knowledge of the properties, uses and manipulation of impression materials, gypsum products and waxes. Foundational knowledge will prepare students for the fabrication of custom trays, bleaching trays, and provisional restorations. Includes knowledge of fixed and removable prosthodontic procedures and rational for polishing removable appliances. An overview of dental implants will also be covered.

Required: Acceptance into Dental Assistant program

Prerequisites: DA-107 with a C or better

Corequisites: DA-108L

DA-108-01 342199

> R. MASCARENHAS \$260.00 \$26.00 \$285.00 \$571.00

DENTAL MATERIALS II LAB, 1 CREDIT DA-108L

Essential skills in the manipulation and application of dental impression materials, gypsum products and waxes will be covered. Thorough knowledge of laboratory skills in the fabrication of bleaching trays and provisional restorations will be taught. Demonstration of custom trays and uses are introduced. The instrumentation and procedures for fixed and removable prosthodontics will also be covered.

Required: Acceptance into Dental Assistant program

Prerequisites: DA-107L with a C or better

Corequisites: DA-108

Course No	Course Title, Cre	dits					Course No	Course Title, Co	redits				
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,) Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
HAR	DA-108L-01	342200	TH		9-11:50 A	М	OC LCT	DMC-147-01	342171	F		6:30 -8:20	PM
	A. KOBYLINSK	Ϋ́	\$130.00	\$13.00	\$0.00	\$143.00				S		9-5:50 PM	
HAR	DA-108L-02	342201	TH		2-4:50 PM	l		B. ROSE		\$130.00	\$13.00	\$99.00	\$242.00
	A. KOBYLINSK	Ϋ́	\$130.00	\$13.00	\$0.00	\$143.00		Meets: 1/30 &	1/31.				

DA-120 CLINICAL PRACTICUM II, 5 CREDITS

Supervised unpaid practice and improvement of clinical skills taught in clinical procedures, dental materials and radiology. Covers advanced Expanded Functions Dental Assisting (EFDA) skills. Implement infection control protocols. Introduce basic business office procedures. Ten hours of community service will be required. Participate in 9 hours of seminar during the term.

Required: Acceptance into Dental Assistant program

Prerequisites: DA-110 with a C or better

HAR DA-120-01 342202 TW 8-4:50 PM
K. HIATT \$650.00 \$65.00 \$335.00 \$1,050.00
Seminar Date: 9am-3pm Wednesday, March 4th. Room

TBD.

Digital Media Communications

DMC-104 DIGITAL VIDEO EDITING, 4 CREDITS

Introduction to video editing skills that include logging and capturing raw video, assembly of shots on a timeline, and the use of effects in a final video sequence. Along with text generation, audio balancing, audio sweetening, and video compositing, this course will offer students an indepth overview of the video editing process. The course will explore the history of editing and the theory behind various film and video editing forms. Lab component included.

Recommended Prerequisites: WRD-090 or placement in WR-121Z

OC LCT DMC-104-01 343014 TTH 1-3:50 PM M. DEVENDORF \$520.00 \$52.00 \$120.00 \$692.00

DMC-105 THE ART AND CRAFT OF ANIMATION AND CINEMATOGRAPHY, 4 CREDITS

This course is an overview of the art and craft of animation and cinematography and includes, the history of early animation and camera techniques. Students will explore cinematic and animation techniques that include hand-drawn, stop motion, computer-generated animation, world-building, storyboarding, lighting, camera motion and character design. Technical aspects and aesthetic considerations of visual storytelling are considered through lectures, screenings, demonstrations, exercises, creative projects and class critiques.

oc **DMC-105-01 347496 MW 9-11:50 AM**M. DEVENDORF \$520.00 \$52.00 \$120.00 \$692.00

DMC-106 ANIMATION & MOTION GRAPHICS I, 4 CREDITS

Introduction to the fundamentals of animation and motion graphics design. This project-based course will explore experimental and new technological approaches to creating digital effects and animation for video and web-based applications. Students will learn the basics of industry standard 3D and compositing software to create successful VFX, 3D Animation, and Motion Graphics projects.

Recommended Prerequisites: DMC-104 or DMC-225

Campus Locations:

OC: Oregon City Campus

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

OC LCT DMC-106-01 343024 MW 1-3:50 PM T. WASSON \$520.00 \$52.00 \$120.00 \$692.00

DMC-147 MUSIC, SOUND & MOVIEMAKING, 1 CREDIT

Presents the basic components of designing, shooting, recording audio, and post production of movies as well as the history and theory that has led to contemporary film production.

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

OC LCT DMC-205-01 343029 MW 1-3:50 PM M. DEVENDORF \$520.00 \$52.00 \$120.00

DMC-205 DIRECTING FOR FILM & VIDEO, 4 CREDITS

specifically for the screen.

DMC-221

TECHNIQUES, 4 CREDITS

Introduces the principles of 2D digital animation using the latest industry standard software. The course will emphasize design and physical principles, analytical skills, and creativity. Students will learn the fundamental principles of animation, character and environment design, FX animation, and basic narrative development, in order to create

INTRODUCTION TO 2D ANIMATION: DESIGN &

This course provides students interested in filmmaking the opportunity to

\$692.00

develop the skills needed to successfully direct films and performances

Recommended Prerequisites: DMC-104, DMC-264, and WR-121Z

successful animated projects.

Recommended Prerequisites: DMC-225 or equivalent experience

oc LCT DMC-221-01 343034 TTH 9-11:50 AM T. WASSON \$520.00 \$52.00 \$120.00 \$692.00

DMC-225 COMPUTER GRAPHICS I, 4 CREDITS

Introduction to the use of digital graphics programs. Photo manipulation, illustration, and compositing techniques will be explored. Design principles and creative composition will be emphasized. Historical and contemporary issues related to graphic design aesthetics will be considered.

Recommended Prerequisites: ART-115

 ONL LCT
 DMC-225-01
 343038

 B. THWING
 \$520.00
 \$52.00
 \$120.00
 \$692.00

 OC
 DMC-225-02
 343040 MW
 9-11:50 AM

 B. THWING
 \$520.00
 \$52.00
 \$120.00
 \$692.00

DMC-280 DIGITAL MEDIA COMMUNICATIONS/CWE, 3-6 CREDITS

Cooperative work experience. Provides students with on-the-job work experience in the field of media studies. Required: Student Petition.

Corequisites: CWE-281

ONL LCT DMC-280-01 343051
T. WASSON \$780.00 \$78.00 \$45.00 \$903.00V
Required: Student Petition.

DMC-291 DIGITAL MEDIA COMMUNICATIONS PORTFOLIO PROJECT I, 4 CREDITS

This course is an individual portfolio project class for Digital Media Communications (DMC) students. Students create an original finished work representative of one of the focus areas included in the DMC program. Students will develop a professional online portfolio (website) that represents their skills in their chosen DMC focus area in preparation for internships and employment. The process of portfolio production at this level includes planning for, refining and completing a project, presentation of the completed work, and project assessment.

Prerequisites: DMC-100 and DMC-104

Recommended: Two courses from a DMC Focus Area

OC LCT DMC-291-01 343053 TTH 1-3:50 PM T. WASSON \$520.00 \$52.00 \$120.00 \$692.00

Other Coding Translations:

TBA: To be arranged: contact department first class **VAR:** Variable credit class

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Crs. Fee Instructor Crs. Fee Total Instructor Tuition Fee Total

Economics

EC-201Z PRINCIPLES OF MICROECONOMICS, 4 CREDITS

Examines how consumers and firms make choices when facing scarce resources, and how those choices are related to government policy and market outcomes, such as prices and output.

Prerequisites: MTH-020 or placement in MTH-098

Prerequisite or Corequisite: WRD-098 or placement in WR-121Z

OC NCT	EC-201Z-01	342845 MW		1-2:50 PM	
	D. LOUGEE	\$520.00	\$52.00	\$0.00	\$572.00
ONL NCT	FC-2017-02	342850			

FC-2027-01

M. PARTAPURWALA \$520.00 \$52.00 \$0.00 \$572 00

3-4-50 PM

PRINCIPLES OF MACROECONOMICS, 4 CREDITS EC-202Z

Examines the aggregate activity of a market economy, economic growth, inflation, unemployment, and the use of fiscal and monetary policy to address macroeconomic problems.

Prerequisites: MTH-020 or placement in MTH-050 or MTH-060 Prerequisite or Corequisite: WRD-098 or placement in WR-121Z 342856 MW

00 1101	LC-2022-01	342030 IVIV		3-4.30 F W	
	D. LOUGEE	\$520.00	\$52.00	\$0.00	\$572.00
ONL NCT	EC-202Z-02	342864			
	M PARTAPU	RWALA \$520.00	\$52.00	\$0.00	\$572 00

Education

OC NCT

OBSERVATION AND GUIDANCE I IN ECE SETTINGS, 4 ECE-121 CREDITS

Course is designed to help students explore in depth observation and recording techniques of children's development and learning and to examine various child guidance techniques for children from birth - 3rd grade. Students will be provided with strategies to assist them in providing positive guidance to children in a variety of settings and situations

342865 ONL ECE-121-01

S. MYERS \$520.00 \$52.00 \$0.00 \$572.00 Meets: 1/5-2/8. This is an accelerated 5-week section that is all online with no synchronous meetings.

OBSERVACIÓN Y ORIENTACIÓN I EN EDUCACIÓN ECE-121ES **TEMPRANA, 4 CREDITS**

El curso está diseñado para ayudar a los estudiantes a explorar en profundidad las técnicas de observación y registro del desarrollo y aprendizaje de los niños. Se examinan varias técnicas de orientación infantil para niños desde el nacimiento hasta el 3er grado. Los estudiantes recibirán estrategias para ayudarles a proporcionar orientaciónes positivas a los niños en función de diferentes de escenarios y situaciones.

REM ESPAÑOL	ECE-121ES-01342868	M		6-7:50 PM	
ESPANOL	Y. SANCHEZ	\$520.00	\$52.00	\$0.00	\$572.00
	La clase se reúne seis		Zoom d	e 6:00-7:50	pm.

ECE-INTRODUCCIÓN A LA EDUCACIÓN INFANTIL Y LOS 150ES **ESTUDIOS FAMILIARES. 4 CREDITS**

Este curso se enfoca en la historia de la educación infantil y los teóricos más importantes que han contribuido significativamente al campo. Se examinarán los tipos de programas que atienden a niños pequeños, desde el nacimiento hasta los 8 años, y sus familias. Se explorarán los estándares estatales y nacionales en educación infantil y estudios familiares

REM ESPAÑOL	ECE-150ES-01342871	TH		6-7:50 PM	
	L. JAMES La clase se reúne seis 7:50PM (1/8, 1/22, 2/5,	, ,	or Zoom		\$572.00 a

LANGUAGE & LITERACY DEVELOPMENT IN YOUNG **CHILDREN, 4 CREDITS**

Focuses on language and literacy development of children from birthage 8. The research foundation and components of language and literacy development will be examined. Criteria for selecting quality children's literature will be explored. Practical strategies for promoting optimal development will be emphasized. Students will explore how to set create language and literacy-rich environments and experiences.

ONL ECE-154-01 342876 B KING \$520.00 \$52.00 \$0.00 \$572 00 Meets: 2/9-3/14. This is an accelerated 5-week course that is all online with no synchronous meetings.

ECE-DESARROLLO DEL LENGUAJE Y LA ALFABETIZACIÓN, 154ES **4 CREDITS**

Se centra en el desarrollo del lenguaje y la alfabetización de los niños desde el nacimiento hasta tercer grado. Se examinarán las bases de la investigación y los componentes del desarrollo del lenguaje y la alfabetización. Se explorarán los criterios para seleccionar literatura infantil de calidad. Se enfatizarán estrategias prácticas para promover un desarrollo óptimo.

Prerequisites: FYE-101ES

REM ESPAÑOL	ECE-154ES-01342878	T	6-7:50 PM	
		\$520.00	 	\$572.00
	La clase se reúne seis 7:50PM (1/6, 1/20, 2/3,		de 6.00Pivi	d

TRABAJAR CON NIÑOS CON NECESIDADES ECE-169ES **ESPECIALES, 4 CREDITS**

Explora prácticas inclusivas para niños con necesidades especiales, desde el nacimiento hasta el tercer grado, en diferentes entornos de desarrollo infantil entornos de primera infancia. Este curso incluirá una exploración de lo siguiente: historia y contexto legal de la educación especial de la primera infancia; la importancia y los beneficios de crear entornos familiares para apoyar el desarrollo educativo de los niños; adaptaciones y adaptaciones curriculares; evaluación y seguimiento del progreso; y promoción.

REM ESPAÑOL	ECE-169ES-01342883	W		6-7:50 PM	
	M. GARCIA AVILEZ				\$572.00
	La clase se reúne seis (1/7, 1/21, 2/4, 2/18, 3/4)		por Zoo	m de 6:00-7	':50pm.
REM ESPAÑOL	ECE-169ES-02342886	. ,		6-7:50 PM	
ESPANOL	M. GARCIA AVILEZ La clase se reúne seis (1/8, 1/22, 2/5, 2/19, 3/	jueves po			\$572.00)pm.

SAFETY, HEALTH AND NUTRITION, 3 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Crs. Fee Instructor Total Instructor Tuition Fee Total

Explores safety, health and nutrition issues for children ages infant through preschool. Focus includes creating safe indoor and outdoor environments, healthy lifestyle practices, caring for children with special healthcare needs, USDA food program requirements, and state guidelines around safety, health and nutrition requirements.

ECE-235-01

B KING \$390.00 \$39.00 \$0.00 \$429 00 Meets: 2/9-3/14. This is an accelerated 5-week course that is all online with no synchronous meetings.

FCF-SEGURIDAD, SALUD, Y NUTRICIÓN, 3 CREDITS 235ES

Este curso explora temas de seguridad, salud y nutrición para niños desde bebés hasta la edad de cinco años. El enfoque incluye la creación de ambientes seguros al interior como el exterior, prácticas para llevar us estilo de vida saludable, cuidado de niños con necesidades especiales médicas, requisitos del programa de alimentos del USDA y pautas estatales sobre los requisitos de seguridad, salud y nutrición.

REM LCT	ECE-235ES-01 342896 S	8-9:50 AM
ESPAÑOL		

L. JAMES \$390.00 \$39.00 \$0.00 \$429.00 La clase se reúne seis sábados por Zoom de 8:00am-9:50am. (1/10, 1/24, 2/7, 2/21, 3/7, 3/14).

ECE-PRÁCTICAS INFORMADAS POR EL TRAUMA EN EL CUIDADO Y LA EDUCACIÓN DE LA PRIMERA INFANCIA, 239ES 4 CREDITS

Desarrollar conocimientos y habilidades que apoyen el aprendizaje y el desarrollo de niños pequeños, desde el nacimiento hasta los 8 años, que han sido negativamente afectados por traumas. Explorar los tipos y síntomas del trauma, y hacer hincapié en las prácticas informadas por el trauma que pueden aplicarse en el hogar y el entorno escolar del niño. Identificar los recursos disponibles y las estrategias reconocidas para trabajar en colaboración con las familias y otros profesionales.

Prerequisites: ECE-150ES and HDF-225ES

ONL ESPAÑOL	ECE-239ES-01342910)			
ONL ESPAÑOL	B. MARRON ECE-239ES-02 342912	\$520.00 2	\$52.00	\$0.00	\$572.00
ESPANUL	B. MARRON	\$520.00	\$52.00	\$0.00	\$572.00

ESTRATEGIAS DE INSTRUCCIÓN PARA ESTUDIANTES ECE-254ES **DE DOS IDIOMAS, 4 CREDITS**

Este curso examina enfoques pedagogicos y culturales que conducen a un desarrollo exitoso del dominio del idioma ingles, idioma usado en la casa, y reconocimiento del contenido por los niños cuyo idioma en el hogar no es el inglés. Se enfoca en el niño desde su nacimiento hasta la escuela primaria.

Prerequisites: ECE-154ES and ECE-240ES

REM ESPAÑOL	ECE-254ES-01 342918 T			6-7:50 PM				
	A. ECHEVARRIA	\$520.00	\$52.00	\$0.00	\$572.00			
	La clase se reúne seis martes por Zoom de 6:00-7:50pm.							
	(1/6, 1/20, 2/3, 2/17, 3/	3, 3/17).						

ECE-291 **PRACTICUM II, 4 CREDITS**

Focuses on field experience for students in a variety of educational settings, paralleling duties regularly assigned to early childhood educators. This course allows students to apply knowledge, methods, and skills gained from early childhood education and family studies courses. The course covers classroom experiences, best practices and assessment techniques. Required: Student Petition.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

Prerequisites: ECE-121, ECE-150, ECE-280, HDF-225, and HDF-247

ECE-291-01 342926 TH 5:30 -7:20 PM B. KING \$520.00 \$52.00 \$0.00 \$572.00 Required: Student Petition. Meets in-person on six Thursdays from 3:00pm to 4:50pm. (1/8, 1/22, 2/5, 2/19, 3/5,

ECE-**PRACTICUM II, 4 CREDITS** 291ES

Se enfoca en permitir que los estudiantes tengan una experiencia laboral en una variedad de entornos educativos, al mismo tiempo que hacen las tareas asignadas regularmente a los educadores de la primera infancia. Este curso permite a los estudiantes aplicar los conocimientos, métodos y habilidades adquiridos en los cursos de educación infantil y estudios sobre las familias. El seminario cubre las experiencias en el aula, las mejores prácticas y los métodos de

Prerequisites: ECE-121ES, ECE-150ES, ECE-179ES, ECE-240ES, ECE-280ES, HDF-225ES, and HDF-247ES

ESPAÑOL	ECE-291ES-01342930 F				6-8:50 PM		
	A. ECHEVARF	•••	\$520.00		•	\$572.00	
	Requerido: per viernes por Zo 3/6, 3/20).						
REM ESPAÑOL	ECE-291ES- 02WPY	342935	S		9-11:50 AN	Л	

D. TORRADO \$520.00 \$52.00 \$0.00 \$572 00 Requerido: petición del estudiante. La clase se reúne seis sábados por Zoom de 9:00am-11:50am. (1/10, 1/24, 2/7, 2/21, 3/7, 3/14).

ED-131 **INSTRUCTIONAL STRATEGIES, 3 CREDITS**

This course examines the knowledge, skills, and characteristics of effective teachers. The focus of the course is on successful instructional planning and the delivery of curriculum. This course covers teachercentered and student-centered instructional strategies and ways to differentiate instruction for diverse learners.

ONL LCT ED-131-01 L. SCOTT \$390.00 \$39.00 \$43.75 \$472.75 Online textbook included in section fees.

FOUNDATIONS OF TEACHING & EDUCATION, 4 ED-216 **CREDITS**

Provides an overview of the educational system in the U.S. including historical, legal, and philosophical foundations of education. Explores the financing, governance and organization of education as well as current issues impacting our educational system. Provides an overview of diversity in educational settings and the characteristics and ethical obligations of effective schools and professional educators. Examines career options and pathways in the field of education.

ED-216-02 ONL L. SCOTT \$520.00 \$52.00 \$43.75 \$615.75 Online textbook included in section fees.

LEARNING & DEVELOPMENT, 3 CREDITS ED-229

Focuses on foundational ideas, concepts, principles, and theories in the field of educational psychology that have a significant influence on educational practice. Provides students with an overview of psychological theories regarding human development, intelligence, motivation, and the learning process. Students learn how to apply strategies and techniques derived from these theories in the classroom.

Course No	Course Title, Co	redits					Course No	No Course Title, Credits					
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
ONL LCT	ED-229-01	342944	ļ				ОС	EET-227-01	343073	MW		5:30 -8:20	PM
	L. SCOTT		\$390.00	\$39.00	\$43.75	\$472.75		J. KUEBLER		\$390.00	\$39.00	\$130.50	\$559.50
	Online textboo	ok includ	ed in sect	ion fees.									

ED-254 INSTRUCTIONAL STRATEGIES FOR DUAL LANGUAGE **LEARNERS, 3 CREDITS**

Examines pedagogical and cultural approaches which lead to successful development of English language skills and content knowledge for children who speak a home language other than English.

ONL LCT ED-254-01 342954

\$390.00 \$39.00 \$0.00 S MYFRS \$429.00

OVERVIEW OF SPECIAL EDUCATION, 3 CREDITS ED-269

Provides an introduction to the categories of disability described in the Individuals with Disabilities Education Act (IDEA). Topics include definitions under federal law, implications in school settings, and intervention strategies to meet students' special needs.

ONL NCT ED-269-01 342955

T. GOWDY \$390.00 \$39.00 \$0.00 \$429 00

Electronics & Microelectronics

All degree seeking students should arrange to speak to a faculty advisor prior to registering. Call 503-594-3318 for more information, or contact Advising, 503-594-3475.

EET-113 ELECTRONIC EQUIPMENT AND ASSEMBLY II, 1 CREDIT

This is the second course in a three course sequence. Exploration of oscilloscope and function generator functions to create and measure time varying signals. Spreadsheets are used to analyze and plot experimental data. Create circuits using PCB software.

Prerequisites: EET-112

ОС	EET-113-01	343059 MW		4:30 -5:	20 PM
	B. PALACIOS	\$130.00	\$13.00	\$43.75	\$186.75

EET-141 **ELECTRICAL FUNDAMENTALS II, 4 CREDITS**

Learn methods of electrical circuit analysis, using proper DC theorems. Study energy storage elements including inductors and capacitors. Transient analysis of RC and RL circuits will studied.

Prerequisite or Corequisite: EET-113

Prerequisites: EET-137

Recommended Prerequisite or Corequisite: MTH-111Z

343066 MW EET-141-01 12-3:50 PM W. SELLEVAAG \$520.00 \$52.00 \$174.00 \$746 00

EET-225 **MECHATRONICS I, 2 CREDITS**

This course explores automation of industrial systems. Students will study the fundamental components of industrial motion control, relay circuits, stepper and servo motors; and power transmission components.

Prerequisites: EET-215

EET-225-01 343069 MW 1-2:50 PM OC J. TRAVER \$260.00 \$26.00 \$87.50 \$373.50

EET-227 **SEMICONDUCTOR CIRCUITS II, 3 CREDITS**

Second in a series concentrating on the application, design and circuit analysis of circuits using transistors. Industry standard devices will be used

Prerequisites: EET-127

EET-233 PROGRAMMABLE LOGIC CONTROLLERS I, 3 CREDITS

Study of basic skills necessary to program, install and maintain industrial control systems utilizing programmable logic controllers. Course content lays a foundation of hardwired relay control systems and components, and then builds on this for an understanding of programmable logic controller (PLC) systems.

Recommended Prerequisites: MFG-130

ОС	EET-233-01	343079 TH		6-8:50 PM	
	B. GARDNER	\$390.00	\$39.00	\$0.00	\$429.00

EET-257 **DIGITAL LOGIC II, 3 CREDITS**

Bus systems and computer peripherals & systems using latches, registers, counters, and memory circuits are developed and analyzed.

Prerequisites: EET-157

ОС	EET-257-01	343082 MW	343082 MW		
	JIFF	\$390.00	\$39 00	\$130.50	\$559 50

SM-136 PHOTOLITHOGRAPHY, 2 CREDITS

The course covers the relationship between theoretical and practical aspects of current methods and equipment used in photolithography. It also includes troubleshooting common process and equipment-related

Recommended Prerequisites: SM-150

ONI SM-136-01 343366

W. SELLEVAAG \$260.00 \$26.00 \$87.00 \$373.00

SM-160 SEMICONDUCTOR PROCESSING II. 2 CREDITS

Provides an overview of basic processes involved in the fabrication of finished silicon wafers, oxidation and deposition processes. Troubleshooting of common equipment is emphasized.

Recommended Prerequisites: SM-150

SM-160-01 343367 \$260.00 \$26.00 \$87.00 W. SELLEVAAG \$373.00

ELECTRONICS & MICROELECTRONICS/CWE, 1-6 SM-280 **CREDITS**

Cooperative work experience. Practical experience in the high-tech industry. Coordination of instruction will occur with industry and the manufacturing and cooperative work departments. Required: Student Petition.

Corequisites: CWE-281

ONL SM-280-01 343368

> C. CONNORS \$780.00 \$78.00 \$255.00 \$1,113.00V Required: Student Petition. Restricted: Microelectronics & Electronics students. Corequisite: Take the following CWE-281-06

Emergency Management Professional

EMP-201 INTRODUCTION TO HOMELAND SECURITY AND **EMERGENCY MANAGEMENT, 4 CREDITS**

This course introduces Homeland Security and Emergency Management (HSEM) as a profession. The course begins with the historical context of HSEM and provides a foundation for the many disciplines within the field including threats and hazards analysis, hazard mitigation, emergency preparedness, response and recovery. The course also provides an overview of current issues, policies, best practices and lessons learned.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español

Course No	Course Title, Cr	Course Title, Credits					Course No	Course Title, Credits					
	Section No Instructor	Crs Reg.	Days (M,T,) Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total

ONL EMP-201-01 347637

TBA \$520.00 \$52.00 \$0.00 \$572.00

EMP-202 THREAT AND HAZARD ASSESSMENT FOR EMERGENCY MANAGEMENT PROFESSIONALS, 3 CREDITS

This course demonstrates the importance of risk reduction programs and the history of Threats and Hazard Identification and Risk Assessment (THIRA). Emergency management professionals must assess weaknesses and establish programs to reduce risks during preparedness for the whole community. This course will give students a basic understanding of risk management and risk prevention in emergency management.

ONL EMP-202-01 347638

TBA \$390.00 \$39.00 \$0.00 \$429.00

EMP-208 DISASTER RESPONSE AND RECOVERY, 4 CREDITS

The purpose of this course is to enable students to understand and think critically about response and recovery operations in the profession of emergency management. Students will utilize problem based learning by analyzing actual disaster events and applying the theories, principals, and practice of response and recovery. In addition, students will learn about the issues faced by vulnerable populations and how to address the unique needs during disaster response and recovery.

ONL EMP-208-01 347639

TBA \$520.00 \$52.00 \$0.00 \$572.00

Emergency Medical Technology

EMT-101 EMERGENCY MEDICAL TECHNICIAN PART I, 6 CREDITS

This course is the first of a two-part series that will prepare students to enter the workforce as an emergency medical service provider. Topics include airway management, patient assessment, and treatment/stabilization for common medical emergencies.

Required: Acceptance into EMT cohort **Prerequisites:** EMT-105 with a C or better

Prerequisites: MTH-060 with a C or better or placement in MTH-065 **Prerequisites:** WRD-098 with a C or better or placement in WR-121Z

HAR HYB EMT-101-01 342203 MWF 1-4:20 PM T. SAWZAK \$780.00 \$78.00 \$400.00 \$1,258.00

EMT-102 EMERGENCY MEDICAL TECHNICIAN PART II, 6 CREDITS

This course is the second of the two-part series that will prepare students to enter the workforce as an emergency medical service provider. Topics include patient assessment, treatment/stabilization for environmental and trauma emergencies, providing emergency care to special patient populations, and EMS operations. Includes 20 hours of observational time in an emergency department and with an EMS unit. Upon successful completion, students will qualify to take the National Registry of Emergency Medical Technicians cognitive certification exam.

Required: Acceptance into EMT cohort **Prerequisites:** EMT-101 with a C or better

HAR HYB EMT-102-01 342204 MWF 6-9:20 PM T. SAWZAK \$780.00 \$78.00 \$400.00 \$1,258.00

EMT-105 INTRODUCTION TO EMERGENCY MEDICAL SERVICES, 3 CREDITS

Introduces the student to Emergency Medical Services (EMS). Explores the career pathways for EMTs and Paramedics. Examines the history, structure, and function of our modern-day EMS system. Includes provider roles and responsibilities, operations, safety, legal considerations, and career opportunities. In addition, this class provides a foundation for the EMT certification course by including a review of anatomy and physiology; where things are and how they are supposed to work, pathophysiology; what happens when disease or injury causes those systems to fail, and patient assessment; how EMS providers evaluate for those conditions and make treatment and transport decisions.

ONL	EMT-105-01	342205		
	T. SAWZAK	\$390.00	\$39.00 \$0.00	\$429.00
ONL	EMT-105-02	342206		
	T. SAWZAK	\$390.00	\$39.00 \$0.00	\$429.00

Engineering

ENGR-111 INTRODUCTION TO ENGINEERING, 3 CREDITS

Introduction to the basic ideas and tools of the engineering profession. An exploration of career and education options within the field, and the skills needed to achieve career goals. Methods of engineering analysis, design, and problem solving culminating in a design project. The class will cover all facets of engineering design, including background research, requirement specification and prioritization, development, prototype construction, testing, and evaluation for future redesigns.

Prerequisite or Corequisite: MTH-111Z or higher

ОС	ENGR-111-01	343085 MW		4-5:20 PM	
	R. SCHOMP	\$390.00	\$39.00	\$10.00	\$439.00

ENGR-112 ENGINEERING PROGRAMMING, 3 CREDITS

Introduction to basic scientific and engineering computing. Covers methods of engineering analysis, design, and problem solving with computational tools. Emphasis on developing proficiency in writing functions and programs.

Prerequisite or Corequisite: MTH-112Z or higher

ос	ENGR-112-01	343087 MW		1-2:20 PM	
	E. LEE	\$390.	00 \$39.00	\$0.00	\$429.00
ос	ENGR-112-02	343089 TTH		3-4:20 PM	
	E. LEE	\$390.	00 \$39.00	\$0.00	\$429.00

ENGR-171 DIGITAL LOGIC, 4 CREDITS

Introduction to digital design fundamentals. Covers basic logic gates, number systems, logic circuit simplification techniques, combinational logic devices, flip-flops, and basic state machines. Uses computer-based tools for logic system development and simulation. Reinforces systemic design methodology.

Prerequisites: MTH-111Z

ос	ENGR-171-01	343090 MF		9-11:5	0 AM
	M. FARRELL	\$520.00	\$52.00	\$0.00	\$572.00

ENGR-212 DYNAMICS, 4 CREDITS

Kinematics, kinetics, work-energy, and impulse-momentum relationships of engineering systems. The course examines the fundamental principles of Newton's laws of motion, with applications to basic particles and rigid bodies in one, two, and three dimensions.

Prerequisites: ENGR-211 and PH-211

ос	ENGR-212-01	343092 MW		3-4:50 PM	
	E. LEE	\$520.00	\$52.00	\$20.00	\$592.00

ENGR-222 ELECTRICAL CIRCUIT ANALYSIS II, 4 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) **HYB:** In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course N	urse No Course Title, Credits						Course No	Course Title, Credits					
	Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T Tuition	r,w,th.F,s,su) Fee	Time Crs. Fee	Total
through response	Expands upon the techniques of circuit analysis begun in ENGR-221 through theory and laboratory experiments. The course covers the time response of first- and second-order circuits, the steady-state circuit behavior of circuits driven by sinusoidal sources. AC power, and three				OC NCT	ESOL-015-01 J. RUEDA Required: Stu		\$0.00	\$0.00	9-11:50 AM \$65.00	\$65.00		
phase ci	rcuits.	,	oidal sou	irces, AC	power, and	I three	HAR NCT	ESOL-015-06 K. STECKMES		MW \$0.00	\$0.00	6-8:50 PM \$65.00	\$65.00
Prerequ	isites: ENGR-22	1						Required: Stu	dent Peti	tion.			
Corequi	sites: ENGR-222	2L					HAR NCT	ESOL-015-07	342442	MW		6-8:50 PM	
Recomn	nended Prerequ	isite or C	orequisi	ite: ENGF	R-112			Y. EFIMENKO)	\$0.00	\$0.00	\$65.00	\$65.00
ос	FNGR-222-01	343095	TTH		9-10-20 A	м		Required: Stu	dent Peti	tion.			

OC NCT

HAR NCT

\$624.00

ENGR-ELECTRICAL CIRCUIT ANALYSIS II LAB, 0 CREDIT

\$520.00 \$52.00 \$52.00

222L

Lab course for ENGR-222 Corequisites: ENGR-222

M. FARRELL

Recommended Prerequisite or Corequisite: ENGR-112

ОС	ENGR-222L-	343097 TTH		10:30 -11:50 AM		
	01					
	M. FARRELL	\$0.00	\$0.00	\$0.00	\$0.00	

ENGR-231 PROPERTIES OF MATERIALS, 4 CREDITS

This course is an introduction to materials science, a field that describes the behavior of materials by utilizing principles of chemistry and physics to engineer new materials and predict their resultant properties. Materials processing methods and the resulting microscopic structures and macroscopic thermal, electrical, and mechanical properties will be investigated.

Prerequisites: CH-221Z and CH-227Z

ОС	ENGR-231-01	343099 TTH		10-11:20 AM		
		Т	T		PM	
	E. LEE	\$520.0	0 \$52.00	\$52.00	\$624.00	

English for Speakers of Other Languages

ESOL-012 BEGINNING ESOL. 0 CREDIT

English language learners speak and listen to simple words, phrases, questions, statements and commands using common English vocabulary in simple, highly-structured tasks. Aligns with the Oregon Adult English Language Proficiency Standards, Level 1 and the Oregon Adult College and Career Readiness Standards Reading Foundational Skills. Variable Hours: 48-66 hours. Required: Student Petition.

OC LCT	ESOL-012-01 342424 TTH D. VERMILLION \$0.00 Required: Student Petition.	\$0.00	9-11:50 AM \$60.00	\$60.00
HAR LCT	ESOL-012-06 342429 TTH T. NIKOLOPOULOS \$0.00 Required: Student Petition.	\$0.00	6-8:50 PM \$60.00	\$60.00
HAR LCT	ESOL-012-07 342432 TTH M. SHORTINO \$0.00 Required: Student Petition.	\$0.00	6-8:50 PM \$60.00	\$60.00
HAR LCT	ESOL-012-08 342436 TTH L. ROWE \$0.00 Required: Student Petition.	\$0.00	6-8:50 PM \$60.00	\$60.00

ESOL-015 BEGINNING READING, WRITING, AND GRAMMAR, 0 CREDIT

English language learners are introduced to the basic language necessary to function in day-to-day American society; language functions are taught in the contexts of work, family and community, Aligns with the Oregon Adult English Language Proficiency Standards, Level 1. Variable hours: 48-66 hours. Required: Student Petition.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

ESOL-030 INTERMEDIATE GRAMMAR A, 0 CREDIT One of a two-part series. English language learners study and practice simple present, present progressive, and future verb forms and modals of ability, and advice. Aligns with the Oregon Adult English Language Proficiency Standards, Level 2. Required: Student Petition.

HAR LCT ESOL-030-06 342457 TTH 7:30 -8:50 PM S. MUNRO \$0.00 \$0.00 \$30.00 \$30.00 Required: Student Petition.

ESOL-031 INTERMEDIATE GRAMMAR B, 0 CREDIT

One of a two-part series. English language learners study and practice simple past and present perfect verb forms with time expressions, and comparative and superlative adjectives in written and spoken English. Aligns with the Oregon Adult English Language Proficiency Standards,

Required: Student Petition. **ESOL-022 UPPER BEGINNING CONVERSATION, 0 CREDIT**

ESOL-020 UPPER BEGINNING GRAMMAR, 0 CREDIT

Proficiency Standards, Level 1. Required: Student Petition.

ESOL-020-01 342444 TTH

Required: Student Petition. ESOL-020-06 342447 TTH

A. FRANZONI

A. FRANZONI

English language learners study and practice basic verb forms (simple

present and present progressive), and adverbs of frequency in written and spoken English. Aligns with the Oregon Adult English Language

\$0.00

\$0.00

\$0.00

\$0.00

10:30 -11:50 AM

7:30 -8:50 PM

\$35.00

\$35.00

\$35.00

\$35.00

English language learners study and practice speaking and listening skills in basic, highly-structured tasks in the contexts of community, health, and work. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 1 & 2.

HAR LCT	ESOL-022-06 342	2450 TTH		6-7:20 PM	
	J. STENSETH	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student	Petition.			

ESOL-024 UPPER BEGINNING READING & WRITING, 0 CREDIT

English language learners read short texts to improve reading skills, write simple, compound, and complex sentences, and write related sentences in paragraph form for the contexts of school, work, family and community. Aligns with the Oregon Adult English Language Proficiency Standards, Level 2. Required: Student Petition.

OC LCT	ESOL-024-01	342452	2 MW		9-11:50 AM				
	T. NIKOLOPOL	ULOS	\$0.00	\$0.00	\$60.00	\$60.00			
	Required: Student Petition.								
HAR LCT	ESOL-024-06	342455	5 MW		6-8:50 PM				
	S. CAISSE		\$0.00	\$0.00	\$60.00	\$60.00			
	Required: Student Petition.								

Level 2. Required: Student Petition.

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	Course Title, Cı	urse Title, Credits					Course No	Course Title, Credits					
	Section No Instructor	Crs Reg.	Days (M,T,) Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC LCT	ESOL-031-01	342460) TTH		10:30 -1	1:50 AM	OC NCT	ESOL-044-01	342478	MW		9-11:50 AM	
	J. RUEDA		\$0.00	\$0.00	\$30.00	\$30.00		L. MYERS		\$0.00	\$0.00	\$70.00	\$70.00
	Required: Stu	dent Pet	ition.					Required: Stud	dent Peti	tion.			
HAR LCT	ESOL-031-06	342461	TTH		7:30 -8:	50 PM	HAR NCT	ESOL-044-06	342480	MW		6-8:50 PM	
	I. FERGUSON	1	\$0.00	\$0.00	\$30.00	\$30.00		P. MROZEK		\$0.00	\$0.00	\$70.00	\$70.00
	Required: Stu	dent Pet	ition.					Required: Stud	dent Peti	tion.			

ESOL-033 INTERMEDIATE CONVERSATION 2, 0 CREDIT

English language learners study and practice speaking and listening skills and strategies in structured tasks to improve fluency in the contexts of school, work, family and community. One of a 2-part series. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 2 and 3. Required: Student Petition.

OC LCT	ESOL-033-01	342462 TTH	10:30 -11:50 A					
	S. CAISSE	\$0.00	\$0.00	\$30.00	\$30.00			
	Required: Student Petition.							
HAR LCT	ESOL-033-06	342465 TTH		6-7:20 PM				
	S. CAISSE	\$0.00	\$0.00	\$30.00	\$30.00			
	Required: Student Petition.							

ESOL-034 INTERMEDIATE READING & WRITING, 0 CREDIT

English language learners read a variety of texts to improve reading skills, and write paragraphs focused on a single topic developed with logically organized facts and details for the contexts of school, work, family and community. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 2 and 3. Required: Student Petition.

OC LCT	ESOL-034-01 34246	57 MW		9-11:50 AN	1
	D. VERMILLION	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Pe	etition.			
HAR LCT	ESOL-034-06 34247	70 MW		6-8:50 PM	
	D. VERMILLION	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Pe	etition.			
HAR LCT	ESOL-034-07 34765	51 MW		6-8:50 PM	
	TBA	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Pe	etition.			

ESOL-043 UPPER INTERMEDIATE CONVERSATION 2, 0 CREDIT

English language learners study and practice speaking and listening skills and strategies for independent communication to improve fluency in the contexts of school, work, family and community. One of a 2-part series. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 3 and 4. One of a 2-part series. Required: Student Petition.

OC LCT	ESOL-043-01 342 A. FRANZONI Required: Student	\$0.00	\$0.00	9-10:20 AN \$30.00	1 \$30.00
HAR LCT	ESOL-043-06 342 S. MUNRO Required: Student	\$0.00	\$0.00	6-7:20 PM \$30.00	\$30.00
HAR LCT	ESOL-043-07 342 A. FRANZONI Required: Student	\$0.00	\$0.00	6-7:20 PM \$30.00	\$30.00

ESOL-044 UPPER INTERMEDIATE READING & WRITING, 0 CREDIT

English language learners read a variety of texts to improve reading skills, and produce basic multi-paragraph texts for the contexts of school, work, family and community. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 3 and 4. Required: Student Petition.

ESOL-046 EDITING FOR BETTER WRITING, 0 CREDIT

English language learners improve their writing through editing. They also engage in extended reading to provide a context for writing. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 2, 3 and 4. Required: Student Petition.

OC LCT	ESOL-046-01 K. LONG Required: Stu	\$0.00	\$0.00	9-11:50 AN \$60.00	\$60.00
HAR LCT	ESOL-046-06 I. FERGUSON Required: Stu	\$0.00	\$0.00	6-8:50 PM \$60.00	\$60.00

ESOL-051 ADVANCED GRAMMAR B, 0 CREDIT

One of a three-part series. English language learners study and practice count/non-count nouns, definite/indefinite articles, and noun clauses in written and spoken English. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 3 and 4. Required: Student Petition.

OC LCT	ESOL-051-01 3476	48 TTH		10:30 -11:50 AM				
	K. LONG	\$0.00	\$0.00	\$30.00	\$30.00			
Required: Student Petition.								
HAR LCT	ESOL-051-06 3476	49 TTH	TTH 7:30 -8:50 PN					
	S. CAISSE	\$0.00	\$0.00	\$30.00	\$30.00			
	Required: Student F	etition.						
HAR LCT	ESOL-051-07 3476	50 TTH		7:30 -8:50	PM			
	J. STENSETH	\$0.00	\$0.00	\$30.00	\$30.00			
Required: Student Petition.								

ESOL-053 ADVANCED COMMUNICATION SKILLS 2. 0 CREDIT

English language learners practice speaking and listening strategies for effective communication for discussions, interviews, presentations, and note-taking to improve fluency in speaking and listening. Students will study the important effect intonation and body language have on meaning, build vocabulary and critical thinking skills, and develop confidence in speaking with purpose. The focus of this course is to prepare students for success in the workplace and community. Aligns with the Oregon Adult English Language Proficiency Standards, Level 4 & 5. Required: Student Petition.

OC LCT	ESOL-053-01	342490 TTH		9-10:20 AM	
	J. RUEDA	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stud	dent Petition.			
HAR LCT	ESOL-053-06	342492 TTH		6-7:20 PM	
	I. FERGUSON	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stud	dent Petition.			

ESOL-054 ADVANCED READING & WRITING, 0 CREDIT

English language learners develop writing skills including summarizing, response writing, and paraphrasing, and improve writing fluency. Develop reading skills and fluency through reading a range of texts on a variety of topics. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 4 and 5. Required: Student Petition.

OC NCT	ESOL-054-01	342493 MW	W 9-11:50 AN		
	L. JOYCE	\$0.00	\$0.00	\$70.00	\$70.00
	Required: Stu	dent Petition			

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

ESOL-075 PRONUNCIATION: SOUNDS OF AMERICAN ENGLISH, 0 CREDIT

English language learners develop pronunciation skills and knowledge to improve speech clarity, listening effectiveness, and pronunciation of written words. This course focuses on the sounds (phonemes) of American English. Required: Student Petition.

OC LCT ESOL-075-01 342497 MW 12:30 -1:50 PM K. LONG \$0.00 \$0.00 \$30.00 \$30.00 Required: Student Petition.

ESOL-082 ASSESS/EVALUATE NEW STUDENTS, 0 CREDIT

New students in the ESOL program receive information about classes offered, departmental and college policies, college services available, campus facilities, accessing student portal and email, student responsibilities, and community resources. Students are tested to determine their language levels and class placement. Students select courses with a faculty advisor. This course is used administratively to identify new students in the ESOL department. Required: Student Petition.

ONL NCT	ESOL-082-01	342498			
	L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stud	dent Petition.			
ONL NCT	ESOL-082-06	342500			
	L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stud	dent Petition.			

ESOL-083 EDUCATIONAL PLANNING FOR RETURNING STUDENTS, 0 CREDIT

Designed for returning students in the ESOL program at CCC. Students meet with faculty advisors to review their progress, revisit their goals, choose next term's classes, and learn how to transition to other educational and training opportunities at the college and in other community programs. This course is used administratively to identify returning students in the ESOL department. Required: Student Petition.

ONL NCT	ESOL-083-01	342502			
	L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stud	dent Petition.			
ONL NCT	ESOL-083-06	342504			
	L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stud	dent Petition.			

English Literature

ENG-108 **WORLD LITERATURE: EARLY MIDDLE AGES THROUGH** THE 18TH CENTURY, 4 CREDITS

Literature of the Early Middle Ages through the 18th Century, in a variety of genres. Through class discussion, research, and written work, students practice close reading and literary interpretation, explore the readings' contemporary relevance, relate the readings to their own lives and the world, and engage in academic conversations about the

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ENG-108-01 342976 \$520.00 \$52.00 \$0.00 A. WARREN \$572.00

ENG-202 SHAKESPEARE, 4 CREDITS

OFF: Other Off-Campus Location

Selected comedies, histories, tragedies, romances, and poetry. Students focus on reading and discussion, literary interpretation, and relating Shakespeare's work to their lives and the world. Study of significant plays and sonnets. Works from ENG-202 will not be repeated in CCC's other Shakespeare course, ENG-201.

Campus Locations: Distance Education Notification:

HAR: Harmony Community Campus ONL: Online Only OC: Oregon City Campus REM: Remote (w/ scheduled meetings) WILS: Wilsonville Training Center HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

elements and terminology. Recommended Prerequisites: WRD-098 or placement in WR-121Z

Explores the historical, cultural, social, and literary significance of Greek myths; views Greek mythology in its historical and geographic positions

considers how studying myth affects and influences reading other works;

and in the larger context of Western civilization and literary tradition;

introduces theoretical approaches to mythology and basic literary

Recommended Prerequisites: WRD-098 or placement in WR-121Z

\$520.00 \$52.00

1-2:50 PM

\$572.00

\$0.00

345553 MW

ENG-202-01

ENG-250 GREEK MYTHOLOGY, 4 CREDITS

J. DAVIS

ENG-250-01 347685 TTH 10-11:50 AM C. BURNELL \$520.00 \$52.00 \$0.00 \$572.00

AMERICAN LITERATURE: TOPICS IN AMERICAN ENG-255 LITERATURE, 4 CREDITS

Focus on selected authors and works of American fiction, poetry, nonfiction, and drama. Theme changes yearly.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ENG-255-01 345549 J. MCALPINE \$520.00 \$52.00 \$0.00 \$572.00

ENG-260 INTRODUCTION TO WOMEN WRITERS, 4 CREDITS

The study of the works (e.g. plays, poems, fiction, new media) created by women writers, both classic and contemporary, with an emphasis on women's evolving social, historical, and economic roles.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ENG-260-01 342989 A. WARREN \$520.00 \$52.00 \$0.00 \$572.00

WORLD LITERATURE: EARLY MIDDLE AGES THROUGH ENG-272 THE 18TH CENTURY, 4 CREDITS

Literature of the Early Middle Ages through the 18th Century, in a variety of genres. Through class discussion, research, and written work, students practice close reading and literary interpretation, explore the readings' contemporary relevance, relate the readings to their own lives and the world, and engage in academic conversations about the literature.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ONL ENG-272-01 345552 \$520.00 \$52.00 \$0.00 A WARREN \$572 00

ENG-296 ADAPTATION: LITERATURE INTO FILM, 4 CREDITS

Adaptation: Literature into Film is an exploration into the study of the art of transforming literary texts into films. The course focuses on various literary genres such as the novel, the short story, the play, and the nonfiction event, and analyzes the process of transforming these stories from page to screen, thereby creating a new art form. Note: This is a literature and not a writing class.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ENG-296-01 345551 TTH R. DAVIS \$520.00 \$52.00 \$0.00 \$572.00

Environmental Science

ESR-172 INTRODUCTION TO CLIMATE CHANGE, 4 CREDITS

Introduction to climate change, the causes and consequence and efforts to mitigate climate change. The laboratory assignments will focus on applied introductory climate change topics.

Course No Course Title, Credits Course No Course Title, Credits Crs Reg. Section No Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Crs. Fee Instructor Crs. Fee Total Instructor Tuition Fee Total

\$0.00

Corequisites: ESR-172L

Recommended Prerequisites: MTH-060 with a C or better or

placement in MTH-065

Recommended Prerequisites: WRD-098 or placement in WR-121Z

oc ESR-172-01 343100 TTH 1-2:20 PM
E. CAVALIERE \$520.00 \$52.00 \$55.00 \$627.00
Corequisite: Take 1 of the following ESR-172L-01, ESR-172L-02, ESR-172L-03, ESR-172L-04.

ONL ESR-172-02 343103

E. CAVALIERE \$520.00 \$52.00 \$55.00 \$627.00 Corequisite: Take 1 of the following ESR-172L-01, ESR-172L-02, ESR-172L-03, ESR-172L-04.

ONL ESR-172-03 347578

E. CAVALIERE \$520.00 \$52.00 \$55.00 \$627.00 Corequisite: Take 1 of the following ESR-172L-01, ESR-172L-02, ESR-172L-03, ESR-172L-04.

ESR-172-15 343104

S. BALLEW \$520.00 \$52.00 \$55.00 \$627.00

ESR-172L INTRODUCTION TO CLIMATE CHANGE LAB, 0 CREDIT

Lab course for ESR-172 **Corequisites:** ESR-172

ONI

oc ESR-172L-01 343106 T 9-11:50 AM

E. CAVALIERE \$0.00 \$0.00 \$0.00 \$0.00

Corequisite: Take 1 of the following ESR-172-01, ESR-172-

oc ESR-172L-02 343108 W 9-11:50 AM
D. HUFFORD \$0.00 \$0.00 \$0.00 \$0.00
Corequisite: Take 1 of the following ESR-172-01, ESR-172-

02.

oc ESR-172L-03 343109 W 1-3:50 PM
E. CAVALIERE \$0.00 \$0.00 \$0.00 \$0.00
Corequisite: Take 1 of the following ESR-172-01, ESR-172-

oc ESR-172L-04 347590 TH 2:30 -5:20 PM
E. CAVALIERE \$0.00 \$0.00 \$0.00 \$0.00
Corequisite: Take 1 of the following ESR-172-01, ESR-172-02, ESR-172-03.

HAR ESR-172L-15 343110 TH 6-8:50 PM S. BALLEW \$0.00 \$0.00 \$0.00

Ethnic Studies

ES-221 INTRODUCTION TO BLACK STUDIES, 4 CREDITS

This is an introductory and survey course which analyzes factors that helped mold the African American experience, beginning with precolonial Africa to US contemporary socio-political, cultural, educational, and economic issues relevant to descendants of the African diaspora. Provides counter narratives to dominant perspectives on race, ethnicity, and Black identity.

Prerequisites: WRD-098 or placement in WR-121Z

ONL ES-221-01 342996

TBA \$520.00 \$52.00 \$0.00 \$572.00

ES-231 INTRODUCTION TO SOUTHEAST ASIAN AND SOUTH PACIFIC ISLAND DIASPORA STUDIES, 4 CREDITS

This course will examine key migration and dispersion factors, and cultural adjustment and resettling challenges of the Southeast Asian and Pacific Island Diaspora in the United States from the late 19th Century through the present. These analyses will center Southeast Asian and Pacific Island counternarrative and ethnography through literature, history, anthropology, and political scholarship.

Prerequisites: WRD-098

Recommended Prerequisites: WR-121Z

ONL NCT ES-231-01 347513

K. BACA \$520.00 \$52.00 \$0.00 \$572.00

L. MARTINEZ

Family Studies

HDF-225 PRENATAL, INFANT & TODDLER DEVELOPMENT, 3 CREDITS

Explores the principles of child development, prenatal through three years of age. Emphasis will be placed on the physical, cognitive, and social-emotional development of young children. The impact of family dynamics, culture and socio-economic status on children's development will be explored.

ONL LCT HDF-225-01 343141

D. GLASCOCK \$390.00 \$39.00 \$0.00 \$429.00 Meets: 2/9-3/14. This is an accelerated 5-week course that is all online with no synchronous meetings.

HDF- DESARROLLO Y CRECIMIENTO EN LA NIÑEZ: 247ES PREESCOLAR HASTA LA ADOLESCENCIA, 4 CREDITS

Este curso se enfoca en los principios del desarrollo en niños de tres años hasta la adolescencia, incluyendo el crecimiento, y la evolución física, cognitiva, social y emocional. Explora las principales teorías históricas del desarrollo infantil y las investigaciones y prácticas actuales. Se incluye un enfoque en cómo la cultura, la dinámica familiar y el estatus socioeconómico impactan el crecimiento y el desarrollo de los niños.

Prerequisites: ECE-150ES, FYE-101ES, and HDF-225ES

REM LCT ESPAÑOL
P. ALVARADO \$520.00 \$52.00 \$0.00 \$572.00 La clase se reúne seis jueves por Zoom de 6:00-7:50pm.

HDF-260 UNDERSTANDING CHILD ABUSE AND NEGLECT, 3 CREDITS

In this course, students will receive an overview of child abuse and neglect. Students will examine the types and causes of abuse, abused children, abusive parents, treatment, education and prevention, and resources available to assist children and families. An emphasis is placed on intervention and mandatory reporting, as well as risks and outcomes. This course discusses the investigation process of child welfare and forensic interviewing of abused children. Students will also learn about the signs and symptoms of abuse and how trauma impacts an individual's health across a lifetime.

ONL HDF-260-01 343152

C. BAKER \$390.00 \$39.00 \$0.00 \$429.00

Fire Science (Wildland)

FRP-130 INTRODUCTION TO WILDLAND FIREFIGHTING (S-130/S-190/S-110/ICS-100/IS-700/L-180), 3 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location **Distance Education Notification:**

ONL: Online Only

REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	Course Title, Ci	redits					Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
firefighting	e provides an ir safety and wild	land firef	ighting te	chniques	. The cou	irse covers	ос	FRP-249-01 J. GULLEY Meets: 3/13-3.			\$26.00	8-5:00 PM \$30.00	\$316.00

NWCG Courses completed in class include S-130, S-190, S-110, L-180, IS-100 and IS-700. This course also includes the Work Capacity Test (WCT) which is needed for employment. Completion of firefighter field day is required to pass this course.

oc FRP-130-01 344981 FSSU 8-5:00 PM B. ESTES \$390.00 \$39.00 \$50.00 \$479.00 Meets: 2/20-3/1.

FRP-200 BASIC INCIDENT COMMAND SYSTEM (I-100, I-200, IS-700, IS-800), 4 CREDITS

Introduces the knowledge and skills to function efficiently during an incident or event within the Incident Command System (ICS). National Incident Management System (NIMS) and the National Response Framework (NRF) provide a consistent nationwide template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents.

OC HYB FRP-200-01 347543 W 12-1:50 PM J. GULLEY \$520.00 \$52.00 \$0.00 \$572.00

FRP-215 FIRE OPERATIONS IN THE URBAN INTERFACE (S-215), 2 CREDITS

Assess homes and structures located in and around forest, grass and brush lands (urban interface) for vulnerability to a wildland fire.

Prerequisites: FRP-130 (S-130/S-190/L-180)

ос FRP-215-01 347624 FS 8:30 -5:00 PM \$260.00 \$26.00 \$20.00 \$306.00 K. GEARY Meets: 3/13-3/14.

FRP-244 WILDERNESS II: BASIC LAND NAVIGATION (S-244), 3

Students will learn how to make and document field observations, how to produce hand drawn and GPS field maps, and how to navigate using a map, compass, and GPS.

Prerequisites: FRP-130 (S-130/S-190/L-180) Recommended Prerequisites: FRP-290 (S-290)

8:30 -3:00 PM OC HYB LCT FRP-244-01 342646 FS J. GULLEY \$390.00 \$39.00 \$50.00 \$479.00 M SNYDER

Meets: 1/30-2/7.

FRP-246 WILDERNESS IV: BACKCOUNTRY CPR/FIRST AID/AED. **4 CREDITS**

Introduction to general medical concepts and basic life support skills. It is targeted to the outdoor enthusiast on day trips or short adventures. Course results in CPR, first aid & AED certification and Wilderness First Aid certification.

FRP-246-01 342649 FSSU 8:30 -5:00 PM OC **FSSU** 5-8:30 PM B FSTFS \$520.00 \$52.00 \$50.00 \$622 00 Meets: 1/9-1/18.

FRP-249 FOLLOWERSHIP TO LEADERSHIP (L-280), 2 CREDITS

The course prepares the student for a basic field operations leadership role. Students will be able demonstrate basic leadership skills through interactive classroom discussions and scenario based exercises.

FRP-250 WILDERNESS VI: BASIC TOOL USE AND CARE, 1

Selection, operation, and maintenance of chain saws and hand tools to include shovels, Pulaski, single and double bit axes, hand saws, and various other tools used in forestry, firefighting and survival activities. Class includes a lab component.

FRP-250-01 342652 T 10-11:50 AM J. GULLEY \$130.00 \$13.00 \$125.00 \$268.00

FRP-255 PHYSICAL FITNESS AND NUTRITION FOR FIRST **RESPONDERS, 2 CREDITS**

This course will assist the student in meeting the physical fitness requirements for work in firefighting, and emergency medical services. Includes individual conditioning strategies, nutritional guidelines, basic exercise principles, pre-employment and lifelong fitness and conditioning. The course will prepare students for activities like the Candidate Physical Abilities Test (CPAT), work capacity test and other physical ability tests required for first responders. May be repeated for up to 6 credits.

Required: Complete a physical performed by a licensed physician prior to attending

Recommended: Have adequate outdoor exercise attire and be prepared for arduous physical activity

FRP-255-01 342656 MTH 8-9:50 AM \$260.00 \$26.00 \$0.00 J. GULLEY \$286.00

WILDLAND FIRE PREVENTION EDUCATION 1 (P-101), 3 FRP-265 **CREDITS**

This course was developed as part of a multi-course national curriculum covering wildfire prevention. It is designed to provide a basic introduction of fire prevention principles and activities for fire prevention specialists, fire managers, public information officers and others who have wildland fire prevention, education, or mitigation responsibilities. Course equivalent to NWCG P-101 Fire Prevention Education 1.

Prerequisites: FRP-130 (S-130/S-190/L-180)

FRP-265-01 342659 TH 10-1:30 PM J. GULLEY \$390.00 \$39.00 \$0.00 \$429.00

First Year Experience (FYE)

FIRST YEAR EXPERIENCE LEVEL I, 2 CREDITS

This is the first course in a 3-course sequence designed to help students adjust to a new campus, connect with other students, understand college expectations and systems, and access services available through the college. The First Year Experience Level I course is designed to help students in developing relationships with students and faculty, and to build student behaviors for successfully completing classes and continuing college through to completion.

OC LCT FYE-101-01 343001 M 9-10:50 AM T. BOYLE-\$260.00 \$26.00 \$12.00 \$298.00 **GALESTIANTZ**

Contact: counseling@clackamas.edu.

OC LCT FYE-101-02 343007 T 1-2:50 PM TBA \$260.00 \$26.00 \$12.00 \$298.00

Contact: counseling@clackamas.edu.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work VAR: Variable credit class

Other Coding Translations: TBA: To be arranged: contact department first class

Course No	Course Title, C	redits					Course No	Course Title, C	redits		
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	,W,TH.F,S,SU) Fee
OC LCT	FYE-101-03	343010) W		10-11:50) AM	ONL	FN-225-03	342210		
	J. CORTES		\$260.00	\$26.00	\$12.00	\$298.00		T. SCOLLARD)	\$520.00	\$52.00
	Contact: cour	nseling@	clackama	s.edu.				Online textboo	k include	ed in sec	ion fees.
OC LCT	FYE-101-04	343012	2 T		2-3:50 P	М					
	J. CORTES		\$260.00	\$26.00	\$12.00	\$298.00	Genera	ıl Developr	nent E	Educa [.]	tion (G
	Contact: cour	nseling@	clackama	s.edu.				•			
		•					~ ~:				

FYE-EXPERIENCIA DE PRIMER AÑO (FIRST YEAR 101ES **EXPERIENCE EN ESPAÑOL), 2 CREDITS**

Este es el primer curso en la serie de 3 clases diseñadas para ayudar a los estudiantes novatos o que inician apenas su trayectoria estudiantil, con el ajuste a un plantel nuevo, a conectar con otros alumnos, a entender las expectativas del sistema estudiantil, y a familiarizarse con la fuente de servicios al alcance del estudiante. First Year Experience (Experiencia de Primer Año) está diseñada para preparar a los estudiantes a entablar nexos entre estudiante y profesorado, y con el desarrollo de prácticas exitosas para concluir clases y continuar con el estudio hasta la culminación de metas académicas.

REM LCT ESPAÑOL	FYE-101ES-01 343022	M		6-7:50 PM				
	L. MARTINEZ	\$260.00	\$26.00	\$12.00	\$298.00			
	Contact: counseling@clackamas.edu.							

FIRST YEAR EXPERIENCE LEVEL II, 1 CREDIT

This course is a second in the First Year Experience sequence offered to new CCC students. This course is designed for students who want to continue to delve in depth into future educational and career planning, financial aid and scholarships, applied study skills, and college and community resources.

Prerequisites: FYE-101

ONLICT FYE-102-01 343027

> D. GREEN \$130.00 \$13.00 \$12.00 \$155.00

Contact: counseling@clackamas.edu.

Food & Nutrition

FN-110 **PERSONAL NUTRITION, 3 CREDITS**

This course explores how nutrition affects health and fitness for the individual and the family. Students apply knowledge of nutrition guidelines to analyze personal diet and improve current food preparation and habits. It is a basic nutrition course for students with little or no science background.

ONL	FN-110-01	342207	,			
	T. SCOLLARD)	\$390.00	\$39.00	\$86.40	\$515.40
	Online textboo	k includ	ed in sect	ion fees.		

FN-225 **NUTRITION, 4 CREDITS**

This course explores the role of nutrients in the development and maintenance of a healthy body. The course examines the relationship between diet and health. Students apply knowledge of nutritional adequacy through computer-aided diet analysis. It discusses current nutrition recommendations and controversies. The course meets requirements for most nursing programs.

Recommended: A strong background in anatomy and physiology, biology or chemistry

	0,						
ONL	_	FN-225-01	342208				
		T. SCOLLARD		\$520.00	\$52.00	\$121.88	\$693.88
		Online textboo	k include	ed in sect	ion fees.		

J. PAVLINAC \$520.00 \$52.00 \$121.88 \$693.88

Online textbook included in section fees.

342209

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text NCT: No-Cost Text

Development Education (GED)

GED Classes offered Days and Evenings

Students will be placed in the appropriate class based on their schedules and intake assessments. Please call 503-594-3028 for orientation information.

\$520.00 \$52.00 \$105.84

Time

Crs. Fee

Total

\$677.84

GED-011 GED IN ESPAÑOL, 0 CREDIT

Instrucción del desarrollo de habilidades básicas ofrecida en español. Un examen de diagnóstico determina las necesidades académicas del alumno. Inscripción y terminación del curso todo el tiempo durante el trimestre, se ofrece en Harmony center y Oregon City campus. Se requiere el consentimiento del Instructor para registrarse. Basic academic instruction offered in Spanish. Diagnostic tests determine individual academic needs. Open-entry, open-exit class offered at Harmony center and Oregon City campus. Required: Student Petition.

REM LCT ESPAÑOL	GED-011-01	343032	MW		5:30 -7:50 P	M
LOFAROL	A. ARISTIZAB Requerido: pe Aristizabal at 5	tición del		\$0.00 te. Conta	\$50.00 act: Adriana	\$50.00
HAR LCT ESPAÑOL	GED-011-02	343042	TTH		6-8:50 PM	
	C. SANCHEZ Requerido: pe information co register at first	tición del ntact Cai				\$50.00 or

GED-015 GED PREPARATION, 0 CREDIT

Basic academic skill development preparing for the GED 2014 tests and transition to career or post-secondary education. Course focuses primarily on language arts, math and technology skills. Provides direction and support for transitioning students. Required: Student Petition.

OC LCT	GED-015-17	343050	MW		5:30 -7:50	PM
	A. WICKERT		\$0.00	\$0.00	\$50.00	\$50.00
	Required: Stud	dent Peti	tion.			
HAR HYB LCT	GED-015-67	343055	MW		10-11:50 A	M
	L. NIELSON		\$0.00	\$0.00	\$55.00	\$55.00
	Required: Stud	dent Peti	tion.			
ONL LCT	GED-015-68	343056				
	S. HATSWELL	-	\$0.00	\$0.00	\$55.00	\$55.00
	Required: Stud	dent Peti	tion.			
ONL LCT	GED-015-69	343058				
	L. NIELSON		\$0.00	\$0.00	\$55.00	\$55.00
	Required: Stud	dent Peti	tion.			
OC LCT	GED-015-80	343060	MTWTH		10-11:50 A	M
	J. NIELSON		\$0.00	\$0.00	\$55.00	\$55.00
	Required: Stud	dent Peti	tion.			

GED-049 LATINO GED & LIFE SKILLS, 0 CREDIT

Campus Locations:

ONL

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

FN-225-02

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Crs. Fee Total

Desarrollo de habilidades académicas básicas, ofrecida en español con énfasis en los requerimientos para presentar el test del GED para obtener el certificado equivalente a la High School. También se enfoca en habilidades básicas de la vida, metas personales e interés de carreras. Se requiere el consentimiento del Instructor para registrarse. Offered in Spanish. Basic academic skill development with emphasis on requirements to take the GED test to obtain a high school equivalency certificate. Also focuses on basic life skills, personal and career goals and interests. Required: Student Petition.

REM LCT ESPAÑOL	GED-049-02	343064	TTH		6-8:50 PM	
LOFANOL	A. ARISTIZAB. Requerido: pe		\$0.00 I estudian	\$0.00 te.	\$50.00	\$50.00
HAR LCT ESPAÑOL	GED-049-03	343071	MW		9-11:50 AM	
	C. SANCHEZ Requerido: peinformation co register at first	ntact Ca				\$50.00 or
HAR LCT ESPAÑOL	GED-049-04	343075	S		9-11:50 AM	
ESFANUL	M. ROSAS DE Requerido: pe		•	\$0.00 te.	\$30.00	\$30.00

General Science

EARTH SYSTEM SCIENCE, 4 CREDITS GS-104

A lab course designed to give an overview of the physical sciences by examining the relationship between physics, chemistry and geology in the natural world. Topics include plate tectonics, the Earth's structure, earthquakes/hazards, mineral chemistry, igneous rocks, and volcanoes/hazards.

Corequisites: GS-104L

Recommended Prerequisites: MTH-065 or placement in MTH-095

GS-104-01 OC 347592 TTH TBA \$520.00 \$52.00 \$50.00 \$622.00 Corequisite: Take the following GS-104L-01.

GS-104L EARTH SYSTEM SCIENCE LAB, 0 CREDIT

Lab course for GS-104 Corequisites: GS-104

oc GS-104L-01 347593 W 1-3:50 PM \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following GS-104-01.

ASTRONOMY, 4 CREDITS GS-107

A lab course including the history of astronomy, the Earth and moon, all planets in our solar system, along with asteroids, meteors and comets.

Corequisites: GS-107L

Prerequisites: MTH-065 or MTH-098 with a C or better or placement in

MTH-095

Prerequisites: WRD-090 or placement in WRD-098

ONL LCT GS-107-40 343130 \$520.00 \$52.00 \$25.00 \$597.00 C SHARON

GS-107L ASTRONOMY LAB. 0 CREDIT

Lab course for GS-107 Corequisites: GS-107

GS-107L-40 343133

C. SHARON \$0.00 \$0.00 \$0.00 \$0.00

Geographic Information Systems

All degree seeking students should arrange to speak to a faculty advisor prior to registering. Call 503-594-3678 for more information, or contact Advising, 503-594-3475.

MAPS AND GEOSPATIAL TECHNOLOGY, 4 CREDITS

This course provides an overview of the concepts and principles of geospatial technology using lab activities to explore maps, geospatial data, and geospatial software. Major themes include maps and cartography, geographic information systems, spatial data, global navigation satellite systems, remote sensing, terrain analysis, web maps, and the geospatial industry.

OC HYB GIS-101-01 347546 W 10-11:50 AM A. ARMEN \$520.00 \$52.00 \$30.00 \$602.00

GIS-201 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS, 4 CREDITS

This course explores fundamental geographic information systems (GIS) concepts utilizing hands-on application through various laboratory exercises with industry-standard ArcGIS software. The class explores basic map principles, cartographic design, geodesy, and geospatial data manipulation while exploring ArcGIS Online to create, display, query, relate, classify, and analyze spatial data to create maps and answer geographic questions.

GIS-201-01 342661 A ARMEN \$520.00 \$52.00 \$40.00 \$612.00

GIS-202 **GIS APPLICATIONS, 4 CREDITS**

This class follows the introductory course as a continuation of Geographic Information Systems (GIS). Topics explored include working with geodatabases, topology, vector and raster analysis, and creating and editing data. Students also practice key GIS project management processes, workflows, and best practices through an analysis project.

Recommended Prerequisites: GIS-201

ONL GIS-202-01 342663 A. ARMEN \$520.00 \$52.00 \$40.00 \$612.00

GIS-236 PROGRAMMING FOR GIS, 4 CREDITS

An introduction to computer programming and Object Orientated Programming (OOP) with Python. Covers basic computer programming concepts including data types, loops, control structures, functions, classes, and program development. Use Python for problem solving by creating basic scripts for more advanced object-oriented programs.

ONL GIS-236-01 342666 A ARMEN \$520.00 \$52.00 \$30.00 \$602.00

GIS WEB MAPPING, 4 CREDITS GIS-238

This class is an introduction to interactive map making using ArcGIS Online. Topics for online map making will be explored including web cartography, interactive map elements, mobile data collection, geospatial data from community science, and ArcGIS Online apps. Students will get the chance to create interactive map products.

Recommended: Familiarity with GIS software and applications

ONL GIS-238-01 347547 \$520.00 \$52.00 \$20.00 \$592.00 I COX

GIS-280 GIS/CWE, 2-6 CREDITS (VAR)

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

Cooperative work experience. Provides students with on-the-job work experience in the field of geographic information systems. This class is intended for students who are completing their Geographic Information Systems (GIS) Technology Certificate. Required: Student Petition.

Corequisites: CWE-281 Prerequisites: GIS-201

GIS-280-01 342667

> A. ARMEN \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

Geography

GEO-100 INTRODUCTION TO PHYSICAL GEOGRAPHY, 4 CREDITS

Analyzes the physical elements of the Earth's surface and atmosphere. Focuses on natural processes that create physical diversity on the Earth including weather and climate, biosphere, soils and landforms and explores how these influence human cultural settlement activities.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL GFO-100-01

> C. FELDMAN \$520.00 \$52.00 \$101.32 \$673.32

Online textbook included in section fees.

GEO-110 CULTURAL & HUMAN GEOGRAPHY, 4 CREDITS

Introduces geographical perspectives on human population, agriculture, political pattern, language, religion, folk culture, popular culture, ethnic culture, urban development, industry, and transportation as these play out on the diverse landscapes of the world.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL NCT GEO-110-01 343083

> C. FELDMAN \$520.00 \$52.00 \$0.00 \$572 00

GEO-208 GEOGRAPHY OF THE UNITED STATES & CANADA, 4 CREDITS

Provides students with the fundamental geographical knowledge of the United States and Canada and their paths of development. Presents the spatial arrangement of culture, economics, politics, and the natural environment.

Recommended Prerequisites: WRD-090 or placement in WRD-098

GEO-208-01 ONL 345538

> A. ARMEN \$520.00 \$52.00 \$0.00 \$572.00

GEO-280 GEOGRAPHY/CWE, 2-6 CREDITS (VAR)

Cooperative work experience. Provides students with on-the-job work experience in the field of geography. Required: Student Petition.

Corequisites: CWE-281

OC NCT GEO-280-01 343088

> C. FELDMAN \$780.00 \$78.00 \$45.00 \$903.00V

D. LOUGEE

Required: Student Petition. Corequisite: Take the following

CWE-281-06.

Geology

G-102 **GENERAL GEOLOGY, 4 CREDITS**

For non-science majors. An introductory lab course that explores the Earth's systems and surface features. Systems/processes/hazards explored include rivers, mass wasting, glaciers, groundwater, and deserts. Labs focus on geologic and topographic maps and how they are used to understand geologic features and local geology.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

Recommended Prerequisites: WRD-090 or placement in WRD-098

G-102-01 343112

Coreguisites: G-102L

A KOTASH \$520.00 \$52.00 \$50.00 \$622.00 This section has remote lectures and on-campus exams. Midterm and Final are on campus on February 7th (Wednesday week 5) and March 18th (Monday of final week). Students will need to come to campus to take exams. Corequisite: Take 1 of the following G-102L-01, G-102L-02. 10-11:20 AM G-102-02 343114 TTH

oc \$520.00 \$52.00 \$50.00 A. KOTASH \$622.00 This section has an in-person lab. Corequisite: Take 1 of the

following G-102L-01, G-102L-02,

REM G-102-20 343115 T 6-8:50 PM \$520.00 \$52.00 \$50.00 J. WOODCOCK \$622.00

G-102L **GENERAL GEOLOGY LAB, 0 CREDIT**

Lab course for G-102 Corequisites: G-102

G-102L-01 343116 T 1-3:50 PM \$0.00 \$0.00 A. KOTASH \$0.00 \$0.00 Corequisite: Take 1 of the following G-102-01, G-102-02. G-102L-02 343118 TH 1-3:50 PM A. KOTASH \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following G-102-02, G-102-01. HAR G-102L-20 343119 TH 6-8:50 PM J. WOODCOCK \$0.00 \$0.00 \$0.00 \$0.00

G-202 **GENERAL GEOLOGY, 4 CREDITS**

For science majors. A lab course that explores surface features of the Earth and the systems that form those features.

Systems/processes/hazards explored include rivers, mass wasting, glaciers, groundwater and deserts. Topographic/geologic maps are used to understand geologic features and local geology.

Prerequisites: G-201 with a C or better

Corequisites: G-202L

ONL G-202-01 343121 A. KOTASH \$520.00 \$52.00 \$50.00 \$622.00 This section has remote lectures and on-campus exams. Midterm and Final are on campus on February 7th (Wednesday week 5) and March 18th (Monday of final week). Students will need to come to campus to take exams.

Corequisite: Take 1 of the following G-202L-02, G-202L-01. oc G-202-02 343122 TTH 10-11:20 AM A. KOTASH \$520.00 \$52.00 \$50.00 This section has an in-person lab. Corequisite: Take 1 of the

following G-202L-02, G-202L-01.

REM G-202-20 6-8:50 PM 343123 T J. WOODCOCK \$520.00 \$52.00 \$50.00 \$622.00

GENERAL GEOLOGY LAB, 0 CREDIT

Lab course for G-202 Corequisites: G-202

oc G-202L-01 343124 T 1-3:50 PM \$0.00 A KOTASH \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following G-202-01, G-202-02. G-202L-02 343125 TH 1-3:50 PM OC. A. KOTASH \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following G-202-01, G-202-02. HAR G-202L-20 343127 TH 6-8:50 PM J. WOODCOCK \$0.00 \$0.00 \$0.00 \$0.00

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

Gerontology

GRN-181 ISSUES IN AGING, 3 CREDITS

Provides an introduction to gerontology including the history of aging and current issues. Covers: myths, stereotypes, economic and political aspects, demographics and service availability for aging populations.

GRN-181-01 347575

> Y. SMITH \$390.00 \$39.00 \$0.00 \$429.00

GRN-280 GERONTOLOGY/CWE, 2-6 CREDITS (VAR)

Cooperative work experience. Acquaint gerontology students with the roles and related activities of organizations serving the elderly. This course provides an opportunity to apply theories and techniques learned in the classroom. May be repeated for up to 6 credits. Required: Student

Prerequisite or Corequisite: HS-170

Corequisites: HS-270

HAR GRN-280-01 342188

> J. LOVELESS \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

Health

HE-163 **BODY & DRUGS I: INTRODUCTION TO ABUSE & ADDICTION, 3 CREDITS**

The first of a four-course sequence, this course examines the history of the use of addictive drugs, the definition of addiction, psychosocial and neurobiological causes of drug and behavioral addiction, addictive drug classifications, and the history of/introduction to addiction treatment, and access and utilize effective resources to improve and maintain mental and physical wellbeing.

ONL	HE-163-01 34313	36			
	T. PANTAGES	\$390.00	\$39.00	\$0.00	\$429.00
ONL	HE-163-02 34313	38			
	T. PANTAGES	\$390.00	\$39.00	\$0.00	\$429.00

HE-164 **BODY & DRUGS II: ALCOHOL, 3 CREDITS**

The second of a four-course offering. Covers beverage alcohol as a drug, the history of alcohol use/abuse, physiological and psychological effects of alcohol use on the user, and the impact of that use on those around the user and on society at large, access and utilize effective resources to improve and maintain mental and physical wellbeing.

Prerequisites: HE-163

343140 ONL HE-164-01 T. PANTAGES \$390.00 \$39.00 \$0.00 \$429.00

HE-201 **PERSONAL TRAINING, 3 CREDITS**

Students will follow the curriculum for the National Council on Strength and Fitness (NCSF) Certified Personal Trainer certification. The course will guide students through the expectations, requirements, processes and knowledge to prepare to become a certified Personal Trainer through the NCSF. Through videos, lecture and self-study, students will be prepared to take the NCSF Certified Personal Training exam, which is offered through the NCSF and is not included in the course.

Recommended Prerequisites: PE-240

ONL HE-201-01

\$390.00 \$39.00 \$0.00 T. NELSON \$429.00

HE-204 **NUTRITION & WEIGHT CONTROL, 3 CREDITS**

Campus Locations: HAR: Harmony Community Campus OC: Oregon City Campus

WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Other Coding Translations:

Methods of maintaining or improving nutrition by considering diets and dieting, obesity, types of exercise, physical testing, cardio-vascular fitness and nutritional concepts.

HE-204-01 343143

J. BUEL \$390.00 \$39.00 \$0.00 \$429.00

SPORTS NUTRITION, 3 CREDITS HF-223

Examination of nutrition as it relates to the demands of exercise and competitive sport. Emphasis on the relationship of diet and exercise to optimal health and performance. This course can lead to a certification as a sports nutritionist through the NCSF.

HE-223-01 343149

J. BUEL \$390.00 \$39.00 \$0.00 \$429.00

HE-249 **MENTAL HEALTH, 3 CREDITS**

Designed for each student to understand and improve their personal mental health. Teaches theories of mental health as well as practical strategies for improving one's level of mental health. Analyzes factors that may impede optimal mental health, again with practical solutions for minimizing/avoiding such factors.

REM NCT	HE-249-01	343150 MW		1-2:20	РМ
	K. WOODS	\$390.00	\$39.00	\$0.00	\$429.00

HE-250 PERSONAL HEALTH, 3 CREDITS

This course is designed to help students gain an overall understanding of information basic to the field of health, to help them critically evaluate health information, and to promote positive attitudes, values, and behaviors in regard to personal health.

ONL	HE-250-04 J. RHODEN	343156		ተባባ ባባ	ድር ርር	¢400.00
ONL	J. KHODEN HE-250-05	343162	\$390.00	ф39.00	\$0.00	\$429.00
	J. RHODEN	1/21	\$390.00	\$39.00	\$0.00	\$429.00

HF-252 FIRST AID/CPR/AED, 3 CREDITS

This course supports the American Red Cross program for First Aid/CPR/AED and will teach participants the knowledge and skills needed to give immediate care to an injured or ill person and to decide whether advanced medical care is needed. Successful completion of the course leads to a Red Cross First Aid/CPR/AED certification for the lay responder.

ONL	HE-252-01	343164
	K. WOODS	\$390.00 \$39.00 \$35.00 \$464.00
ONL	HE-252-03	343166
	T. NELSON	\$390.00 \$39.00 \$35.00 \$464.00
ONL	HE-252-05	343168
	K. ARIZO	\$390.00 \$39.00 \$35.00 \$464.00

Health & Fitness

HPE-295 HEALTH & FITNESS FOR LIFE, 3 CREDITS

This course explores interaction of the nine dimensions of wellness (health). All of the related assignments are online. Students will assess their level of the health related components of fitness and develop an exercise plan for maintenance/improvement. Students are expected to spend a minimum of 3 hours per week exercising. Related topics include: nutrition, stress reduction, relaxation techniques, goal setting, and weight control.

Recommended: A completed physical by a doctor

Course No	Course Title, Ci	redits				
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition	/,TH.F,S,SU) Fee	Time Crs. Fee	Total
ONL	HPE-295-01	343215	1			
	J. RHODEN		\$390.00	\$39.00	\$30.00	\$459.00
ONL	HPE-295-02	343221				
	T. NELSON		\$390.00	\$39.00	\$30.00	\$459.00

SALUD Y APTITUD FÍSICA PARA LA VIDA, 3 CREDITS HPF-295ES

Este curso analiza la interacción entre las nueve dimensiones del bienestar (la salud). Todas las tareas relacionadas se realizan en línea. Los estudiantes evaluarán su nivel de los componentes de la aptitud física relacionados con la salud y desarrollarán un plan de ejercicios para mantener o mejorar dicha aptitud física. Se espera que los estudiantes hagan ejercicio 3 horas a la semana como mínimo. Los temas relacionados incluyen lo siguiente: nutrición, reducción del estrés, técnicas de relajación, fijación de metas y control del peso.

Recommended: Examen físico realizado por un médico

ESPAÑOL

HPE-295ES-01347576

E. COLON-CORTES \$390.00 \$39.00 \$30.00 \$459.00

Health Professions

HEALTHCARE PROVIDER BLS/CPR, FIRST HP-100 AID/BLOODBORNE PATHOGENS, 1 CREDIT

Introduces CPR, first aid, and bloodborne pathogens to individuals working in healthcare environments, home, and community settings. Covers skills to perform CPR and operate an Automatic External Defibrillator (AED) for adults/children/infants. Includes citizen-level first aid for providing initial care to persons injured or stricken by sudden illness where help is not immediately available. Covers how to minimize communicable disease transmission while providing emergency care.

Recommended: Computer access with internet capabilities

Recommended Prerequisites: WRD-098

HAR HYR HP-100-01 344855 TBA

> S. COOPER \$130.00 \$13.00 \$15.00 \$158.00 Additional costs associated with this course include: \$22 Bloodborne Pathogens Certificate, \$36 CPR Card, \$16.50 First Aid Certificate for a total of \$74.50 additional cost. Inperson date and times: Friday, February 27th at 8:30am -12:00pm or 1:00pm - 4:30pm.

HP-110 **MEDICAL TERMINOLOGY, 4 CREDITS**

This course provides the foundational principles required for understanding medical terms used to communicate effectively within the healthcare field. This includes word meaning and discerning the difference between look-alike and sound-alike words through correct spelling and pronunciation. Students will develop the ability to read and comprehend the content of medical records and reports. Through the review of body systems this course includes introductions to disease processes, basic anatomy and physiology and associated terminology.

ONL	HP-110-01 34	4857		
	S. DAVENPORT	\$520.00 \$5	52.00 \$156.56	\$728.56
	Online textbook in	cluded in section	fees.	
ONL	HP-110-02 34	4859		
	W. HARTJE	\$520.00 \$5	52.00 \$156.56	\$728.56
	Online textbook in	cluded in section	fees.	
ONL	HP-110-03 34	4860		
	J. LAFRANCE	\$520.00 \$5	52.00 \$156.56	\$728.56
	Online textbook in	cluded in section	fees.	

COMMUNICATIONS AND ETHICAL PRACTICES IN HP-130 **HEALTHCARE SETTINGS, 2 CREDITS**

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text NCT: No-Cost Text

This course will introduce the student to a variety of communications and foundational aspects of patient care of the healthcare professional. Students will be exposed to Electronic Health Records, the importance of documentation and study pertinent laws in a healthcare setting.

Crs Reg. Days (M,T,W,TH.F,S,SU)

Fee

Tuition

Time

Crs. Fee

Total

Prerequisites: WRD-098 or placement into WR-101

HP-130-01 344861 T 6-7:00 PM \$260.00 \$26.00 \$0.00 C. GARNER \$286.00

High School Diploma (AHSD)

Course No Course Title, Credits Section No

Instructor

The Adult High School Diploma program is designed for students who have earned at least 14 credits. Students who are under 18 years old or whose high school class has not graduated must have an official CCC referral or a release from compulsory attendance to begin the program. Classes are assigned individually. Please contact the Skills Development Department at 503-594-3028.

ASE-042 JOB SKILLS COMPETENCY LAB, 0.5 CREDIT

High school credit only. Provides overview of college and career processes and expectations including cooperative work experience for employed high school students to earn elective credit. Focuses on appropriate work and college behaviors, decision making techniques, communication skills, and teamwork. May be repeated for up to 2 high school credits. Required: Student Petition.

HAR HYB NCT	ASE-042-01	342615 W	12:30 -2:00 PM			
	H. PAZ	\$0.00	\$0.00	\$0.00	\$0.00	
	Required: Stu	dent Petition.				
OC NCT	ASE-042-04	342621 W		3-5:50 PM		
	D. BARE	\$0.00	\$0.00	\$0.00	\$0.00	
	Required: Stu	dent Petition.				

XASE-**BASIC ESSENTIAL SKILLS SUPPORT, 0 CREDIT** 0001

Offers students academic assessments, coaching, and support to reach basic essential skills competencies necessary for students' program of study. Students utilize computer based material in a self-paced format to improve academic skills, and work with the instructor to develop future plans and set appropriate goals. Students set attainable goals, apply appropriate strategies, and use college resources to meet the competencies necessary to succeed in their academic programs.

OC NCT	XASE-0001-02 34	3567 MTWTH	1	10-11:50	AM
	A. SMITH	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Studen	t Petition.			

History

HST-101 **HISTORY OF WESTERN CIVILIZATION, 4 CREDITS**

Origins and development of Western Civilization with a primary focus on Europe from ancient times to ca. 1300.

Recommended Prerequisites: WRD-090 or placement in WRD-098

HST-101-01 ONL NCT 343177

P. MCFARLAND \$520.00 \$52.00 \$0.00 \$572.00

HST-102 HISTORY OF WESTERN CIVILIZATION, 4 CREDITS

Origins and development of Western Civilization with an emphasis on Europe from ca. 1300 to 1800.

Recommended Prerequisites: WRD-090 or placement in WRD-098

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

VAR: Variable credit class

Course No	Course Title, C	redits					Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T,\ Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC HYB NCT	HST-102-01	343181			10-11:50			perience with s		,			
	P. MCFARLA	.ND	\$520.00	\$52.00	\$0.00	\$572.00			s, green	nouses, a	and lands	cape man	agement.
ONL NCT	HST-102-02	343184	1				Prerequisit	tes: HOR-111					
	P. MCFARLA	ND	\$520.00	\$52.00	\$0.00	\$572.00	ос	HOR-133-01	343174			8-11:50 A	
HST-131	HISTORY OF	CRIME	& PUNIS	HMENT	IN WESTE	RN		F. KILDERS		\$260.00	\$26.00	\$50.00	\$336.00

CIVILIZATION, 4 CREDITS

Explores the topics of crime and punishment in western civilization from ancient Greece to the present and relates them to the political, social, economic, intellectual and cultural trends of each time period.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL LCT HST-131-01 343186

\$520.00 \$52.00 \$0.00 P. MCFARLAND \$572.00

HISTORY OF THE UNITED STATES, 4 CREDITS

Covers the period of United States history from the Age of Jackson to World War I. Recommended that sequence is taken in order.

Prerequisite or Corequisite: WRD-098 or placement in WR-121Z Recommended Prerequisites: Sequence of HST-201, HST-202, and HST-203 is taken in order

ос	HST-202-01	343190 MW		1-2:50 PM	
	J. PARKER	\$520.00	\$52.00	\$77.50	\$649.50
	Online textbo	ok included in sect	ion fees.		
ONL	HST-202-02	343192			
	J. PARKER	\$520.00	\$52.00	\$77.50	\$649.50
	Online textbo	ok included in sect	ion fees.		

HST-280 HISTORY/CWE, 2-6 CREDITS (VAR)

Cooperative work experience. Provides students with on-the-job work experience in the field of history. Required: Student Petition.

Corequisites: CWE-281

OC HST-280-01 343196

P. MCFARLAND \$780.00 \$78.00 \$45.00 Required: Student Petition. Corequisite: Take the following CWF-281-06

Horticulture/Arboriculture/Landscape/Organic Farming

For more information call 503-594-3292 or email horticulture@clackamas.edu

HOR-122 GREENHOUSE I, 3 CREDITS

Environmental influences on plant growth, crop scheduling, greenhouse structures and equipment. Emphasis on foliage and flowering potted plant production.

ос	HOR-122-01	343171 TH	8-11:50 AM			
	F. KILDERS	\$390.00	\$39.00	\$50.00	\$479.00	

HOR-131 TREE & SHRUB PRUNING, 3 CREDITS

Emphasis on dormant pruning of fruiting and ornamental plants. Pruning and training techniques for grapes, fruit trees, and both evergreen and deciduous ornamental trees and shrubs. Basic woody plant anatomy, growth and development.

ос	HOR-131-01	343172 T		8-11:50 AM	
	D. FRANEK	\$390.00	\$39.00	\$40.00	\$469.00

HOR-133 HORTICULTURE PRACTICUM/WINTER, 2 CREDITS

HOR-136 ORGANIC FARMING PRACTICUM/WINTER, 3 CREDITS

Essential organic farming practices, including seasonal activities such as ground preparation and planning for crop production. Also covers farm business structures, financial management, recordkeeping, and marketing and distribution techniques. Field trips to area farms included. Class lecture, field trips, and lab are essential components of this course. This format has been selected to create a hands-on experience for each student in seasonal crop production.

ос нув LCT HOR-136-01	343175 T	8-11:50 AM		
D. ROSTAD	\$390.00	\$39.00	\$60.00	\$489.00

HOR-140 SOILS, 3 CREDITS

Soil characteristics and management, including nutritional elements and the relationship between the soil and plant growth.

OC LCT HOR-140-01		343176 T	1-3:50 PM		
	D. FRANEK	\$390.00	\$39.00	\$65.00	\$494.00

HOR-216 INTEGRATED PEST MANAGEMENT, 3 CREDITS

Learn the components of, and develop an Integrated Pest Management (IPM) plan for landscape, nursery, greenhouse or organic farming. The plan will incorporate pest detection, control practices and an evaluation of effectiveness.

OC LCT	HOR-216-01	343178 W		9-11:50 AM	
	F KILDERS	\$390.00	\$39.00	\$30.00	\$459 00

HOR-222 **HORTICULTURAL COMPUTER APPLICATIONS, 2** CREDITS

Utilizes database, spreadsheet, word-processing, PowerPoint, social media and other computer programs for record keeping and management and marketing for horticulture businesses.

Recommended Prerequisites: CS-120 or comparable computer skills

OC HYB LCT HOR-222-01 343179 M A. CHASTAIN \$260.00 \$26.00 \$25.00 \$311.00 Meets: In-person Monday 1/5. Online with optional in-person labs for remainder of term. Class has assignment options for varying skill levels. If you feel you have extensive computer skills please contact april.chastain@clackamas.edu to

discuss possibly waiving the class. HOR-227 PLANT IDENTIFICATION/WINTER, 4 CREDITS

Identification of conifers and broadleaf evergreens, shrubs, and groundcovers, including their cultural requirements in the landscape.

OC LCT	HOR-227-01	343180 T		8-11:50 A	И
	F. KILDERS	\$520.00	\$52.00	\$45.00	\$617.00
OC HYB LC	T HOR-227-02	343182 W		6-8:30 PM	
	TBA	\$520.00	\$52.00	\$15.00	\$587.00

HOR-229 INTRODUCTION TO LANDSCAPE DESIGN, 3 CREDITS

Introduction to landscape planning, including basic drafting skills, grading, drainage, and site planning.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Course No	Course Title, Cr	edits				
	Section No	Crs Reg.	Days (M,T,W	/,TH.F,S,SU)	Time	
	Instructor		Tuition	Fee	Crs. Fee	Total
OC HYB	HOR-229-01	343183	Т		6-9:00 P	M
			S		9-12:00	PM
	A. WHITWOR	TH	\$390.00	\$39.00	\$45.00	\$474.00
	Required field	trip Sat	1/24.			

HOR-230 EQUIPMENT OPERATION & MAINTENANCE, 2 CREDITS

The selection, safe operation, and maintenance of power driven machines in horticultural operations. Includes hands on experience with mowing equipment, rototillers, chain saws, edgers, shears, tractors, chippers, and skid steer.

Corequisites: HOR-230L

ONL HOR-230-01 343185

> S. CROSSWHITE \$260.00 \$26.00 \$75.00 \$361.00

HOR-230L EQUIPMENT OPERATION & MAINTENANCE LAB, 0 **CREDIT**

Lab course for HOR-230 Corequisites: HOR-230

ос	HOR-230L-01 3431	87 TH		9-11:50 AM	
	S. CROSSWHITE	\$0.00	\$0.00	\$0.00	\$0.00
	E. ROBERTS				
ОС	HOR-230L-02 3431	89 TH		1-3:50 PM	
	S. CROSSWHITE	\$0.00	\$0.00	\$0.00	\$0.00
	E. ROBERTS				

HOR-231 IRRIGATION DESIGN, 3 CREDITS

Principles of irrigation system design for various situations, including underground, above-ground, residential, commercial, and urban farm systems.

OC HYB	HOR-231-01	343191 W		6-8:50 PM	И
	A. CHASTAIN	\$390.00	\$39.00	\$45.00	\$474.00

HOR-237 DISEASE IDENTIFICATION, 2 CREDITS

Identification of ornamental plant diseases which occur in greenhouses. landscapes, nurseries, and farms.

oc	HOR-237-01	343194 W	3-4:50 PM		
	E. ROBERTS	\$260.00	\$26.00	\$15.00	\$301.00

HOR-239 TREE CLIMBER TRAINING, 1 CREDIT

The safe use of rope and saddle tree climbing procedures will be covered through lecture, discussion, and field practice. For beginner to moderately experienced climbers. May be repeated for up to 3 credits.

OC LCT	HOR-239-01	343195 F			8-12:45	PM
	E. ROBERTS	\$1	130.00	\$13.00	\$60.00	\$203.00
	Meets: Fridays	1/9-2/6				

Meets: Fridays 1/9-2/6.

HOR-251 HERBAL PRODUCTS, 1 CREDIT

Instruction in making herbal teas, skin lotion, tincture, infused oil, vinegar, spritzers and herbal mixes. Instruction includes the use of specific ingredients, methods for effective usage and storage, and their importance.

OC LCT	HOR-251-01	343197 F		8-11:50 AM		
	D. ROSTAD	\$130.00	\$13.00	\$60.00	\$203.00	
	Mooto: Erido	0 0/10 0/10				

Meets: Fridays 2/13-3/13.

HOR-260 ARBORICULTURE II, 3 CREDITS

Course No Course Title, Credits Crs Reg. Section No

Instructor

Evaluation, assessment and management of trees in the urban environment. Covers monetary and ecosystem values for trees, property development considerations, tree appraisals, tree inventories, risk

Tuition

Days (M,T,W,TH.F,S,SU)

Fee

Time

Crs. Fee

Total

Prerequisites: HOR-225

HOR-260-01 343198 T 2-4:50 PM E. ROBERTS \$390.00 \$39.00 \$40.00 \$469.00

assessments, and crew management. Together with HOR-225, this class will prepare students for passing the ISA Certified Arborist exam.

HOR-280 HORTICULTURE/CWE, 3 CREDITS

Cooperative work experience. On-the-job experience in the student's major course of study. Students are expected to work a minimum of 90 job site hours. May be repeated for up to 6 credits. Required: Student

Corequisites: CWE-281

OC LCT HOR-280-01 343199

> \$390.00 \$39.00 \$45.00 G. LOEFFLER \$474.00 Required: Student Petition. Corequisite: Take the following CWE-281-06.

HOR-281 HORTICULTURE/CWE, 6 CREDITS

Cooperative work experience. On-the-job experience in the student's major course of study. Students are expected to work a minimum of 180 job site hours. May be repeated for up to 12 credits. Required: Student Petition.

Corequisites: CWE-281

OC LCT HOR-281-01 343202

G. LOEFFLER \$780.00 \$78.00 \$45.00 \$903.00 Required: Student Petition. Corequisite: Take the following CWE-281-06.

HOR-282 HORTICULTURE/CWE, 3 CREDITS

Cooperative work experience. On-the-job experience in the student's major course of study. Students are expected to work a minimum of 90 job site hours. May be repeated for up to 6 credits. Required: Student Petition.

Corequisites: CWE-281

Required: Students are expected to work a minimum of 90 job site hours

HOR-282-01 343205

G. LOEFFLER \$390.00 \$39.00 \$45.00 Required: Student Petition. Corequisite: Take the following CWE-281-06.

HOR-285 ORGANIC FARMING/CWE, 3 CREDITS

Cooperative work experience. On-the-job experience working with an agricultural business/farm. Students are expected to work a minimum of 90 job site hours. May be repeated for up to 6 credits. Required: Student Petition.

Corequisites: CWE-281

Required: Students are expected to work a minimum of 90 job site hours

HOR-285-01

G. LOEFFLER \$390.00 \$39.00 \$45.00 \$474.00 Required: Student Petition. Corequisite: Take the following

CWE-281-06.

SPECIAL TOPICS IN HORTICULTURE, 1 CREDIT HOR-290

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

This course gives students an opportunity to gain knowledge in a specific area relevant to the field of horticulture, landscaping, arboriculture or organic farming. This topic will be pulled from a comprehensive list of areas identified by horticulture professionals as having importance for students pursuing work in the field. May be repeated for up to 6 credits. Required: Student Petition.

OC HYB LCT HOR-290-01 343212 TWTHFS

3-4:50 PM

C. WASHBURN \$130.00 \$13.00 \$200.00 \$343.00 Required: Student Petition. Hybrid. Meets: Mondays 1/5, 1/12, 2/2, 2/28, 3/9; plus additional hours online. Special Topic: Prepare for National Collegiate Landscape Competition held at Michigan State University, East Lansing, MI, traveling March 17-21, 2026.

XHOR-**BEEKEEPING SCHOOL, 0 CREDIT** 0004

Beekeeping is growing in popularity because of its importance in pollination, honey production, and as a relaxing hobby. This 2 day workshop is intended to prepare new and beginner beekeepers with knowledge, demonstrations, and lists of resources. Topics will include: basic bee biology, proper equipment, handling of bees, hive pest and disease control, feeding, and more. Co-sponsored by the Portland Metro Beekeepers Association.

XHOR-0004- 343576 S 9-3:00 PM 01

TBA

Required: Student Petition. Meets: Saturdays 2/7 & 2/14. Register at https://bit.ly/horteventbrite Fee \$50. Contact Loretta at lorettam@clackamas.edu with questions.

XHOR-PESTICIDE CORE TRAINING/WINTER, 0.40 CEUS C06B

This training qualifies for 4 CORE recertification credits as required by Oregon Department of Agriculture. Fulfills yearly recertification requirement for Private Pesticide license holders, and can be used towards total needed for Public and Commercial license requirements. Our Fall and Winter courses are different, so both will count towards recertification in the same year.

oc XHOR-C06B- 343585 F 1-4:50 PM 01

G. COOKE

Required: Student Petition. Meets: 2/20. Fee: \$40. Register at https://bit.ly/horteventbrite Contact Loretta Mills at lorettam@clackamas.edu with questions.

Human Services

HS-103 ETHICS FOR HUMAN SERVICE WORKERS, 2 CREDITS

Explores the professional issues students will face when in a helping relationship. Introduces the professional codes of ethics associated with the helping professions. Addresses solving ethical dilemmas using professional guidelines. Topics include client rights, confidentiality, professional boundaries, legal issues in helping, competence, and cultural diversity.

ONL LCT HS-103-01 343154

> T BOYLE-\$260.00 \$26.00 \$0.00 \$286 00 **GALESTIANTZ**

USING DIAGNOSTIC CRITERIA IN SUBSTANCE USE HS-104 **TREATMENT, 2 CREDITS**

This course will present an overview of The American Society of Addiction Medicine (ASAM) Criteria and the Diagnostic and Statistical Manual (DSM) criteria related to addiction and substance use. Students will gain familiarity with the use of the ASAM Criteria to enhance the use of multidimensional assessments to develop patient-centered service plans. Students will also gain knowledge about the use of the DSM Manual to guide diagnosis and treatment of Substance Use Disorders.

ONL LCT HS-104-01 343155

\$260.00 \$26.00 \$0.00 TRA \$286.00

COMMUNITY RESOURCES. 3 CREDITS HS-154

Explores local community social service resources. Focuses on local agencies and programs, including services provided, eligibility criteria, mission, and policies of these agencies. Includes instruction in identifying client needs, various referral processes, and historical, political and social trends.

OC HYB LCT HS-154-01 343157 T 1-2:50 PM

\$390.00 \$39.00 \$0.00 \$429.00 C BAKER Meets in-person on five Tuesdays from 1:00pm to 2:50pm.

(1/6, 1/20, 2/3, 2/17, 3/3). HS-154-02 343158

C. BAKER \$390.00 \$39.00 \$0.00 \$429.00

HS-156 **CONDUCTING HUMAN SERVICE INTERVIEWS, 3 CREDITS**

Provides the specific techniques required for entry-level interviewing in human service settings. Addresses issues raised in working with clients from diverse backgrounds.

OC HYB LCT HS-156-01 343159 TH 10-11:50 AM C. BAKER \$390.00 \$39.00 \$0.00 \$429.00

Meets in-person on five Tuesdays from 10:00am to 11:50am. (1/8, 1/22, 2/5, 2/19, 3/5).

HS-211 **INFECTIOUS DISEASES AND HARM REDUCTION, 1** CREDIT

This course will explore the relationship between substance use and infectious diseases, and discuss methods for reducing transmission of these diseases. Diseases will include HIV/AIDS, tuberculosis, hepatitis, and sexually transmitted infections. This course will provide students with techniques for assisting clients with assessing risk, practicing harm reduction, and evaluating treatment options.

ONL LCT HS-211-01 343160

> Y. SMITH \$130.00 \$13.00 \$0.00 \$143.00

HS-216 **GROUP COUNSELING SKILLS, 3 CREDITS**

This course provides students with strategies and skills for group work with a variety of clients. Explores leadership styles and skills, group formation and stages, and the ethics of working with groups. The course will address the knowledge needed to develop, run, and evaluate groups for a variety of human service topics, including substance use treatment. Theories of therapeutic group work will also be discussed.

Prerequisites: HS-156 with a C or better

REM LCT HS-216-01 343161 M 4-5:50 PM T. BOYLE-\$390.00 \$39.00 \$0.00 \$429.00 GALESTIANTZ

Meets remotely on five Mondays from 4:00pm to 5:50pm. (1/12, 1/26, 2/9, 2/23, 3/9).

HS-256 ADVANCED INTERVIEWING SKILLS WITH THEORY, 3 **CREDITS**

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español LCT: Low-Cost Text

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

This course is designed to help human service students further develop and deepen their skills and understanding of interviewing in the human service field. Course will build on skills learned in HS-156, incorporating the use of behavior change theories to guide the helping process.

Prerequisites: HS-156 with a C or better

OC HYB HS-256-01 343163 T 10-11:50 AM
C. BAKER \$390.00 \$39.00 \$0.00 \$429.00
Meets in-person on five Tuesdays from 10:00am to

11:50am. (1/6, 1/20, 2/3, 2/17, 3/3).

HS-270 HUMAN SERVICES PRACTICUM SEMINAR, 2 CREDITS

Focuses on field experience for students in a variety of human service settings, paralleling duties regularly assigned to human service workers. The course offers students a chance to discuss issues faced in the field, and apply human services concepts and theories to their work. Students will reflect on program curriculum and how their knowledge influences the work in the field. May be repeated for up to 6 credits. Required:

Corequisites: GRN-280, HS-280, HS-281, or HS-282

OC HYB HS-270-01 343165 TH 1-2:50 PM

C. BAKER \$260.00 \$26.00 \$0.00 \$286.00 Required: Student Petition. Meets in-person on five Thursdays from 1:00pm to 2:50pm. (1/8, 1/22, 2/5, 2/19, 3/5).

HS-280 HUMAN SERVICES GENERALIST I: CWE/PRACTICUM, 2-6 CREDITS (VAR)

Cooperative work experience. Supervised experience in human services including but not limited to: social service; early childhood care; criminal/juvenile justice; gerontology; and other occupations. May be repeated for up to 12 credits. Required: Student Petition.

Prerequisites: HS-170 Corequisites: HS-270

oc HS-280-01 343167

J. LOVELESS \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

HS-281 HUMAN SERVICES GENERALIST II: CWE/PRACTICUM, 2-6 CREDITS (VAR)

Cooperative work experience level II. Supervised experience in human services including but not limited to: social service; early childhood care; criminal/juvenile justice; gerontology; and other related occupations. May be repeated for up to 12 credits. Required: Student Petition.

Prerequisites: HS-170 Corequisites: HS-270

oc HS-281-01 343170

J. LOVELESS \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

HS-282 HUMAN SERVICES GENERALIST III: CWE/PRACTICUM, 2 -6 CREDITS (VAR)

Cooperative work experience level III. Supervised experience in human services including but not limited to: social service; early childhood care; criminal/juvenile justice; gerontology, and other related occupations. May be repeated for up to 12 credits. Required: Student Petition.

Prerequisites: HS-170. HS-280 or HS-281

Corequisites: HS-270

oc HS-282-01 343173

J. LOVELESS \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

Humanities

HUM-160 FAITH & REASON, 4 CREDITS

An introduction of how personal concepts of faith & reason and institutions of science & religion shape personal intellectual landscapes. Examines classical philosophy, sacred texts, worldviews, modern fiction, poetry, theology, cosmology, and evolutionary biology.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ONL HUM-160-01 343200

J. SHELTON \$520.00 \$52.00 \$0.00 \$572.00

Industrial Maintenance Technology

IMT-111 INTRODUCTION TO RENEWABLE ENERGY AND INDUSTRIAL SYSTEMS, 3 CREDITS

This is a survey course in Renewable Energy and Industrial Technology. Students will gain an understanding of the principles, technologies, and career opportunities in these closely related fields. It will provide a basic understanding of energy and electro-mechanical systems. Students will gain knowledge and skills related to hand and power tools, fasteners, and mechanical systems. Students will acquire a fundamental understanding of the primary energy sources and their impact on the environment. Includes hands-on lab exercises.

oc IMT-111-01 347623 T 2:30 -5:20 PM MW 9-10:30 AM C. CONNORS \$390.00 \$39.00 \$153.75 \$582.75 S. PAVEY

IMT-120 INDUSTRIAL MACHINERY I, 3 CREDITS

This course will introduce students to industrial machinery and power equipment with respect to industrial maintenance. Students will learn the fundamentals of electro-mechanical machinery repair, assembly and disassembly and how to work safely around mechanical equipment and power tools. Topics discussed will include hand and power tools, preventative maintenance, power transmission systems, fasteners and torque.

Recommended Prerequisites: MTH-050 or higher

oc IMT-120-01 343224 TTH 5:30 -8:20 PM M. BABCOCK \$390.00 \$39.00 \$153.75 \$582.75

IMT-230 INTRODUCTION TO HEATING, VENTILATION, AND AIR CONDITIONING, 3 CREDITS

This course will introduce students to commercial and residential Heating, Ventilation, and Air Conditioning (HVAC) systems. Students will study HVAC terminology, heating systems, the refrigeration cycle, low voltage controls, basics of air flow and ventilation as well as safety practices while working on these systems. There will be many opportunities for hands-on experience using trainer devices in a lab setting that will include exercises for troubleshooting, understanding controls, and basic system performance and function.

oc IMT-230-01 343226 MW 9-11:50 AM C. CONNORS \$390.00 \$39.00 \$131.25 \$560.25

Journalism

J-211 MASS MEDIA & SOCIETY, 4 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location

Distance Education Notification:

ONL: Online Only
REM: Remote (w/ scheduled meeting)

REM: Remote (w/ scheduled meetings) **HYB:** In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class **VAR:** Variable credit class

ESPAÑOL: Enseñado en español

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Total Instructor Tuition Fee Crs. Fee Total

This course takes students through a critical study of the production and consumption of mass media, including television, radio, books, film, news, advertising and the internet. Students also examine the economic and social organization of mass media, the growth of new media technologies, and the relationship between media and the public.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

342392 ONL J-211-01

K. DOSS \$520.00 \$52.00 \$10.00 \$582.00

J-215 **COLLEGE NEWS: WRITING & PHOTOGRAPHY, 4** CREDITS

Students work as writers, photographers and editors on The Clackamas Print, the college's student-run news website, newspaper and social media sites. Students study and produce journalism stories and photos. In doing so, they learn different writing styles, photography rules, ethical standards of news gathering and the rights of a free press in a democracy. May be repeated for up to 8 credits.

Recommended Prerequisites: Placement in WR-121Z

J-215-01 342395 MW 1-2:50 PM OC M. JONES \$582.00 \$520.00 \$52.00 \$10.00

J-216 WRITING FOR MEDIA, 4 CREDITS

Introduces students to the fundamentals of writing for various media including journalism, public relations and other communications-related fields. Topics include news gathering, interviewing and media law, with an emphasis on writing for the web, print, broadcast and social media.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC HYB LCT J-216-01 342398 W 10-11:50 AM \$520.00 \$52.00 \$10.00 \$582.00 M JONES

J-225 **INTERMEDIATE COLLEGE NEWS: WRITING & PHOTOGRAPHY, 4 CREDITS**

Intermediate news writing and photojournalism for publication in the student-run Clackamas Print news website, newspaper and social media sites. Generate original story ideas, publish photo essays and complete more complicated interviews on multiple projects in news, arts, sports and opinion writing. Apply media ethics to social, online and print media. May be repeated for up to 8 credits.

Prerequisites: J-215

Recommended Prerequisites: Placement in WR-121Z

342400 MW 1-2:50 PM oc J-225-01 M. JONES \$520.00 \$52.00 \$0.00 \$572.00

INTRODUCTION TO COLLEGE NEWS: DESIGN & J-226 **PRODUCTION, 4 CREDITS**

Students work as designers and media creators for The Clackamas Print, the college's award-winning student newspaper, website and social media sites. Students design the student newspaper, create social media posts and produce related multimedia content using Adobe software and other products. May be repeated for up to 8 credits.

Recommended Prerequisites: Placement in WR-121Z

OC LCT J-226-01 342403 T 1-4:50 PM M. JONES \$582.00 \$520.00 \$52.00 \$10.00

J-227 **INTERMEDIATE COLLEGE NEWS: DESIGN & PRODUCTION, 4 CREDITS**

Offers students intermediate work as designers and media creators for The Clackamas Print, the college's award-winning student newspaper, website and social media sites. Students design the student newspaper, create social media posts and produce related multimedia journalism content using Adobe software and other products. May be repeated for up to 8 credits.

Prerequisites: J-226

OC LCT J-227-01 342405 T 1-4:50 PM M. JONES \$520.00 \$52.00 \$0.00 \$572.00

ADVANCED COLLEGE NEWS: DESIGN & PRODUCTION, J-228

Offers students advanced work as designers and media creators for The Clackamas Print, the college's award-winning student newspaper, website and social media sites. Students design the student newspaper, create social media posts and produce related multimedia journalism content using Adobe software and other products. May be repeated for up to 8 credits.

Prerequisites: J-227

OC LCT J-228-01 342407 T 1-4:50 PM M. JONES \$520.00 \$52.00 \$0.00 \$572.00

ADVANCED COLLEGE NEWS: WRITING & J-235 **PHOTOGRAPHY, 4 CREDITS**

Advanced news writing and photography for publication online, in social media and in the student-run newspaper, The Clackamas Print. Students apply Associated Press style, use journalism ethics and cover a variety of topics and events in words and photos to build their journalism portfolios. May be repeated for up to 8 credits.

Prerequisites: J-225

Recommended Prerequisites: Placement in WR-121Z

J-235-01 342409 MW 1-2:50 PM M. JONES \$520.00 \$52.00 \$0.00 \$572.00

J-280 JOURNALISM/CWE, 2-6 CREDITS

Cooperative work experience. Provides the student with on-the-job experience and training related to journalism. Required: Student Petition.

Corequisites: CWE-281

ONL J-280-01 342411

> \$780.00 \$78.00 \$45.00 \$903.00V M. JONES

Required: Student Petition.

J-280A **PUBLIC RELATIONS/CWE, 2-6 CREDITS**

Cooperative work experience. Provides the student with on-the-job experience and training related to public relations. Required: Student Petition.

Corequisites: CWE-281

342417 J-280A-01

M. JONES \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

Library

INTRODUCTION TO LIBRARY RESEARCH, 1 CREDIT LIB-101

Introduces and strengthens college-level research skills. Students will build an understanding of strategies for finding, evaluating, and using information responsibly. Prepares students for success in researchbased college assignments and real-life research needs.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Course No	Course Title, Cı	redits					Course No Course Title, Credits
	Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total	Section No Instructor Crs Reg. Days (M,T,W,TH.F,S,SU) Time Tuition Fee Crs. Fee Total
ONL LCT	LIB-101-01 TBA Meets: 1/5-3/7	34322 8	3 \$0.00	\$0.00	\$0.00	\$0.00	This class will introduce students to 5-axis CNC milling machines, their programming, and setup procedures. The course will explore limitations, advantages, and configurations of typical 5-axis machines including
ONL LCT	LIB-101-02 TBA Meets: 1/5-3/7		\$0.00	\$0.00	\$0.00	\$0.00	rotation style and set-up orientation. Post processing and virtual machine simulation will also be discussed. Prerequisites: MTT-122
ONL LCT	LIB-101-03 TBA Meets: 1/5-3/7	34323 2 7.	\$ 0.00	\$0.00	\$0.00	\$0.00	oc MTT-253-01 343286 MW 1-3:50 PM C. LETTENMAIER \$390.00 \$39.00 \$153.75 \$582.75

Machine Tool Technology

MTT-111 **MANUAL MACHINING I, 4 CREDITS**

This course is an introduction to machine tool operation and precision measurement. It covers elementary operation of drill presses, bandsaws, lathes, and milling machines. The course includes external threading.

Recommended Prerequisite or Corequisite: MFG-104 and MTH-050

ОС	MTT-111-01	343273 TTH		5-8:50 PM		
	J. TRAVER	\$520.00	\$52.00	\$205.00	\$777.00	

MTT-112 MANUAL MACHINING II, 4 CREDITS

This course is a continuation of machine tool operations. It covers set-up and operation of the vertical milling machine, lathe boring techniques, surface grinding and screw thread nomenclature.

Prerequisites: MTT-111

ос	MTT-112-01	343277 MW		8-11:50	1:50 AM	
	J. TRAVER	\$520.00	\$52.00	\$205.00	\$777.00	

MTT-121 CNC I: SET-UP AND OPERATION, 4 CREDITS

This is the first course in the CNC sequence. Students will learn basic skills including how to properly set-up and operate both CNC milling and turning centers. Students will also learn G & M codes related to basic machine set-up and operation. Designed for persons with little or no previous CNC experience.

ОС	MTT-121-01	343279	TTH		5:30 -9:20	PM
	J. CARLSTON		\$520.00	\$52.00	\$205.00	\$777.00

MTT-122 CNC II: PROGRAMMING AND OPERATION, 4 CREDITS

This is the second course in the CNC sequence. Students will learn G&M-code programming for milling and turning while they build their setup and operation skills. There will also be an introduction to set-up probing, 4-axis mill programming and machining, sub-programming and process documentation.

Prerequisites: MTT-111, MTT-121, MTH-050

ОС	MTT-122-01 3432		ΓTH		8-11:50 AM	
	J. CARLSTON	\$	520.00	\$52.00	\$205.00	\$777.00

MTT-242 CAD/CAM III, 4 CREDITS

This course is the third in the Computer-Aided Machining (CAM) series and will build on the previous course. Students will use CAD/CAM software to produce CNC parts. There will be an emphasis on multiple operations on both CNC milling and turning machines. An introduction to five-axis and mill/turn machining will be included.

Prerequisites: MTT-241

ос	MTT-242-01	343285	MW		8-11:50 AM	
	C. LETTENMA	MER	\$520.00	\$52.00	\$205.00	\$777.00

MTT-253 5-AXIS MACHINING, 3 CREDITS

MTT-268 CAPSTONE MACHINING I, 3 CREDITS

This is the first of the capstone project series and will allow students to demonstrate mastery of core skills that are learned in the machining program including: CNC setup and operation, manual machining, CAM programming, and surface grinding. This class will focus on importing models, process development, and programming components to be run on a CNC machine tool.

Prerequisites: MTT-113, MTT-122, and MTT-141

Recommended Corequisite: MTT-242

ОС	MTT-268-01		343289 MW			5:30 -8:20 PM	
	C LETTENMA	IFR	\$390.00	\$39 00	\$153.75	\$582.75	

Manufacturing Technology

All degree seeking students should arrange to speak to a faculty advisor prior to registering. Call 503-594-3318 for more information, or contact Advising, 503-594-3475.

MFG-103 MACHINING FOR FABRICATION & MAINTENANCE, 3 **CREDITS**

This course is an introduction to metal working for welders, fabricators, maintenance personnel and others who need to understand simple machining principles. Students will be introduced to precision measurement with calipers and micrometers. Combination squares, protractor dividers and scribes will be used for semi-precision layout of workpieces in preparation for machining. The elementary use of the drill press, band saw, milling machine and lathe, as well as hand tools, will be practiced during hands-on labs. A discussion of thread systems will include nomenclature, measurement, tapping, chasing and repair.

Prerequisites: MTH-050 or higher

ос	MFG-103-01	343233	MW		2-4:50 PM	
	J. CARLSTON		\$390.00	\$39.00	\$153.75	\$582.75
ос	MFG-103-02	343236	TTH		2-4:50 PM	
	J. CARLSTON		\$390.00	\$39.00	\$153.75	\$582.75

MFG-104 PRINT READING, 3 CREDITS

Introduction to basic print reading. Students will use the principles of orthographic projection and current industry standards as they apply this knowledge to interpreting manufacturing prints.

OC HYB	MFG-104-01	343239 TTH		1-2:20 PM	
	J. CARLSTON	\$390.00	\$39.00	\$153.75	\$582.75

MFG-107 INDUSTRIAL SAFETY & FIRST AID, 3 CREDITS

This course is designed to provide the student with a basic understanding of safety hazards and first aid in the workplace. Includes eye safety, grinding wheel hazards, electrical/chemical hazards, slips, falls and back injuries. Instruction in first aid, AED and CPR and OSHA 10.

OC HYB	MFG-107-01	343241 F		1-3:50 PM	
	L. HILLYARD	\$390.00	\$39.00	\$153.75	\$582.75

MFG-109 COMPUTER LITERACY FOR TECHNICIANS, 3 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	Course Title, Cr	edits					Course No	Course Title, Cr	redits				
	Section No	Crs Reg.	Days (M,T,V	V,TH.F,S,SU)	Time			Section No	Crs Reg.	Days (M,T,\	N,TH.F,S,SU)	Time	
	Instructor		Tuition	Fee	Crs. Fee	Total		Instructor		Tuition	Fee	Crs. Fee	Total

Presents the uses of computers in business and industry. Subjects covered include computer platforms, basic hardware, data communication and operating systems. Reviews & uses word processing, spreadsheet and database software for the PC.

REM MFG-109-01 343244 F 8-10:50 AM

> A. ARISTIZABAL \$390.00 \$39.00 \$282.19 \$711.19

Online textbook included in section fees.

MFG-110 **MANUFACTURING SPECIAL PROJECTS, 1-9 CREDITS**

Allows students a great deal of latitude in project selection, design & production utilizing manual machine tools, CNC machine tools, CAD/CAM and electrical discharge machines. A solid understanding of all basic machine tools is expected. May be repeated for up to 9 credits. Required: Student Petition.

oc MFG-110-01 347688 TBA

C. CONNORS \$1,170.0 \$117.00 \$461.25 \$1,748.25V

n

Required: Student Petition.

MFG-129 **BASIC ELECTRICITY, 3 CREDITS**

Explores fundamentals of AC and DC electricity. Includes: atomic structure, direct current, alternating current, Ohm's law, series, parallel, and combination circuits, DC circuit theorems, production of DC voltages, magnetic principles, transformers, motors and generators. Includes practical laboratory activities.

oc	MFG-129-01	347622 TTH		9-11:50 AM	
	C. CONNORS	\$390.00	\$39.00	\$153.75	\$582.75

MFG-131 BASIC ELECTRICITY II, 3 CREDITS

Covers application of several theories learned in previous term. Additional topics will include: motors, controls, alignment, pulleys and gears, troubleshooting theory, power distribution and lighting, electrical wiring and schematics.

Recommended Prerequisites: MFG-130 and MTH-050

ОС	MFG-131-01	343251 F	5-7:50 PM		
	B. KARM	\$390.00	\$39.00	\$153.75	\$582.75

MFG-140 PRINCIPLES OF FLUID POWER, 3 CREDITS

Course provides students with instruction in the use of hydraulics and pneumatics in industry, covering the fundamentals of hydraulics, basic components (valves, cylinders, pumps, motors, piping, fluid, fluid conditions, and accessories).

Recommended Prerequisites: MTH-050

OC HYB	MFG-140-01	343255 MW	5:30 -8:20 PM		
	J. TRAVER	\$390.00	\$39.00	\$153.75	\$582.75

MFG-209 **PROGRAMMING & AUTOMATION FOR MANUFACTURING, 3 CREDITS**

A high-level computer literacy course for technologists. The focus of this course is on structured computer programming in the Visual Basic language and the application of programming industrial automation. Basic knowledge of the PC required.

Recommended Prerequisites: MFG-109

MFG-209-01 REM 343258 TTH 3-4:50 PM M. MATTSON \$390.00 \$39.00 \$153.75 \$582 75

MFG-221 MATERIALS SCIENCE, 3 CREDITS

Introduces metallurgy and material science. Extractive and physical metallurgy will be covered. Specific topics include heat treatment, materials analysis, the iron carbon phase diagram, composites, ceramics and industrial plastics.

Recommended Prerequisites: MTH-050

MFG-221-01 343260 TTH 12-2:50 PM M. BABCOCK \$390.00 \$39.00 \$153.75 \$582.75

MFG-264 CMM SET-UP AND OPERATION, 2 CREDITS

In this last course of the precision measurement sequence, students will learn to properly set-up and operate a Coordinate Measuring Machine (CMM) and design measurement plans for optimal metrology output.

Prerequisites: MFG-104

MFG-264-01 343261 TTH 3-4:50 PM M. SNELL \$260.00 \$26.00 \$103.00 \$389.00

MFG-272 MASTERCAM MILL II, 4 CREDITS

Students construct three-dimensional geometric models using solids and surface modeling techniques. Students program models using advanced multi-axis programming techniques utilizing all aspects of roughing and finishing. Projects verified with solids toolpath verification.

Recommended Prerequisites: MFG-271 or prior experience

REM	MFG-272-01	343262 TTH		5:30 -9:20 PM		
	M. SNELL	\$520.00	\$52.00	\$205.00	\$777.00	

MFG-280 MANUFACTURING TECHNOLOGY/CWE, 1-6 CREDITS

Cooperative work experience. Practical experience in the manufacturing trades. Coordination of instruction will occur with industry and the manufacturing and cooperative work departments. May be repeated for up to 6 credits. Required: Student Petition.

Corequisites: CWE-281

ONL MFG-280-01 343264

> \$780.00 \$78.00 \$75.00 C. CONNORS \$933 00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

ONL MFG-280-02

\$780.00 \$78.00 \$75.00 M. MATTSON Required: Student Petition. Corequisite: Take the following

CWE-281-06.

XMFG-**WORK SESSIONS: MAKERSPACE, 0 CREDIT** റററമ

The de Asis Makerspace workshop where creative people from all walks of life can have access to the tools they will need to create prototypes, models and masterpieces. Participants will have the ability to use equipment ranging from basic woodworking machinery and 3-D printing to CNC milling, plasma and laser.

ОС	XMFG-0008- 01	343586	F		5-8:50 PM	
	C. CONNORS Meets: 1/9/26.		\$0.00	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-	343587	F		5-8:50 PM	
	02					
	C. CONNORS		\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 1/16/26	6.				
ОС	XMFG-0008-	343588	F		5-8:50 PM	
	03					
	C. CONNORS Meets: 1/23/26	S.	\$0.00	\$0.00	\$0.00	\$0.00

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

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Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Course No	Course Title, Cre	edits				
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition	,TH.F,S,SU) Fee	Time Crs. Fee	Total
ОС	XMFG-0008- 04	343589	F		5-8:50 PM	
	C. CONNORS Meets: 1/30/26	i.	\$0.00	\$0.00	\$0.00	\$0.00
ос	05 C. CONNORS Meets: 2/6/26.	343590	F		5-8:50 PM	
			\$0.00	\$0.00	\$0.00	\$0.00
ос		343591	F		5-8:50 PM	
			\$0.00	\$0.00	\$0.00	\$0.00
ос	oc XMFG-0008- 07 C. CONNORS Meets: 2/20/26		F		5-8:50 PM	
			\$0.00	\$0.00	\$0.00	\$0.00
ос	XMFG-0008- 08	343593	F		5-8:50 PM	
	C. CONNORS Meets: 2/27/26		\$0.00	\$0.00	\$0.00	\$0.00
ос	XMFG-0008- 09	343594	F		5-8:50 PM	
	C. CONNORS Meets: 3/6/26.		\$0.00	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-	343595	F		5-8:50 PM	
	10 C. CONNORS Meets: 3/13/26	i.	\$0.00	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-	343596	F		5-8:50 PM	
	11 C. CONNORS Meets: 3/20/26	i.	\$0.00	\$0.00	\$0.00	\$0.00

Mathematics

MTH-010 FUNDAMENTALS OF ARITHMETIC I, 4 CREDITS

This first course in arithmetic reviews operations on whole numbers, basic fractions, decimals, measurement, and basic geometry.

OC NCT	MTH-010-01	343201 MW	MW 1-2:50 PM		PM
	J. NIELSON	\$520.00	\$52.00	\$20.00	\$592.00

MTH-020 FUNDAMENTALS OF ARITHMETIC II, 4 CREDITS

This second course in arithmetic is a prerequisite for the three math pathways. It reviews mathematical foundations such as fractions, percents, geometry, and effective study skills.

Prerequisites: MTH-010 with a C or better, or placement in MTH-020

ONL NCT MTH-020-02 343207

S. HATSWELL \$520.00 \$52.00 \$20.00 \$592.00

Meets: 1/19-3/21.

FUNDAMENTOS DE ARITMÉTICA II, 4 CREDITS МТН-020ES

Este segundo curso de aritmética es un requisito previo para las tres vías de matemáticas. Revisa fundamentos matemáticos como fracciones, porcentajes, geometría y habilidades de estudio efectivas.

Prerequisites: MTH-010 con una C o mejor, o ubicación en MTH-020

REMICT MTH-020ES- 347652 S

ESPAÑOL 01

A. ARISTIZABAL \$520.00 \$52.00 \$20.00 \$592.00

Requerido: petición del estudiante.

MTH-050 TECHNICAL MATHEMATICS I, 4 CREDITS

Campus Locations: HAR: Harmony Community Campus OC: Oregon City Campus

WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

department first class VAR: Variable credit class

Other Coding Translations:

TBA: To be arranged: contact

Designed for career-technical students. Topics focus on critical thinking, problem solving, and mathematical communication using applications of arithmetic, measurement, geometry, and statistics and probability.

Tuition

Days (M,T,W,TH.F,S,SU)

Fee

Time Crs. Fee

Total

Crs Reg.

Prerequisites: MTH-020 with a C or better, or placement in MTH-050 or higher

OC LCT MTH-050-01 343209 TTH 10-11:50 AM A. ARISTIZABAL \$520.00 \$52.00 \$20.00 \$592.00 OC LCT MTH-050-02 343213 MW 3-4:50 PM \$592.00 A. ARISTIZABAL \$520.00 \$52.00 \$20.00 OC LCT MTH-050-03 343216 TTH 12:30 -2:20 PM M. PARTNOF \$520.00 \$52.00 \$20.00 \$592.00 Required: Student Petition.

MATEMÁTICAS TÉCNICAS I, 4 CREDITS мтн-050FS

Este curso está diseñado para estudiantes de carreras técnicas. Los temas se centran en el pensamiento crítico, la resolución de problemas y la comunicación matemática utilizando aplicaciones de aritmética, mediciones, geometría, estadística y probabilidades.

Prerequisites: MTH-020 con una C o meior, o ubicación en MTH-050 o superior

REM NCT	MTH-050ES-	343218	F		5-8:50 PM	
ESPAÑOL	01					
	A. ARISTIZAB	AL	\$520.00	\$52.00	\$20.00	\$592.00

MTH-060 ALGEBRA I, 4 CREDITS

Course No Course Title, Credits Section No

Instructor

An introduction to the algebra sequence. This class starts from foundational skills of arithmetic to build a rich understanding of linear models. Variables are introduced to represent changing quantities in applications and are used in tables, graphs, expressions, equations, inequalities, and systems. Multiple algebraic representations and strategies are used both with and without technology.

Prerequisites: MTH-020 with a C or better, or placement in MTH-060

HAR NCT	MTH-060-01	343220	MW		9-10:50 A	Л
	B. WEBBER		\$520.00	\$52.00	\$20.00	\$592.00
HAR NCT	MTH-060-02	347562	TTH		6-7:50 PM	
	B. WEBBER		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-060-03	347563	TTH		10-11:50 A	M
	E. KELLY		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-060-04	347564	MW		1-2:50 PM	
	A. ARISTIZAE	BAL	\$520.00	\$52.00	\$20.00	\$592.00

MTH-065 ALGEBRA II, 4 CREDITS

A second term in an algebra sequence, this course bridges foundational algebra skills to formal analysis of algebraic models. Linear and nonlinear applications, including radical, absolute value, squaring, and polynomial relations are modeled graphically, numerically, and symbolically. Expressions, equations, and inequalities are utilized throughout. Multiple algebraic representations and strategies are used both with and without technology.

Prerequisites: MTH-060 with a C or better, or placement in MTH-065

HAR NCT	MTH-065-01	343238	MW		9-10:50 AM	Л
	B. WEBBER		\$520.00	\$52.00	\$20.00	\$592.00
HAR NCT	MTH-065-02	343243	TTH		6-7:50 PM	
	B. WEBBER		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-065-03	347565	TTH		10-11:50 A	M
	A. HALL		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-065-04	347566	TTH		1-2:50 PM	
	A. HALL		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-065-05	347567	MW		10-11:50 A	M
	J. KUOHA		\$520.00	\$52.00	\$20.00	\$592.00

Course No Course Title, Credits Course No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Crs. Fee Total

MTH-080 TECHNICAL MATHEMATICS II, 3 CREDITS

This course is the second in a sequence designed for career-technical students. The topics focus on critical thinking, problem solving, and mathematical communication using applications in arithmetic, algebra, geometry, and trigonometry.

Prerequisites: MTH-050 with a C or better, or placement in MTH-080

OC NCT	MTH-080-01	343254 MW		3-4:20 P	M
	B. WEBBER	\$390.00	\$39.00	\$20.00	\$449.00

MTH-082C WASTEWATER MATH II, 1 CREDIT

Quantitative component to understanding analysis and operations of secondary wastewater systems. Flow rate, chemical dosage, treatment plant loading, treatment process efficiency, unit conversion and process control.

Prerequisites: MTH-082A and MTH-082B

Corequisites: WET-120

ОС	MTH-082C-01	343269 M		5-5:50 PM	
	M. LAFORCE	\$130.00	\$13.00	\$10.00	\$153.00
	Remote options	s available with th	nis sectio	n	

MTH-082D WATERWORKS MATH II, 1 CREDIT

Problem solving for waterworks applications. Introduction to contact-time (CT) calculations, how to determine chemical concentrations, the pounds formula, and basic hydraulics.

Prerequisites: MTH-082A and MTH-082B

Corequisites: WET-121

ОС	MTH-082D-01	343271 T		5-5:50 PM	
	J. NURMI	\$130.00	\$13.00	\$10.00	\$153.00
	Remote option	s available with th	nis sectio	n.	

MTH-095 ALGEBRA III, 4 CREDITS

This course focuses on foundational skills and ways of thinking that prepare a student for future STEM coursework. Linear, quadratic, and rational relations are approached through applications with a strong emphasis on modeling as a problem-solving technique. Multiple algebraic representations and strategies are used both with and without technology.

Prerequisites: MTH-065 with a C or better, or placement in MTH-095

OC NCT	MTH-095-01	343259	MW		10-11:50 A	M
	J. HEVEL		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-095-02	343263	TTH		10-11:50 A	M
	K. AMREIN		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-095-03	343265	TTH		1-2:50 PM	
	K. AMREIN		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-095-04	343266	MW		3-4:50 PM	
	J. KUOHA		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-095-05	347568	TTH		1-2:50 PM	
	M. CHASE		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-095-06	347569	TTH		8-9:50 AM	
	M. CHASE		\$520.00	\$52.00	\$20.00	\$592.00
OC HYB NCT	MTH-095-10	343267	TBA			
	S. PRUYN		\$520.00	\$52.00	\$20.00	\$592.00

This is an online course that meets in-person for orientation and testing dates only. Mandatory Meetings: First Week Orientation (1 hour): Wednesday, 1/7 at 6:00 pm or Thursday, 1/8 at 1:00 pm. Week 3 Exam (2 hours): Wednesday, 1/21 at 6:00 pm or Thursday, 1/22 at 1:00 pm. Week 7 Exam (2 hours): Wednesday, 2/18 at 6:00 pm or Thursday, 2/19 at 1:00 pm. Final Exam (2 hours): Wednesday, 3/18 at 6:00 pm or Thursday, 3/19 at 1:00 pm.

Campus Locations: Distance Education Notification:

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

OC: Oregon City Campus

ONL: Online Only

REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

MTH-098 COLLEGE MATH FOUNDATIONS, 4 CREDITS

In our society, we see and hear about important topics and trends that involve numbers. In this class, participants work to understand and communicate what these numbers mean. Students will explore ways they interact with quantitative information in daily life, learn to effectively interpret and communicate quantitative information, and apply their own knowledge and experience to quantitative reasoning. Learning happens in small student groups, with technology, and through reflective writing. The class is project-based, meaning that students complete projects to demonstrate what they have learned.

Prerequisites: MTH-020 with a C or better, or placement in MTH-050, MTH-060, or MTH-098

OC HYB	MTH-098-01	343272 MW	•	10-11:20 A	M
	M. PRICE	\$52	0.00 \$52.00	\$20.00	\$592.00
OC HYB NCT	MTH-098-02	343276 TTH	ı	1-2:20 PM	
	K. PHILLIPS	\$52	0.00 \$52.00	\$20.00	\$592.00
OC HYB NCT	MTH-098-03	347570 TTH	ł	10-11:20 A	M
	M. PRICE	* -	0.00 \$52.00	\$20.00	\$592.00
ONL NCT	MTH-098-10 F KELLY	343280 \$52	0.00 \$52.00	\$20.00	\$592.00

MTH-105Z MATH IN SOCIETY, 4 CREDITS

An exploration of present-day applications of mathematics focused on developing numeracy. Major topics include quantitative reasoning and problem-solving strategies, probability and statistics, and financial mathematics; these topics are to be weighted approximately equally. This course emphasizes mathematical literacy and communication, relevant everyday applications, and the appropriate use of current technology.

Prerequisites: MTH-095 or MTH-098 with a C or better, or placement in MTH-111Z

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC HYB NCT	MTH-105Z-01 34328	2 MW		10-11:20 A	AM
	S. VALDES	\$520.00	\$52.00	\$20.00	\$592.00
OC HYB NCT	MTH-105Z-02 34328	7 MW		1-2:20 PM	
	S. VALDES	\$520.00	\$52.00	\$20.00	\$592.00
OC HYB NCT	MTH-105Z-03 34328	в ттн		1-2:20 PM	
	J. KUOHA	\$520.00	\$52.00	\$20.00	\$592.00
ONL NCT	MTH-105Z-10 34329	0			
	M. YANNOTTA	\$520.00	\$52.00	\$20.00	\$592.00
ONL NCT	MTH-105Z-11 34329	1			
	M. YANNOTTA	\$520.00	\$52.00	\$20.00	\$592.00
ONL NCT	MTH-105Z-12 34329	2			
	M. JOSI	\$520.00	\$52.00	\$20.00	\$592.00

MTH-108 DATA SCIENCE EXPLORATIONS, 4 CREDITS

In this survey course, students engage with concepts present in multiple fields devoted to understanding and using data. Technology is used throughout as a powerful and necessary tool for robust data exploration and analysis. Students should emerge from the course with a deeper knowledge of the crucial role of data in society and appropriate methodologies for data organization, visualization, analysis, and reporting. Emphasis is placed on preparing students for ethical and informed engagement with data both in future courses and life beyond academia

Prerequisites: MTH-095 or higher with a C or better or placement into MTH-105Z or higher

OC NCT	MTH-108-01	347571 MW	1-2:50 PM		
	K. MERCER	\$520.00	\$52.00	\$20.00	\$592.00

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

Course No Course Title, Credits				Course No	Course Title, Credits								
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,\ Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
					OC NCT	MTH-212-01	343318	TTH		1-2:50 PM			
MTH-111Z	MTH-111Z PRECALCULUS I: FUNCTIONS, 4 CREDITS						S. VALDES		\$520.00	\$52.00	\$20.00	\$592.00	

A course primarily designed for students preparing for trigonometry or calculus. This course focuses on functions and their properties, including polynomial, rational, exponential, logarithmic, piecewise-defined, and inverse functions. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology.

Prerequisites: MTH-095 with a C or better, or placement in MTH-111Z Recommended Prerequisites: WRD-098 or placement in WR-121Z

HAR NCT	MTH-111Z-01	343294	ттн		6-7:50 PM	
	M. HUNTER			\$52.00	\$20.00	\$592.00
OC NCT	MTH-111Z-02	345561	TTH		10-11:50 A	M
	K. PHILLIPS	\$	520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-111Z-03	343298	TTH		1-2:50 PM	
	B. WEBBER	\$	520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-111Z-04	343300	TTH		3-4:50 PM	
	K. PHILLIPS	\$	520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-111Z-05	347572 I	MW		10-11:50 A	M
	S. PRUYN	\$	520.00	\$52.00	\$20.00	\$592.00
OC HYB NCT	MTH-111Z-10	343305	TBA			
	F. CARTER	\$	520.00	\$52.00	\$20.00	\$592.00
	This is an onli	ne course	that med	ets in-pe	rson for orie	ntation
	and testing da	tes only. N	Mandato	ry Meetir	ngs: First We	eek
	Orientation (1					
	Thursday, 1/8					
	Wednesday, 1					
	Week 7 Exam					n or
	Thursday, 2/19			,	,	
	Wednesday, 3	/18 at 6:0	0 pm or	Thursday	y, 3/19 at 1:0	00 pm.

MTH-112Z PRECALCULUS II: TRIGONOMETRY, 4 CREDITS

A course primarily designed for students preparing for calculus and related disciplines. This course explores trigonometric functions and their applications as well as the language and measurement of angles, triangles, circles, and vectors. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology.

Prerequisites: MTH-111Z with a C or better, or placement in MTH-112Z Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	MTH-112Z-01	343309 TTH		10-11:50	AΜ
	F. CARTER	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-112Z-02	343312 TTH		1-2:50 PM	
	E. MEUSER	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-112Z-03	345562 MW		10-11:50	AΜ
OC NCT	MTH-112Z-03 F. CARTER	345562 MW \$520.00	\$52.00		AM \$592.00
OC NCT		\$520.00	\$52.00		\$592.00

MTH-212 FUNDAMENTALS OF ELEMENTARY MATH II, 4 CREDITS

A course designed to teach students to understand the basic concepts of mathematics and provide ideas for teaching these concepts to elementary school children. Focuses on modeling and working with integers, fractions, decimals, ratios, percents, and the real numbers. Introduces elementary algebra and statistics. MTH-212 and MTH-213 can be taken in any order.

Prerequisites: MTH-211

Recommended Prerequisites: WRD-098 or placement in WR-121Z

MTH-231 **ELEMENTS OF DISCRETE MATHEMATICS, 4 CREDITS**

This section will have three in-person, proctored exams.

Students will be introduced to discrete structures and techniques for computing. The course, which is the first in the two-term sequence, aims to convey the skills in discrete mathematics that are used in the study and practice of computer science. Topics include: Sets; Graphs and Trees; Functions: properties, recursive definitions, solving recurrences; Relations: properties, equivalence, partial order; Proof techniques: inductive proof; Counting techniques and discrete probability.

Prerequisites: MTH-251Z

ос	MTH-231-01	342468 TTH		3-4:50 PM	
	J. KUOHA	\$520.00	\$52.00	\$20.00	\$592.00

MTH-244 STATISTICS II, 4 CREDITS

The tools learned in Statistics I are purposed for inference of data via the use of hypothesis tests and confidence intervals for both one and two populations, linear regression, and chi-square tests.

Prerequisites: STAT-243Z with a C or better

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	MTH-244-01	343320 MW	-	10-11:5	0-11:50 AM	
	T. BIEBER	\$520.00	\$52.00	\$20.00	\$592.00	

MTH-251Z DIFFERENTIAL CALCULUS, 4 CREDITS

This course explores limits, continuity, derivatives, and their applications for real-valued functions of a single variable. These topics will be explored graphically, numerically, and symbolically in real-life applications. This course emphasizes abstraction, problem-solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of technology.

Prerequisites: MTH-112Z with a C or better, or placement in MTH-251Z Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	MTH-251Z-01	343323 MV	W		10-11:50 A	M
	E. KELLY	\$5	20.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-251Z-02	343325 TT	ТН		8-9:50 AM	
	M. PRICE	\$5	20.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-251Z-03	345564 M\	W		3-4:50 PM	
	M. PRICE	\$5	20.00	\$52.00	\$20.00	\$592.00

MTH-252Z INTEGRAL CALCULUS, 4 CREDITS

This course explores Riemann sums, definite integrals, and indefinite integrals for real-valued functions of a single variable. These topics will be explored graphically, numerically, and symbolically in real-life applications. This course emphasizes abstraction, problem-solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of technology.

Prerequisites: MTH-251Z with a C or better

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	MTH-252Z-01	343327 TTH		10-11:50 A	AM
	M. PARTNOF	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-252Z-02	343330 MW		3-4:50 PM	
	M. PARTNOF	\$520.00	\$52.00	\$20.00	\$592.00

MTH-253Z CALCULUS: SEQUENCES AND SERIES, 4 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class

Course No Course Title, Credits Course No Course Title, Credits Days (M,T,W,TH.F,S,SU) Section No Crs Reg. Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Crs. Fee Total

This course explores real-valued sequences and series, including power and Taylor series. Topics include convergence and divergence tests and applications. These topics will be explored graphically, numerically, and symbolically. This course emphasizes abstraction, problem-solving, reasoning, communication, connections with other disciplines, and the appropriate use of technology.

Prerequisites: MTH-252Z with a C or better

Recommended Prerequisites: WRD-098 or placement in WR-121Z

MTH-253Z-01 343331 MW 3-4:50 PM S PRUYN \$520.00 \$52.00 \$20.00 \$592.00

MTH-256 **DIFFERENTIAL EQUATIONS, 4 CREDITS**

This course is an introduction to the study of first-order differential equations, first-order systems of differential equations, linear systems of differential equations, and applications of these topics.

Prerequisites: MTH-252Z with a C or better

ос нув MTH-256-01 343335 W 9-11:50 AM NCT A HALL \$520.00 \$52.00 \$20.00 \$592 00

MTH-275 A BRIDGE TO UNIVERSITY MATHEMATICS, 3 CREDITS

This is a bridge course designed to help students transition from computation-based mathematics to the more proof-based curriculum typical of junior and senior collegiate-level mathematics courses. Students will construct and validate proofs, explore the nature of mathematics, and navigate some of the systems and conventions used within the mathematics community. May be repeated for up to 6 credits.

Prerequisites: MTH-251Z

REM NCT MTH-275-01 343338 S 1-2:50 PM \$0.00 M. YANNOTTA \$0.00 \$0.00 \$0.00 Required: Student Petition.

Medical Assistant

For more information, contact Health Sciences at healthsciences@clackamas.edu

MA-156 **PHLEBOTOMY I, 1 CREDIT**

This course is designed to introduce students to the fundamental skills required for phlebotomy as a medical assistant. Students will become familiar with phlebotomy equipment and learn about basic blood collection procedures. The course will focus on the basic skills needed for patient interactions, documentation, and various phlebotomy techniques.

Prerequisites: MA-150, MA-152, MA-152L, MA-154, and MA-158 Corequisites: MA-156L, MA-160, MA-162, MA-162L, MA-164, MA-164L, and MA-168

Required: Student must be enrolled in current Medical Assistant cohort

ONI MA-156-01 342212

> E. ZUNIGA \$130.00 \$13.00 \$0.00 \$143.00

MA-156L PHLEBOTOMY I LAB. 1 CREDIT

This lab is designed to apply the hands-on skills that were introduced to students in the lecture class. This lab is designed to introduce students to the fundamental skills required for phlebotomy as a medical assistant. Students will become familiar with phlebotomy equipment and learn about basic blood collection procedures. The course will focus on the basic skills needed for patient interactions, documentation, capillary punctures and various phlebotomy techniques.

Prerequisites: MA-150, MA-152, MA-152L, MA-154, and MA-158 Corequisites: MA-156, MA-160, MA-162, MA-162L, MA-164, MA-164L, and MA-168

Required: Student must be enrolled in current Medical Assistant cohort

MA-156L-01 342213 TH 9-12:00 PM J. ALLISON \$130.00 \$13.00 \$100.00 \$243.00 E. ZUNIGA HAR MA-156L-02 342214 TH 1-4:00 PM J. ALLISON \$130.00 \$13.00 \$100.00 \$243.00 E. ZUNIGA

MA-160 **INSURANCE & HEALTH INFORMATION MANAGEMENT, 3 CREDITS**

This course introduces medical assisting students to practical applications for billing medical insurance both manually and electronically. The course is designed to instruct the student in all phases of billing and insurance procedures and entry-level Electronic Health Record software for the management of medical records. The students are also introduced to basic ICD-10 Diagnosis and Procedural coding skills. This course is required for medical assistant students. This course does not meet the requirements for Insurance Coder certification.

Prerequisites: MA-150, MA-152, MA-152L, MA-154, and MA-158 Corequisites: MA-156, MA-156L, MA-162, MA-162L, MA-164, MA-164L. and MA-168

Required: Student must be enrolled in current Medical Assistant cohort

ONL MA-160-01 342215 S. DAVENPORT \$390.00 \$39.00 \$55.00 \$484.00

MA-162 **EXAMINATION ROOM TECHNIQUES II, 3 CREDITS**

This course builds upon the foundational skills introduced in Examination Room Techniques I. The course will focus on advanced medical assisting skills such as medication administration, patient care interactions, immunization, special exam procedures, EKGs, and assisting providers. This course will incorporate specialty clinics and advanced procedures.

Prerequisites: MA-150, MA-152, MA-152L, MA-154, and MA-158 Corequisites: MA-156, MA-156L, MA-160, MA-162L, MA-164, MA-164L,

and MA-168

Required: Student must be enrolled in current Medical Assistant cohort

MA-162-01 342216 S. PARKER \$390.00 \$39.00 \$145.00 \$574.00

MA-162L EXAMINATION ROOM TECHNIQUES LAB II, 1 CREDIT

This lab is designed to apply the hands-on skills that were introduced to students in the lecture class. This lab will cover hands-on skills required for medical assisting in an exam room by adding advanced procedures to the basic rooming techniques. The lab will include advanced medical assisting skills such as medication administration, patient care interactions, immunization, special exam procedures, EKGs, and assisting providers. This lab will incorporate specialty clinics and advanced procedures.

Prerequisites: MA-150, MA-152, MA-152L, MA-154, and MA-158 Corequisites: MA-156, MA-156L, MA-160, MA-162, MA-164, MA-164L, and MA-168

Required: Student must be enrolled in current Medical Assistant cohort

HAR HYB MA-162L-01 342217 T 9-12:00 PM S. DAVENPORT \$130.00 \$13.00 \$160.00 \$303.00 S. PARKER MA-162L-02 HAR HYB 342218 TH 9-12:00 PM

S. DAVENPORT \$130.00 \$13.00 \$160.00 \$303.00 S PARKER

NCT: No-Cost Text

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español LCT: Low-Cost Text

Course No Course Title, Credits Course No Course Title, Credits Crs Reg. Section No Section No Days (M,T,W,TH.F,S,SU) Time Crs Reg. Days (M,T,W,TH.F,S,SU) Time Fee Instructor Tuition Crs. Fee Total Instructor Tuition Crs. Fee Total MBC-120-01 342224 W RFM 6-9:00 PM

MA-164 **CLINICAL LAB PROCEDURES I, 1 CREDIT**

This theory course is designed to instill a basic understanding of common laboratory terminology and procedures used in a general medical office laboratory to aid the physician in the diagnosis and treatment of disease. Laboratory safety, the prevention of bloodborne disease transmission and scope of practice will be emphasized. First course in the Clinical Laboratory Procedures series.

Prerequisites: MA-150, MA-152, MA-152L, MA-154, and MA-158 Corequisites: MA-156, MA-156L, MA-160, MA-162, MA-162L, MA-164L, and MA-168

Required: Student must be enrolled in current Medical Assistant cohort

ONL MA-164-01 342219

> S. DAVENPORT \$130.00 \$13.00 \$40.00 \$183.00

MA-164L CLINICAL LAB PROCEDURES I LAB, 1 CREDIT

This laboratory course is designed to instill a basic understanding of common laboratory terminology and procedures used in a general medical office laboratory to aid the physician in the diagnosis and treatment of disease. Laboratory safety, the prevention of bloodborne disease transmission and scope of practice will be emphasized. This is the first lab course in the Clinical Laboratory Procedures series.

Prerequisites: MA-150, MA-152, MA-152L, MA-154, and MA-158 Corequisites: MA-156, MA-156L, MA-160, MA-162, MA-162L, MA-164, and MA-168

Required: Student must be enrolled in current Medical Assistant cohort

HAR	MA-164L-01 3422	220 T		1-4:00 PM	1
	S. DAVENPORT	\$130.00	\$13.00	\$170.00	\$313.00
HAR	MA-164L-02 3422	221 TH		1-4:00 PN	1
	S DAVENPORT	\$130.00	\$13.00	\$170.00	\$313.00

MA-168 **SEMINAR II, 2 CREDITS**

This course will expand on professionalism within the healthcare setting and students will interview and obtain clinical practicum placement.

Prerequisites: MA-150, MA-152, MA-152L, MA-154, and MA-158 Corequisites: MA-156, MA-156L, MA-160, MA-162, MA-162L, MA-164, and MA-164L

Required: Student must be enrolled in current Medical Assistant cohort

HΔR MA-168-01 342222 W 9-11:00 AM S. PARKER \$260.00 \$26.00 \$0.00 \$286.00

Medical Billing and Coding

MBC-115 INSURANCE BILLING AND REIMBURSEMENT I, 4

First course of a two part series. This course introduces the student to health insurance, insurance billing and reimbursement. Students will study the health insurance industry, legal and regulatory issues, and differences in reimbursement methods. The principles of medical billing will be covered, including proper claim form preparation.

Required: Medical Billing and Coding students only

REM	MBC-115-01	342223 M		6-9:00 PI	Л
	C GARNER	\$520.00	\$52.00	\$200.00	\$772 00

MBC-120 INTRODUCTION TO MEDICAL CODING, 3 CREDITS

This course will explore the fundamental medical coding skills for professional services, such as physicians, mid-level providers, etc. Students will investigate the fundamentals of Diagnostic and Procedural medical coding.

Required: Medical Billing and Coding students only

LAW AND ETHICS FOR HEALTHCARE PROFESSIONS, 3 **CREDITS**

This course introduces legislation affecting healthcare, along with a review of issues such as professional liability, informed consent, privacy and security laws, electronic health records and workplace legalities. A variety of ethical issues in health care are explored, as well as an examination of future trends in health care.

Required: Medical Billing and Coding students only

MBC-135-01 342225

C. GARNER

C. GARNER \$390.00 \$39.00 \$81.80 \$510.80

\$390.00 \$39.00 \$200.00

\$629.00

Online textbook included in section fees

Music

MUP-102 **WIND ENSEMBLE, 1 CREDIT**

For non-majors and music majors. Introduction and study of traditional and contemporary band literature. This course is taken each term in one's first year of a two-year course of study that includes performance, study of common styles and practices of historically and culturally significant composers/arrangers, and study of historical issues related to the development and performance of band literature. Provides a thorough groundwork in the fundamental ideas, techniques, and practices of band music and ensemble performance. No audition required. May be repeated for up to 3 credits.

Required: Completion of high school or high school performance level. Ability to read music and play a band instrument

MUP-102-01 342260 TTH 3-4:30 PM L. CAMPBELL \$130.00 \$13.00 \$0.00 \$143.00

MUP-104 JAZZ COMBO, 1 CREDIT

Instrumental performing group concentrating on rock, pop, and contemporary styles in the small to medium-sized group setting. No audition required. May be repeated for up to 8 credits.

Recommended Prerequisites: MUP-105

342261 M OC NCT MUP-104-01 12-12:50 PM C. DOGGETT \$130.00 \$13.00 \$0.00 \$143.00

MUP-105 JAZZ ENSEMBLE, 1 CREDIT

For non-majors and music majors. Introduction and study of common 'big-band' and small-group jazz styles. This course is taken each term in one's first year of a two-year course of study that includes performance, improvisation, musical arranging and writing, study of common styles and practices of historically and culturally significant jazz artists, and study of historical issues related to the development and performance of jazz music. May be repeated for up to 3 credits.

Recommended Prerequisites: MUP-102

OC NCT MUP-105-01 342262 MW 3-4:30 PM L. CAMPBELL \$130.00 \$13.00 \$0.00 \$143.00

MUP-122 VOCAL ENSEMBLE, 2 CREDITS

An introductory performance ensemble open to all students wishing to sing in a choral ensemble. Designed for non-majors and majors who need preparation for MUP-125.

Recommended: A desire to sing in a large and fun ensemble. An interest in exploring the roots of American music

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC LCT	MUP-122-01	342263	TTH		3-4:50 P	M
	K. HOLLINGS	WORTH	\$260.00	\$26.00	\$52.00	\$338.00
	Vocal placeme	ent requi	red for pri	ivate less	ons and v	/ocal
	ensembles. N	ew stude	nts atten	d in Roor	n N114 or	า 1/5 from
	3-5 pm to dem	nonstrate	vocal rai	nge. Con	tact	
	kathleen holling	nasworth	@clackar	nas.edu	with auest	tions.

MUP-125 ADVANCED VOCAL ENSEMBLE, 2 CREDITS

Course No Course Title, Credits

An advanced vocal performance ensemble open by audition only. Open to majors and students with vocal experience, sight-reading ability. AVE will travel to perform and a minimum three-term commitment is highly encouraged.

OC NCT	MUP-125-01 3	42265 MW		3-4:50 PN	Л
	K. HOLLINGSW	ORTH \$260.00	\$26.00	\$52.00	\$338.00
	Vocal placemen	t required for pri	vate less	ons and vo	ocal
	ensembles. New	students attend	d in Roon	n N114 on	1/5 from
	3-5 pm to demo	nstrate vocal rar	nge. Cont	tact	
	kathleen hollings	sworth@clackan	nas.edu v	with auestic	ons.

MUP-141 COLLEGE ORCHESTRA, 1 CREDIT

Performance and study of orchestral literature. College students may earn credit for playing in one of several approved orchestral groups. Minimum of one performance per term. May be repeated for up to 8 credits. Required: Student Petition.

OC NCT	MUP-141-01	342266 TBA

L. CAMPBELL \$130.00 \$13.00 \$0.00 \$143.00 Required: Student Petition.

MUP-150 CONTEMPORARY MUSIC ENSEMBLE, 2 CREDITS

This course is a performance ensemble open to all musicians who wish to play pop, rock, popular music. May be repeated for up to 12 credits.

Required: Pass proficiency audition

OC NCT	MUP-150-01	342267 MW		1-2:50 P	M
	K. DEITZ	\$260.00	\$26.00	\$50.00	\$336.0
	K. HOLLINGS	SWORTH			
	Vocal placem	ent required for pr	ivate less	sons and v	ocal
	ensembles. N	lew students atten	d in Rooi	n N114 or	1/5 from
	3-5 pm to der	nonstrate vocal ra	nge. Con	tact	
	kathleen.holli	ngsworth@clackai	mas.edu	with quest	ions.

MUP-158 CHAMBER ENSEMBLE, 1 CREDIT

Rehearsal and performance of traditional vocal and instrumental chamber music (one musician per part). Includes concerts and coaching by area professionals. Highly recommended for music majors. First of a two-part series. May be repeated for up to 8 credits.

OC NCT	MUP-158-01	342269	TH		1-2:50 PM	
	D. TUTMARK		\$130.00	\$13.00	\$85.00	\$228.00
	Guitar Ensem	ble.				
OC NCT	MUP-158-02	342273	TBA			
	G. HARRIS		\$130.00	\$13.00	\$85.00	\$228.00
	Saxophone Q	uartet.				
OC NCT	MUP-158-03	342274	TBA			
	TBA		\$130.00	\$13.00	\$85.00	\$228.00
	Brass Quintet					
OC NCT	MUP-158-04	342275	TBA			
	TBA		\$130.00	\$13.00	\$85.00	\$228.00
	Woodwind Qu	ıintet.				
OC NCT	MUP-158-05	342276	TBA			
	Y. MIYAMA		\$130.00	\$13.00	\$85.00	\$228.00
	Piano Chamb	er Ensen	nble.			

WIND ENSEMBLE, 1 CREDIT MUP-202

Course No Course Title, Credits

Instructor

Section No.

For non-majors and music majors. Introduction and study of traditional and contemporary band literature. This is the second year of a two-year course of study that includes performance, study of common styles and practices of historically and culturally significant composers/arrangers, and study of historical issues related to the development and performance of band literature. Provides a thorough groundwork in the fundamental ideas, techniques, and practices of band music and ensemble performance. No audition required. May be repeated for up to 6 credits.

Davs (M.T.W.TH.F.S.SU)

Tuition

Fee

Time

Crs. Fee

Total

Crs Reg.

Required: Completion of high school or high school performance level. Ability to read music and play a band instrument

Prerequisites: MUP-102 (3 credits)

ос ист MUP-202-01 342345 TTH 3-4:30 PM L. CAMPBELL \$130.00 \$13.00 \$0.00 \$143.00

MUP-204 **JAZZ COMBO, 1 CREDIT**

Instrumental performing group concentrating on rock, pop, and contemporary styles in the small to medium-sized group setting. No audition required. May be repeated for up to 8 credits.

Prerequisites: MUP-104 (3 credits) Recommended Prerequisites: MUP-105

12-12:50 PM OC NCT MUP-204-01 342347 M \$130.00 \$13.00 \$0.00 C. DOGGETT \$143.00

MUP-205 JAZZ ENSEMBLE, 1 CREDIT

For non-majors and music majors. Introduction and study of common big-band and small-group jazz styles. This is the second year of a twoyear course of study that includes performance, improvisation, musical arranging and writing, study of common styles and practices of historically and culturally significant jazz artists, and study of historical issues related to the development and performance of jazz music. May be repeated for up to 3 credits.

Prerequisites: MUP-105 (3 credits)

OC NCT MUP-205-01 342350 MW 3-4:30 PM L. CAMPBELL \$130.00 \$13.00 \$0.00 \$143.00

MUP-222 VOCAL ENSEMBLE, 2 CREDITS

Second year beginning vocal ensemble open to all students wishing to sing in a choral ensemble. Designed for non-majors and majors who need preparation for MUP-225. Performs various genres of vocal music. Emphasis on sight reading, basic vocal production and ensemble singing. May be repeated for up to 6 credits.

Prerequisites: MUP-122 (6 credits)

OC LCT MUP-222-01 342352 TTH 3-4:50 PM K. HOLLINGSWORTH \$260.00 \$26.00 \$52.00 \$338.00 Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/5 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.

MUP-225 ADVANCED VOCAL ENSEMBLE, 2 CREDITS

Second year advanced vocal performance ensemble open by audition only. Open to majors and students with vocal experience, sight-reading ability. AVE will travel to perform, will record in the studio and a minimum three-term commitment is highly encouraged. May be repeated for up to 6 credits.

Prerequisites: MUP-125 (6 credits)

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: **TBA:** To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español

LCT: Low-Cost Text NCT: No-Cost Text

46 For information about Clackamas Community College, call 503-594-6000

Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Fee Instructor Tuition Crs. Fee Total OC NCT MUP-225-01 342354 MW 3-4:50 PM K. HOLLINGSWORTH \$260.00 \$26.00 \$52.00 \$338.00 Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/5 from

3-5 pm to demonstrate vocal range. Contact

kathleen.hollingsworth@clackamas.edu with questions.

MUP-241 COLLEGE ORCHESTRA, 1 CREDIT

Performance and study of orchestral literature. College students may earn credit for playing in one of several approved orchestral groups. Minimum of one performance per term. May be repeated for up to 4 credits. Required: Student Petition.

OC NCT MUP-241-01 342356 TBA

Course No Course Title, Credits

L. CAMPBELL \$130.00 \$13.00 \$0.00 \$143.00

Required: Student Petition.

MUS-101 MUSIC FUNDAMENTALS, 3 CREDITS

Introduction to fundamentals of reading and writing music. Designed for non-majors or majors needing substantial preparation for MUS-111.

ONI MUS-101-01 342438

J. HEDBERG \$390.00 \$39.00 \$10.00 \$439.00

MUS-103 APPLIED MUSIC FUNDAMENTALS, 3 CREDITS

A continuation of an introduction to fundamentals of music theory. Designed for MPT/MT or AS Transfer students who need substantial preparation for MUS-111 and interested non-majors.

Prerequisites: MUS-102

oc MUS-103-01 342443 T 10-11:20 AM TH 10-11:20 AM K. HOLLINGSWORTH \$390.00 \$39.00 \$10.00 \$439.00

MUS-105 MUSIC APPRECIATION, 3 CREDITS

For non-majors and music majors. Emphasis on engaging in the study of instrumental and vocal musical genres from the ancient period through the contemporary music of our time. Includes critical analysis, study of elements, forms, styles, composers, performers, cultural, and historical issues and events.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

MUS-105-01 ONI 342445

J. HEDBERG \$390.00 \$39.00 \$0.00 \$429 00

MUS-106 AUDIO RECORDING AT HOME, 1 CREDIT

An overview of the basic tools and techniques used in audio recording at home. Depending on participant needs, topics may include signal path, microphone applications, software, hardware, outboard gear, soldering techniques, tracking, mixing, and editing.

OC LCT MUS-106-01 342448 F 6-9:00 PM 12-8:00 PM S D. BADSTUBNER \$130.00 \$13.00 \$99.00 \$242.00 Meets: 2/6 & 2/7.

MUS-107 INTRODUCTION TO AUDIO RECORDING I, 3 CREDITS

Introduction to the basic techniques and tools used in audio recording. Areas of study include signal path, microphone applications, software, hardware, outboard gear, tracking, mixing, and editing.

OC MUS-107-01 342453 M 6:30 -9:20 PM D. BADSTUBNER \$390.00 \$39.00 \$99.00 \$528.00

MUS-108 INTRODUCTION TO AUDIO RECORDING II, 3 CREDITS

Exploration of techniques and tools used in audio recording. Analog, digital, and hard drive recording will be explored. Areas of study include multi-tracking, signal path, microphone applications, software, hardware, outboard gear, soldering techniques, tracking, mixing, and editing. Software/hardware includes ProTools, ADAT, Mackie, etc.

Tuition

Days (M,T,W,TH.F,S,SU) Time

Crs. Fee

Total

Fee

Crs Reg.

Prerequisites: MUS-107

Course No Course Title, Credits Section No

Instructor

ОС	MUS-108-01	342459	T		6:30 -9:20	PM
	D. BADSTUBNE	ΞR	\$390.00	\$39.00	\$99.00	\$528.00
OC LCT	MUS-108-02	342463	M		1-3:50 PM	
	D. BADSTUBNE	ΞR	\$390.00	\$39.00	\$99.00	\$528.00

MUS-109 INTRODUCTION TO AUDIO RECORDING III, 3 CREDITS

Exploration of digital recording/editing software and production of CD project. Advanced exploration of techniques and tools used in audio recording. Areas of study include signal path, microphone applications, software, hardware, outboard gear, tracking, mixing, and editing. Analog, digital, and hard drive recording will be explored. Software/hardware includes ProTools, ADAT, Mackie, etc.

Prerequisites: MUS-108

ОС	MUS-109-01 34246	6 T	6:30 -9:20	PM
	D. BADSTUBNER	\$390.00 \$39.00	\$99.00	\$528.00
OC LCT	MUS-109-02 34246	9 M	1-3:50 PM	
	D. BADSTUBNER	\$390.00 \$39.00	\$99.00	\$528.00

MUS-112 MUSIC THEORY I, 3 CREDITS

For non-majors and music majors. Presents functional harmony through written exercises, listening, and analysis. This is the second term of a three-term sequence, which includes voice leading, nonharmonic tones, three-voice and four-voice chorale writing, figured bass, and small melodic structures. Provides a thorough groundwork in the melodic, harmonic, and rhythmic elements of music.

Prerequisites: MUS-111

Corequisites: MUS-112L, MUS-115, and MUS-128 for AS in music degree seekers. This requirement does not affect non-music majors or MPT Majors

OC LCT MUS-112-01 342471 TTH 10-11:20 AM R. OLASON \$390.00 \$39.00 \$0.00 \$429.00

MUS-112L MUSIC NOTATION SOFTWARE I, 1 CREDIT

Continues an introduction to Finale (music notation software) on Macintosh computers.

OC LCT MUS-112L-01 342474 M 10-11:50 AM D. FLESCHNER \$130.00 \$13.00 \$44.00 \$187.00

MUS-115 AURAL SKILLS I. 2 CREDITS

Second of three courses in a year-long sequence. Diatonic sight singing in major keys using solfège syllables and moveable 'do'. Melodic dictation and aural recognition of intervals, triads, and 7th chords.

Corequisites: MUS-112 Prerequisites: MUS-114

MUS-115-01 342476 TTH 1-1:50 PM R. OLASON \$260.00 \$26.00 \$0.00 \$286.00

MUS-128 KEYBOARD SKILLS I, 2 CREDITS

Develops basic keyboard skills required for study of tonal harmony and various musical activities such as vocal and instrumental rehearsals, music education and composition.

Corequisites: MUS-112, MUS-112L, and MUS-115

Prerequisites: MUS-127

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Course No	Course Title, Co	redits					Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC LCT	MUS-128-01	342479	TTH		2-2:50 PM		Prerequisit	tes: MUS-143					
	R. OLASON		\$260.00	\$26.00	\$10.00	\$296.00	OC LCT	MUS-144-01	342496	TH		1-3:50 PM	

MUS-132 GROUP PIANO: PIANO FOR PLEASURE, 1 CREDIT

Second of three courses in a year-long sequence. Beginning classroom piano instruction for non-music majors. Includes reading, theory, technical exercises, and the opportunity to share your music with others. Beginning to intermediate level.

OC LCT	MUS-132-01	342481	TTH		9-9:50 A	M
	T. STOJANO\	/IC	\$130.00	\$13.00	\$85.00	\$228 00

MUS-137 GROUP GUITAR I, 1 CREDIT

For beginning to intermediate players. Covers finger picking, lead guitar, rock and popular styles, music reading, and music theory. Students provide own instrument.

ос	MUS-137-01	342485 TH		10-11:5	0 AM
	D TUTMARK	\$130.00	\$13.00	\$85.00	\$228.00

MUS-138 GROUP GUITAR II, 1 CREDIT

For intermediate to advanced players. Covers finger picking, lead guitar, rock and popular styles, music reading, and music theory. Students provide their own instrument.

Prerec	uisites:	MUS-137

ос	MUS-138-01	342487 TH		10-11:5	O AM
	D. TUTMARK	\$130.00	\$13.00	\$85.00	\$228 00

MUS-140 CAREERS IN MUSIC, 3 CREDITS

An overview of the music industry career opportunities. Studies include recording studio management/engineering, music merchandising, promotion, music contracting, agent/personal manager, live performing, teaching, technical support, record business, video and film production/editing, retailing, and instrument repair.

REM LCT	MUS-140-01	342489	W		6:30 -9	:20 PM
	D. FLESCHNE	R	\$390.00	\$39.00	\$0.00	\$429.00

MUS-142 **INTRODUCTION TO ELECTRONIC MUSIC I: MIDI, 3 CREDITS**

Introduction to synthesis, MIDI sequencing, basic musical elements, and the basics of production. Learn how to make beats, songs, etc. Uses common production software/hardware.

OC LCT	MUS-142-01	342491 T		1-3:50 PM	
	A. HAAK	\$390.00	\$39.00	\$99.00	\$528.00

MUS-143 INTRODUCTION TO ELECTRONIC MUSIC II: **SEQUENCING, AUDIO LOOPING, SOUND EFX, 3** CREDITS

An introduction to digital audio in the MIDI environment. This course continues MIDI sequencing, and integrates audio into the MIDI environment with audio looping, and spotting sound effects. Uses common production software/hardware.

Prerequisites: MUS-142

OC LCT	MUS-143-01	342494 TH		1-3:50 F	PM
	A. HAAK	\$390.00	\$39.00	\$99.00	\$528.00

MUS-144 INTRODUCTION TO ELECTRONIC MUSIC III: DIGITAL **AUDIO, 3 CREDITS**

Exploration of digital music recording and editing, synthesis, sampling, and sequencing. Presents CD/audio file production techniques integrating digital audio with the MIDI sequence. Uses Pro Tools, and other common production software/hardware.

MUS-144-01	342496 TH		1-3:50 I	PM
A. HAAK	\$390.00	\$39.00	\$99.00	\$528.00

MUS-147 MUSIC, SOUND & MOVIEMAKING, 1 CREDIT

Presents the basic components of designing, shooting, recording audio, and post production of movies as well as the history and theory that has led to contemporary film production.

OC LCT	MUS-147-01	342173 F		6:30 -8:2	20 PM
		S		9-5:50 P	M
	B. ROSE	\$130.00	\$13.00	\$99.00	\$242.00
	Meets: 1/30 &	1/31.			

MUS-160 SONGWRITING I, 2 CREDITS

Studies the techniques of a working songwriter, including use of form, lyrics, harmonic progressions and symbolism in the creative aspect of songwriting. Solo writing as well as the concept of collaboration are introduced. Participants will work individually and/or in small groups to record original songs. May be repeated for up to 4 credits.

Required: Working proficiency at playing an instrument such as piano, guitar, voice, or equivalent. Computer generated music is also acceptable

OC LCT	MUS-160-01	342499 T	1-2:50 PM			
	L. POLLARD	\$260.00	\$26.00	\$50.00	\$336.00	

MUS-171 SOUND DESIGN, 2 CREDITS

This course introduces students to the fundamentals of sound design through a series of practical, hands-on activities. Students will gain an understanding of the skills, tools, and concepts used in the creation and synchronization of sound effects in modern visual media. Through a thorough introduction to sound recording, editing and mixing, audio manipulation, and electronic synthesis, this course will provide students with the knowledge and skills to create unique sound effects using industry standard software like Pro Tools, Propellerhead's Reason, Ableton Live, Native Instrument's Reaktor, and other sound designspecific software.

OC LCT	MUS-171-01	342501 W		10-11:	:50 AM
	M. BAIRD	\$260.00	\$26.00	\$0.00	\$286.00

MUS-188 PERFORMANCE ATTENDANCE, 0 CREDIT

The student is expected to attend a minimum of five live performances approved by the Music Department for each term registered.

ос	MUS-188-01 3425	503 T		12-12:50	PM
	L. CAMPBELL	\$0.00	\$0.00	\$0.00	\$0.00
	Required meeting 1	/6. Find free	e on-cam	pus perform	nances
	for students at clack	ramasmusir	eventhr	ite com	

MUS-189 PERFORMANCE & REPERTOIRE, 1 CREDIT

A performance forum required for all students studying a classical instrument or voice at the MUP-171 to MUP-191 and MUP-271 to MUP-291 levels. Through weekly performance and critique, each student will develop proper stage manners and prepare for the end of term performance jury, and will also study the work to be performed through academic research. Students will have an opportunity to work with a professional accompanist. May be repeated for up to 6 credits. Required: Student Petition.

OC LCT	MUS-189-01	342506 W		12-12:50 PM		
	J. ISRAELS	\$130.00	\$13.00	\$0.00	\$143.00	
	B MICHAFI					

MUS-206 MUSIC LITERATURE: HISTORY OF ROCK, 4 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	ourse No Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Tuition Fee Crs. Fee Tota				Course No Course Title, Credits								
	Section No	Crs Reg.	Days (M,T,\	N,TH.F,S,SU)	Time			Section No	Crs Reg.	Days (M,T,	N,TH.F,S,SU)	Time	
	Instructor		Tuition	Fee	Crs. Fee	Total		Instructor		Tuition	Fee	Crs. Fee	Total

For non-majors and music majors. Emphasis on engaging in the study of Rock music and surrounding cultural/historical issues. Includes critical analysis, study of elements, forms, styles, composers, performers, cultural, and historical issues and events. An examination of Rock music as a contemporary social medium.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

oc	MUS-206-01	342511 MW	10-11:	50 AM
	K. DEITZ	\$520.00	\$52.00 \$0.00	\$572.00
ONL	MUS-206-02	342516		
	J. HEDBERG	\$520.00	\$52.00 \$0.00	\$572.00

MUS-208 **ADVANCED AUDIO RECORDING & MIXING II: EDITING &** MIX PREPARATION, 3 CREDITS

This course will address advanced editing and mix preparation techniques. Topics covered include vocal compilation, vocal tuning, drum editing, audio denoising, complex signal routing schemes, clip gain, vocal de-essing, vocal splitting etc. Tools explored in the class include Beat Detective, Melodyne, VocAlign, Auto-Align, iZotope, and Antares Auto Tune. Students will be introduced to the concept of custom mix templates, Pro Tools session data, and creating track presets.

Prerequisites: MUS-109 **Recommended Prerequisites: MUS-207**

MUS-208-01 347633 TH 6:30 -9:20 PM D. BADSTUBNER \$390.00 \$39.00 \$0.00 \$429.00

MUS-212 MUSIC THEORY II, 3 CREDITS

For non-majors and music majors. Continuation of the study of harmony and period styles through written exercises, compositions, listening, and analysis. This is the second term of a three-term sequence, which includes the classical style, extended, and chromatic harmony.

Required: Ability to read music Prerequisites: MUS-211

Corequisites: MUS-215 and MUS-225

OC LCT MUS-212-01 342517 MW 10-11:20 AM R. OLASON \$390.00 \$39.00 \$269.00 \$698.00

MUS-215 KEYBOARD SKILLS II. 2 CREDITS

Second course in the sequential second year of advanced keyboard applications covering the materials of diatonic and chromatic music.

Corequisites: MUS-212 Prerequisites: MUS-214

OC LCT MUS-215-01 342519 MW 2-2:50 PM R. OLASON \$260.00 \$26.00 \$85.00 \$371.00

MUS-219 MPT SEMINAR II, 1 CREDIT

Second in a three-part series. For second year Music Performance and Technology AAS students only. Seminar will cover writing, arranging, production, performance and music theory through experiential learning. Students will produce, write and arrange for each CME/Songwriters concert and will produce the Annual MPT/Garage Band Festival each spring

Prerequisites: MUS-218

Campus Locations:

OC: Oregon City Campus

OC LCT MUS-219-01 342522 M 12-12:50 PM K. HOLLINGSWORTH \$130.00 \$13.00 \$0.00 \$143.00 Field trip TBA.

MUS-225 AURAL SKILLS II, 2 CREDITS

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Second of three courses in a year-long sequence. Diatonic and chromatic sight singing with solfège syllables and moveable 'do'. Fourpart dictation including all chromatic devices studied in Theory II.

Distance Education Notification: ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class ESPAÑOL: Enseñado en español

LCT: Low-Cost Text NCT: No-Cost Text

Corequisites: MUS-212 Prerequisites: MUS-224 MUS-225-01 342523 MW 1-1:50 PM

ADVANCED ELECTRONIC MUSIC II: ELECTRONIC MUS-243 **MUSIC ENSEMBLE, 3 CREDITS**

This course will utilize Ableton Live and introduce students to using the DAW (Digital Audio Workstation) in a performance environment. Topics covered include Session View, Launching Clips, Utilizing Grooves, Programming controllers via MIDI, Synchronizing Live with Link, Tempo Follower, and MIDI. Students will prepare compositions to perform live.

\$260.00 \$26.00 \$85.00

\$371 00

Prerequisites: MUS-144

R. OLASON

4-6:50 PM MUS-243-01 347635 T M. BAIRD \$390.00 \$39.00 \$0.00 \$429.00

MUS-248 LIVE SOUND ENGINEERING II, 3 CREDITS

Students will be introduced to advanced live sound principles including feedback rejection, graphic and parametric equalization of stage monitors and FOH, expanded setup, industry trends and vocabulary, advanced mic techniques, incorporating subwoofers, and digital console workflow. Attendance/Tours of local music venues and systems will be explored.

Prerequisites: MUS-148

MUS-248-01 347684 W 6:30 -9:20 PM D. BADSTUBNER \$390.00 \$39.00 \$0.00 \$429.00

MUS-280 MUSIC/CWE, 2-6 CREDITS

Cooperative work experience. Provides students with on-the-job work experience in the field of music. Required: Student Petition.

Corequisites: CWE-281

Prerequisites: MUS-107, MUS-140, and MUS-142

ONL LCT MUS-280-01 342525

C. DOGGETT \$780.00 \$78.00 \$144.00 \$1.002.00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

ONL LCT MUS-280-02 342527

> \$780.00 \$78.00 \$144.00 \$1,002.00V G. HARRIS Required: Student Petition. Corequisite: Take the following

CWE-281-06.

XMUP-**UNISTUS CHOIR, 0 CREDIT** 0001

Select vocal ensemble which rehearses and performs choral music from the Renaissance to the 20th century, including the music of Estonia. Provides preparation for entering professional fields of music and performance. Emphasis on a cappella singing applied to appropriate chamber music. Provides an environment whereby individual students, selected according to their talents and attitudes, may assist the group at large in achieving its full potential which is that of excellence in choral expression. The achievement of this potential is our goal. By audition.

ОС	XMUP-0001-	342550 M		6-9:30 PM	
	01				
	L. CLINE	\$0.00	\$0.00	\$0.00	\$0.00
	By audition on	ly.			

Music: Individual Lessons - Non-Music Majors

MUP-100 **INDIVIDUAL LESSONS: NON-MUSIC MAJORS, 1-2 CREDITS**

Course Listing 2026/WI Course No Course Title, Credits Course No Course Title, Credits Section No Days (M,T,W,TH.F,S,SU) Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Crs Reg. Crs. Fee Instructor Tuition Fee Total Instructor Tuition Fee Crs. Fee Total OC NCT MUP-100-17 342242 TBA Private lessons for beginners, non-music majors, and students who L. CAMPBELL \$130.00 \$13.00 \$225.00 \$368.00 receive a low rating in MUP-171 through MUP-191 auditions. Brass, Required: Student Petition. Trombone Lessons. woodwind, percussion, string and keyboard instruments, and voice. May MUP-100-18 347631 TBA be repeated for up to 12 credits. Required: Student Petition. OC M. BAIRD \$130.00 \$13.00 \$225.00 \$368.00 OC NCT MUP-100-01 342226 TBA Required: Student Petition. Electronic Music Lessons. K. POLITZER \$130.00 \$13.00 \$225.00 \$368.00 Required: Student Petition. Jazz Piano Lessons. Music: Individual Lessons - Year 1 OC NCT MUP-100-02 342227 TBA \$130.00 \$13.00 \$225.00 Y. MIYAMA \$368.00 College-level private lessons required for music majors and Required: Student Petition. Piano Lessons. available to qualified non-majors. End-of-term juried MUP-100-03 342228 TBA OC NCT performance mandatory. May be repeated for up to 10 credits. D. FLESCHNER \$130.00 \$13.00 \$225.00 \$368.00 Required: Student Petition. Required: Student Petition. Rock, Blues, and Pop Piano Lessons. MUP-171 INDIVIDUAL LESSONS: PIANO, 2 CREDITS OC NCT MUP-100-04 342229 TBA \$130.00 \$13.00 \$225.00 Required: College-level performance ability J. ISBAFLS \$368.00 Required: Student Petition. Voice Lessons. Vocal placement Corequisites: MUS-189 required for private lessons and vocal ensembles. New OC NCT MUP-171-01 342277 TBA students attend in Room N114 on 1/5 from 3-5 pm to \$260.00 \$26.00 \$450.00 Y. MIYAMA \$736.00 demonstrate vocal range. Contact Required: Student Petition. kathleen.hollingsworth@clackamas.edu with questions. OC NCT MUP-171-02 342278 TBA MUP-100-05 OC NCT 342230 TBA T. STOJANOVIC \$260.00 \$26.00 \$450.00 \$736 00 \$130.00 \$13.00 \$225.00 B. MICHAEL \$368.00 Required: Student Petition. Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New MUP-171J INDIVIDUAL LESSONS: JAZZ PIANO, 2 CREDITS students attend in Room N114 on 1/5 from 3-5 pm to Required: College-level performance ability demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions. OC NCT MUP-171J-01 342279 TBA OC NCT MUP-100-06 342231 TBA K. POLITZER \$260.00 \$26.00 \$450.00 \$736.00 D. D'AIGLE \$130.00 \$13.00 \$225.00 \$368.00 Required: Student Petition. Required: Student Petition. Violin Lessons. MUP-100-07 342232 TBA MUP-171R INDIVIDUAL LESSONS: ROCK, BLUES, POP PIANO, 2 OC NCT \$130.00 \$13.00 \$225.00 \$368.00 Required: Student Petition. Bass Lessons. Required: College-level performance ability OC NCT MUP-100-08 342233 TBA OC NCT MUP-171R-01 342280 TBA D. TUTMARK \$130.00 \$13.00 \$225.00 \$368.00 D. FLESCHNER \$260.00 \$26.00 \$450.00 \$736.00 Required: Student Petition. Guitar Lessons. Required: Student Petition. MUP-100-09 342234 TBA OC NCT MUP-171R-02 347632 TBA oc A. CSIKOS \$130.00 \$13.00 \$225.00 \$368.00 K. HOLLINGSWORTH \$260.00 \$26.00 \$450.00 \$736.00 Required: Student Petition. Guitar Lessons. Required: Student Petition. OC NCT MUP-100-10 342235 TBA \$130.00 \$13.00 \$225.00 G. HARRIS \$368.00 MUP-172 INDIVIDUAL LESSONS: ORGAN, 2 CREDITS Required: Student Petition. Saxophone Lessons. Required: College-level performance ability MUP-100-11 342236 TBA OC NCT Corequisites: MUS-189 J. KLAUSE \$130.00 \$13.00 \$225.00 \$368.00 OC NCT MUP-172-01 342282 TBA Required: Student Petition. Trumpet Lessons. J. HOLLAND \$260.00 \$26.00 \$450.00 \$736.00 MUP-100-12 342237 TBA OC NCT Required: Student Petition. \$130.00 \$13.00 \$225.00 \$368.00 C. DOGGETT Required: Student Petition. Percussion & Drum Set Lessons. MUP-174 INDIVIDUAL LESSONS: VOICE, 2 CREDITS MUP-100-13 342238 TBA OC NCT Required: College-level performance ability S. TIEDEMANN \$130.00 \$13.00 \$225.00 \$368.00 Corequisites: MUS-189 Required: Student Petition. Flute Lessons. OC NCT MUP-100-14 342239 TBA MUP-174-01 342284 TBA \$130.00 \$13.00 \$225.00 T. STOJANOVIC \$260.00 \$26.00 \$450.00 \$368.00 J. ISRAELS \$736.00 Required: Student Petition. Piano Lessons. Required: Student Petition. Vocal placement required for OC NCT MUP-100-15 342240 TBA private lessons and vocal ensembles. New students attend in Room N114 on 1/5 from 3-5 pm to demonstrate vocal \$130.00 \$13.00 \$225.00 \$368.00 C. LEE range. Contact kathleen.hollingsworth@clackamas.edu with Required: Student Petition. Oboe Lessons. questions. OC NCT MUP-100-16 342241 TBA B. GARDINER \$130.00 \$13.00 \$225.00 \$368.00

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location Distance Education Notification:

ONL: Online Only
REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class ESPAÑOL: Enseñado en español LCT: Low-Cost Text NCT: No-Cost Text

Required: Student Petition. Percussion Lessons.

Course		and the					0						
Course No	Course Title, C		Dave / Ture	15000	Time		Course No	Course Title, C Section No		Dave #4	WTH FOO!"	Time	
	Section No Instructor		Days (M,T,W,TI		Time Crs. Fee	Total		Instructor		Tuition	,W,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC NCT	MUP-174-02 B. MICHAEL Required: Stu private lessor		\$260.00 \$ ition. Vocal	placem	ent requir		OC NCT	MUP-177-01 C. AVERILL Required: Stud	342297 dent Pet	\$260.00	\$26.00	\$450.00	\$736.00
	in Room N11- range. Contac questions.						Required:	INDIVIDUAL I College-level pe tes: MUS-189			-	DITS	
Required:	I INDIVIDUAL College-level p tes: MUS-189			OICE, 2	2 CREDIT	s	OC NCT	MUP-178-01 K. DEITZ Required: Stu	342299 dent Pet	\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-174J-01 J. ISRAELS	342287	7 TBA \$260.00 \$	26.00	\$450.00	\$736.00		J INDIVIDUAL I College-level pe				CREDITS	
	Required: Student Petition. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/5 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with				ed for s attend vocal	OC NCT	MUP-178J-01 K. DEITZ Required: Stud	342300	TBA \$260.00	\$26.00	\$450.00	\$736.00	
OC NCT	questions. MUP-174J-02 B. MICHAEL		тва			\$736.00	OC NCT	MUP-178J-02 B. LEE Required: Stu		\$260.00	\$26.00	\$450.00	\$736.00
	Required: Student Petition. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/5 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with							'8R INDIVIDUAI CREDITS College-level pe	LESSO	NS: RO	,	ES, POP B	ASS, 2
MUP-17	questions. 4R INDIVIDUA	L LESS	ONS: ROCK	K, BLUI	ES, POP \	/OICE, 2	OC NCT	MUP-178R-01 K. DEITZ Required: Stud		\$260.00	\$26.00	\$450.00	\$736.00
Dii-	CREDITS		I- 10a										
OC NCT	MUP-174R-01 J. ISRAELS			206 00	\$450.00	\$736.00		INDIVIDUAL I College-level pe tes: MUS-189				DITS	
	Required: Stu private lessor in Room N11 range. Contact	s and vo 4 on 1/5	ition. Vocal cal ensemb from 3-5 pm	placem les. Ne to den	ent requir w student nonstrate	ed for s attend vocal	OC NCT	MUP-179-01 TBA Required: Stud	34230 5 dent Pet	\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	questions. MUP-174R-02 B. MICHAEL Required: Stu		\$260.00 \$			\$736.00	-	INDIVIDUAL I College-level pe tes: MUS-189				EDITS	
	private lessor in Room N11 range. Contac questions.	s and vo	cal ensemb from 3-5 pm	iles. Ne to den	w student nonstrate	s attend vocal	OC NCT	MUP-180-01 D. TUTMARK Required: Stu	342307 dent Pet	\$260.00	\$26.00	\$450.00	\$736.00
	INDIVIDUAL			2 CRE	DITS			J INDIVIDUAL I College-level pe			GUITAR	, 2 CREDI ⁻	ГS
-	College-level p tes: MUS-189 MUP-175-01	erformar 34229 3					OC NCT	MUP-180J-01 J. RADSLIFF		\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	D. D'AIGLE Required: Stu		\$260.00 \$	326.00	\$450.00	\$736.00	MUP-18	Required: Studion Required: Studion Required: Studion Reports			CK, BLUI	ES, POP G	iUITAR, 2
	INDIVIDUAL			2 CRE	DITS		Required:	College-level pe	erforman	ce ability			
Corequisi	College-level p						OC NCT	MUP-180R-01 A. CSIKOS		\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-176-01 H. OSEAS Required: Stu		\$260.00 \$ ition.			\$736.00		College-level pe	ESSON	IS: FLUT	,	DITS	
	INDIVIDUAL College-level p			2 CRE	DITS			tes: MUS-189					
	tes: MUS-189	onomial	ioo abiiity				OC NCT	MUP-181-01 S. TIEDEMAN	342312 N		\$26.00	\$450.00	\$736.00

HAR: Harmony Community Campus
OC: Oregon City Campus
WILS: Wilsonville Training Center
OFF: Other Off-Campus Location

ONL: Online Only
REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

TBA: To be arranged: contact department first class VAR: Variable credit class

LCT: Low-Cost Text NCT: No-Cost Text

51 For information about Clackamas Community College, call 503-594-6000

Course No	Course Title, Credits				Course N	o Course Title, C	Credits				
	·	. Days (M,T,W,TH.F,S,SU Tuition Fee	Time Crs. Fee	Total		Section No Instructor		Days (M,T,V Tuition	/,TH.F,S,SU) Fee	Time Crs. Fee	Total
	INDIVIDUAL LESSO College-level performa		, 2 CREDITS	5	Required	INDIVIDUAL : College-level p			CH HOR	N, 2 CRED	DITS
OC NCT	MUP-181J-01 34231 G. HARRIS Required: Student Pe	\$260.00 \$26.00	\$450.00	\$736.00	OC NCT	ites: MUS-189 MUP-187-01 R. OLASON Required: Stu	342328 Ident Peti	\$260.00	\$26.00	\$450.00	\$736.00
Required:	INDIVIDUAL LESSO College-level performa tes: MUS-189	,	EDITS		•	INDIVIDUAL : College-level p	LESSON	S: TROM	BONE, 2	CREDITS	3
OC NCT	MUP-182-01 34231 C. LEE Required: Student Pe	6 TBA \$260.00 \$26.00 etition.	\$450.00	\$736.00	OC NCT	ites: MUS-189 MUP-188-01 L. CAMPBELI	342329	TBA \$260.00	\$26.00	\$450.00	\$736.00
Required:	INDIVIDUAL LESSO College-level performa tes: MUS-189	NS: CLARINET, 2	CREDITS		OC NCT	Required: Stu MUP-188-02 C. RENEAU Required: Stu	dent Peti 342330	tion. TBA \$260.00			\$736.00
OC NCT	MUP-183-01 34231 L. DE MARTINO Required: Student Pe	8 TBA \$260.00 \$26.00	\$450.00	\$736.00		J INDIVIDUAL : College-level p			гкомво	ONE, 2 CR	EDITS
	INDIVIDUAL LESSO College-level performa	NS: JAZZ CLARI	NET, 2 CRE	DITS	OC NCT	MUP-188J-01 L. CAMPBELL Required: Stu	L	\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-183J-01 34232 TBA Required: Student Pe	\$260.00 \$26.00	\$450.00	\$736.00	•	INDIVIDUAL : College-level p ites: MUS-189			ONIUM,	2 CREDITS	S
-	INDIVIDUAL LESSO College-level performa tes: MUS-189		E, 2 CREDIT	rs	OC NCT	MUP-189-01 TBA Required: Stu	342332 ident Peti	\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-184-01 34232 G. HARRIS Required: Student Pe	21 TBA \$260.00 \$26.00 etition.	\$450.00	\$736.00	-	INDIVIDUAL : College-level p ites: MUS-189		,	2 CRED	DITS	
	INDIVIDUAL LESSO College-level performa		PHONE, 2 C	REDITS	OC NCT	MUP-190-01 TBA	342334	\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-184J-01 34232 G. HARRIS Required: Student Pe	\$260.00 \$26.00 etition.	·	\$736.00	•	Required: Stu INDIVIDUAL : College-level p ites: MUS-189	LESSON	S: PERC	JSSION,	, 2 CREDIT	гs
Corequisit	INDIVIDUAL LESSO College-level performates: MUS-189	nce ability	CREDITS		OC NCT	MUP-191-01 B. GARDINEF Required: Stu		\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	N. BUETTI Required: Student Pe	2 4 TBA \$260.00 \$26.00 etition.	\$450.00	\$736.00	MUP-19	91J INDIVIDUA CREDITS			Z PERCI	JSSION, 2	
	INDIVIDUAL LESSO College-level performa tes: MUS-189		CREDITS		Required oc nct	: College-level p MUP-191J-01 C. DOGGETT	342337		\$26.00	\$450.00	\$736.00
OC NCT	MUP-186-01 34232 J. KLAUSE	5 TBA \$260.00 \$26.00	\$450.00	\$736.00	MUP-191	Required: Stu	ident Peti	tion.			·
MUP-186J	Required: Student Pe		PET, 2 CREI	DITS		2 CREDIT : College-level p	S			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Required:	College-level performa	nce ability			OC NCT	MUP-191R-01					4
OC NCT	MUP-186J-01 34232 Q. WALKER Required: Student Pe	\$260.00 \$26.00	\$450.00	\$736.00		C. DOGGETT Required: Stu	ident Peti				\$736.00
						T INDIVIDUAL : College-level p			TECH,	2 CREDIT	S
OC: Orego	cations: nony Community Campus in City Campus sonville Training Center	Distance Educ ONL: Online (REM: Remote HYB: In-perso	Only e (w/ scheduled	d meetings)	TBA: To be department	g Translations: arranged: contact first class ble credit class		ESPAÑO LCT: Low NCT: No-	-Cost Tex		ñol

Course No.	-		Course No Course Title, Credits
Course No	Course Title, Credits Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time		Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time
	Instructor Tuition Fee Crs. Fee	Total	Instructor Tuition Fee Crs. Fee Total
OC NCT		736.00	OC NCT MUP-274J-02 342376 TBA B. MICHAEL \$260.00 \$26.00 \$450.00 \$736.0
OC NCT	Required: Student Petition. Electronic Music Lessons. MUP-192T-02 342342 TBA D. BADSTUBNER \$260.00 \$26.00 \$450.00 \$	736.00	MUP-274R INDIVIDUAL LESSONS: ROCK, BLUES, POP VOICE, 2 CREDITS
OC NCT	Required: Student Petition. Audio Recording Lessons. MUP-192T-03 342344 TBA	700.00	Prerequisites: MUP-174R (6 credits) Required: Sophomore-level performance ability
	R. SOMMERS \$260.00 \$26.00 \$450.00 \$ Required: Student Petition. Live Sound Lessons.	736.00	OC NCT MUP-274R-01 342378 TBA J. ISRAELS \$260.00 \$26.00 \$450.00 \$736.00 OC NCT MUP-274R-02 342379 TBA
Music:	Individual Lessons - Year 2		B. MICHAEL \$260.00 \$26.00 \$450.00 \$736.0
available	vear private lessons required for music majors and to qualified non-majors. End-of-term juried nce mandatory. May be repeated for up to 10 credi	its.	MUP-275 INDIVIDUAL LESSONS: VIOLIN, 2 CREDITS Prerequisites: MUP-175 (6 credits) Corequisites: MUS-189 Required: Sophomore-level performance ability
Prerequisi	INDIVIDUAL LESSONS: PIANO, 2 CREDITS ites: MUP-171 (6 credits)		OC NCT MUP-275-01 342381 TBA D. D'AIGLE \$260.00 \$26.00 \$450.00 \$736.00
	tes: MUS-189 Sophomore-level performance ability		MUP-276 INDIVIDUAL LESSONS: VIOLA, 2 CREDITS Prerequisites: MUP-176 (6 credits)
OC NCT		736.00	Corequisites: MUS-179 (6 Gredits) Required: Sophomore-level performance ability
OC NCT	MUP-271-02 342362 TBA T. STOJANOVIC \$260.00 \$26.00 \$450.00 \$	736.00	OC NCT MUP-276-01 342382 TBA H. OSEAS \$260.00 \$26.00 \$450.00 \$736.0
Prerequisi	ites: MUP-171J (6 credits) Sophomore-level performance ability MUP-271J-01 342364 TBA		MUP-277 INDIVIDUAL LESSONS: CELLO, 2 CREDITS Prerequisites: MUP-177 (6 credits) Corequisites: MUS-189 Required: Sophomore-level performance ability
MUP-27	1R INDIVIDUAL LESSONS: ROCK, BLUES, POP PIAN	736.00 IO, 2	OC NCT MUP-277-01 342383 TBA C. AVERILL \$260.00 \$26.00 \$450.00 \$736.0
•	CREDITS ites: MUP-171R (6 credits) Sophomore-level performance ability		MUP-278 INDIVIDUAL LESSONS: BASS, 2 CREDITS Prerequisites: MUP-178 (6 credits)
OC NCT	MUP-271R-01 342366 TBA D. FLESCHNER \$260.00 \$26.00 \$450.00 \$	736.00	Corequisites: MUS-189 Required: Sophomore-level performance ability
	INDIVIDUAL LESSONS: ORGAN, 2 CREDITS ites: MUP-172 (6 credits)		OC NCT MUP-278-01 342385 TBA K. DEITZ \$260.00 \$26.00 \$450.00 \$736.00
Corequisi	tes: MUS-189 Sophomore-level performance ability		MUP-278J INDIVIDUAL LESSONS: JAZZ BASS, 2 CREDITS Prerequisites: MUP-178J (6 credits)
ос ист	MUP-272-01 342369 TBA		Required: Sophomore-level performance ability
MUD 074		736.00	OC NCT MUP-278J-01 342388 TBA K. DEITZ \$260.00 \$26.00 \$450.00 \$736.0
Prerequisi	INDIVIDUAL LESSONS: VOICE, 2 CREDITS (ites: MUP-174 (6 credits)		OC NCT MUP-278J-02 342390 TBA TBA \$260.00 \$26.00 \$450.00 \$736.00
•	tes: MUS-189 Sophomore-level performance ability		MUP-278R INDIVIDUAL LESSONS: ROCK, BLUES, POP BASS, 2
OC NCT	MUP-274-01 342371 TBA J. ISRAELS \$260.00 \$26.00 \$450.00 \$	736.00	CREDITS Prerequisites: MUP-178R (6 credits) Required: Sophomore-level performance ability
OC NCT	MUP-274-02 342373 TBA B. MICHAEL \$260.00 \$26.00 \$450.00 \$	736.00	OC NCT MUP-278R-01 342391 TBA
Prerequisi Corequisi	INDIVIDUAL LESSONS: JAZZ VOICE, 2 CREDITS ites: MUP-174J (6 credits) tes: MUS-189 Sophomore-level performance ability		K. DEITZ \$260.00 \$26.00 \$450.00 \$736.0 MUP-279 INDIVIDUAL LESSONS: HARP, 2 CREDITS Prerequisites: MUP-179 (6 credits) Corequisites: MUS-189
OC NCT	MUP-274J-01 342375 TBA	736.00	Required: Sophomore-level performance ability
OC: Orego WILS: Wils	cations: nony Community Campus on City Campus sonville Training Center or Off-Campus Location Distance Education Notification ONL: Online Only REM: Remote (w/ scheduled me HYB: In-person plus online work	eetings)	Other Coding Translations: ESPAÑOL: Enseñado en español LCT: Low-Cost Text department first class VAR: Variable credit class

	Course Title, Cr	redits				Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T,W,TH.F,S,SU Tuition Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,) Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC NCT	MUP-279-01 TBA	342393	TBA \$260.00 \$26.00	\$450.00	\$736.00	OC NCT	MUP-284-01 G. HARRIS	342410		\$26.00	\$450.00	\$736.0
Prerequisi Corequisit	tes: MUP-180 (es: MUS-189	(6 credits	•	REDITS		Prerequisi	INDIVIDUAL I ites: MUP-184J Sophomore-lev	(6 credit	s)		IONE, 2 CI	REDITS
OC NCT	Sophomore-lev MUP-280-01 D. TUTMARK	342394		\$450.00	\$736.00	OC NCT	MUP-284J-01 G. HARRIS	342412		\$26.00	\$450.00	\$736.0
Prerequisi	tes: MUP-180J	(6 credit	•	R, 2 CREDIT	тѕ	Prerequisi Corequisit	ites: MUP-185 (tes: MUS-189	6 credits)	ŕ	CREDITS	
	Sophomore-lev	•	-			-	Sophomore-lev			ility		
OC NCT	MUP-280J-01 J. RADSLIFF	342396	TBA \$260.00 \$26.00	\$450.00	\$736.00	OC NCT	MUP-285-01 N. BUETTI	342413		\$26.00	\$450.00	\$736.0
Prerequisi	OR INDIVIDUAL CREDITS tes: MUP-180P Sophomore-lev	R (6 credi	,	JES, POP G	BUITAR, 2	Prerequisi Corequisit	INDIVIDUAL I ites: MUP-186 (tes: MUS-189 Sophomore-leve	6 credits)	ŕ	REDITS	
OC NCT	MUP-280R-01 A. CSIKOS	•	-	\$450.00	\$736.00	OC NCT	MUP-286-01 J. KLAUSE	342414	ТВА		\$450.00	\$736.0
Prerequisi Corequisit	tes: MUP-181 (es: MUS-189 Sophomore-lev MUP-281-01	(6 credits	mance ability	EDITS		Prerequisi	ites: MUP-186J Sophomore-levented MUP-286J-01 Q. WALKER	(6 credit	s) nance ab TBA	ility	\$450.00	\$736.0
Prerequisi	tes: MUP-181J Sophomore-lev	(6 credit el perfori	mance ability	, 2 CREDITS	s	Prerequisi Corequisit Required:	ites: MUP-187 (tes: MUS-189 Sophomore-lev	6 credits)		N, 2 CRED	IIS
		342402	TBA \$260.00 \$26.00	\$450.00	\$736.00	OC NCT	MUP-287-01 R. OLASON	342416		\$26.00	\$450.00	\$736.00
OC NCT	MUP-281J-01 G. HARRIS		Ψ200.00 Ψ20.00									
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MUP-282 Prerequisit Required: OC NCT MUP-283 Prerequisit Required: OC NCT MUP-283J Prerequisit Required: OC NCT	G. HARRIS INDIVIDUAL I tes: MUP-182 (es: MUP-189 Sophomore-lev MUP-282-01 C. LEE INDIVIDUAL I tes: MUP-183 (es: MUS-189 Sophomore-lev MUP-283-01 L. DE MARTIN INDIVIDUAL I tes: MUP-183J Sophomore-lev MUP-283J-01 TBA	(6 credits rel perform 342404 LESSON (6 credits rel perform 342406 NO LESSON (6 credit rel perform 342408	S: OBOE, 2 CRI) mance ability TBA \$260.00 \$26.00 S: CLARINET, 2) mance ability TBA \$260.00 \$26.00 S: JAZZ CLARI s) mance ability TBA \$260.00 \$26.00 S: SAXOPHONI	0 \$450.00 2 CREDITS 0 \$450.00 NET, 2 CRE	\$736.00 DITS \$736.00	Prerequisi Corequisit Required: OC NCT OC NCT MUP-288J Prerequisi Required: OC NCT MUP-289 Prerequisi Corequisit	ites: MUP-188 (tes: MUP-188) Sophomore-leve MUP-288-01 L. CAMPBELL MUP-288-02 C. RENEAU INDIVIDUAL I Ites: MUP-188J Sophomore-leve MUP-288J-01 L. CAMPBELL INDIVIDUAL I Ites: MUP-189 (tes: MUP-189)	el perforr 342418 342419 LESSON (6 credit: el perforr 342420 LESSON 6 credits: el perforr 342420	mance ab TBA \$260.00 TBA \$260.00 S: JAZZ s) mance ab TBA \$260.00 S: EUPH mance ab TBA	\$26.00 \$26.00 TROMBO illity \$26.00 ONIUM,	\$450.00 \$450.00 DNE, 2 CR \$450.00 2 CREDITS \$450.00	\$736.00 \$736.00 EDITS \$736.00

OC: Oregon City Campus
WILS: Wilsonville Training Center
OFF: Other Off-Campus Location

REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

department first class

VAR: Variable credit class

NCT: No-Cost Text

54 For information about Clackamas Community College, call 503-594-6000

Course No Course Title, Credits Course No Course Title, Credits Crs Reg. Crs Reg. Section No Section No Days (M,T,W,TH.F,S,SU) Days (M,T,W,TH.F,S,SU) Time Fee Crs. Fee Total Instructor Tuition Crs. Fee Total Instructor Tuition Fee

Prerequisites: MUP-190 (6 credits)

Corequisites: MUS-189

Required: Sophomore-level performance ability

OC NCT MUP-290-01 342423 TBA

> \$260.00 \$26.00 \$450.00 \$736.00 TBA

MUP-291 INDIVIDUAL LESSONS: PERCUSSION, 2 CREDITS

Prerequisites: MUP-191 (6 credits)

Corequisites: MUS-189

Required: Sophomore-level performance ability

MUP-291-01 342426 TBA

B. GARDINER \$260.00 \$26.00 \$450.00 \$736.00

MUP-291J INDIVIDUAL LESSONS: JAZZ PERCUSSION, 2 **CREDITS**

Prerequisites: MUP-191J (6 credits)

Required: Sophomore-level performance ability

OC NCT MUP-291J-01 342428 TBA

> C. DOGGETT \$260.00 \$26.00 \$450.00 \$736.00

MUP-291R INDIVIDUAL LESSONS: ROCK, BLUES, POP DRUMSET, 2 CREDITS

Prerequisites: MUP-191R (6 credits)

Required: Sophomore-level performance ability

OC NCT MUP-291R-01 342431 TBA

> \$260.00 \$26.00 \$450.00 C. DOGGETT \$736.00

MUP-292T INDIVIDUAL LESSONS: AUDIO TECH, 2 CREDITS

Prerequisites: MUP-192T (6 credits)

Required: Sophomore-level performance ability

OC NCT MUP-292T-01 342433 TBA

M. BAIRD \$260.00 \$26.00 \$450.00 \$736.00 Electronic Music Lessons.

MUP-292T-02 342435 TBA

OC NCT D. BADSTUBNER \$260.00 \$26.00 \$450.00 \$736.00

Audio Recording Lessons.

OC NCT MUP-292T-03 342437 TBA

> R. SOMMERS \$260.00 \$26.00 \$450.00 \$736.00

Live Sound Lessons.

Nursing

The Nursing program at Clackamas Community College is a full partner in the Oregon Consortium for Nursing Education (OCNE). The curriculum in OCNE nursing programs is a competency-based curriculum developed in collaboration with Oregon Health & Science University (OHSU) and other community colleges around the state. This curriculum, which has been approved by the Oregon State Board of Education as well as the Oregon State Board of Nursing, can ultimately culminate in a Baccalaureate of Science Degree with a focus in Nursing on the community college campus offered by OHSU.

Admission into the nursing program is by special application only. Acceptance to the nursing program allows for coenrollment to Clackamas Community College and Oregon Health & Science University, School of Nursing.

The Nursing Assistant course, while not required to enter the Nursing program, provides a strong foundation regarding the delivery of care to clients in various settings.

NRS-112 **FOUNDATIONS OF NURSING IN ACUTE CARE I, 3**

This course introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients across the lifespan who require acute care, including normal childbirth. Disease/illness trajectories and their translation into clinical practice guidelines and/or standard procedures are considered in relation to their impact on providing culturally sensitive, patient-centered care. Includes classroom and clinical learning experiences.

Required: Acceptance into the CCC nursing program Prerequisites: NRS-110, NRS-110C, and NRS-230 Corequisites: NRS-112C, NRS-231, and NRS-232

NRS-112-01 HAR 347548 M 9-11:50 AM C. BURT \$390.00 \$39.00 \$300.00 \$729.00

NRS-112C FOUNDATIONS OF NURSING IN ACUTE CARE I **CLINICAL, 3 CREDITS**

This course introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients across the lifespan who require acute care, including natural childbirth. Disease/illness trajectories and their translation into clinical practice guidelines and/or standard procedures are considered in relation to their impact on providing culturally sensitive, client-centered care. Includes classroom and clinical learning experiences.

Required: Acceptance into the CCC nursing program Prerequisites: NRS-110, NRS-110C, and NRS-230 Corequisites: NRS-112, NRS-231, and NRS-232

HAR	NRS-112C-01 347549	T W		9-10:50 AI 10-1:50 PI	
	T. VANDERWERF	\$390.00	\$39.00	\$450.00	\$879.00
HAR	NRS-112C-02 347550	T		11-12:50 F	PM
		TH		10-1:50 PI	М
	T. VANDERWERF	\$390.00	\$39.00	\$450.00	\$879.00
HAR	NRS-112C-03 347551	T		1:30 -3:20	PM
		F		11-2:20 PI	М
	T. VANDERWERF	\$390.00	\$39.00	\$450.00	\$879.00

NRS-221 CHRONIC ILLNESS II AND END OF LIFE, 4 CREDITS

Campus Locations: HAR: Harmony Community Campus

OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location **Distance Education Notification:**

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Course No Course Title, Credits					Course No	Course Title, Cr	redits						
	Section No	Crs Reg.	Days (M,T,V	V,TH.F,S,SU)	Time			Section No	Crs Reg.	Days (M,T,\	N,TH.F,S,SU)	Time	
	Instructor		Tuition	Fee	Crs. Fee	Total		Instructor		Tuition	Fee	Crs. Fee	Total

This course builds on NRS-111 and expands the student's knowledge related to family care giving, symptom management and end of life concepts. These concepts are a major focus and basis for nursing interventions with patients and families. Ethical issues related to advocacy, self-determination, and autonomy are explored. Complex skills associated with the assessment and management of concurrent illnesses and conditions are developed within the context of patient and family preferences and needs. Skills related to enhancing communication and collaboration as a member of an interprofessional team and across health care settings are further explored. Exemplars include patients with chronic mental illness and addictions as well as other chronic conditions and disabilities affecting functional status and family relationships. The course includes classroom and clinical learning experiences.

Required: Acceptance into the CCC nursing program

Corequisites: NRS-221C

Prerequisites: NRS-222 and NRS-222C

HAR	NRS-221-01	342532 M		8:30 -10:20 AM		
		M		11-12:50	PM	
	A. DROUIN K. KABAT	\$520.00	\$52.00	\$298.00	\$870.00	

K. RICHARDS

NRS-221C CHRONIC ILLNESS II AND END OF LIFE CLINICAL, 5 **CREDITS**

This course builds on NRS-111 and expands the student's knowledge related to family care giving, symptom management and end of life concepts. These concepts are a major focus and basis for nursing interventions with patients and families. Ethical issues related to advocacy, self determination, and autonomy are explored. Complex skills associated with the assessment and management of concurrent illnesses and conditions are developed within the context of patient and family preferences and needs. Skills related to enhancing communication and collaboration as a member of an interdisciplinary team are further explored. Exemplars include patients with chronic mental illness and addictions as well as other chronic conditions and disabilities affecting functional status and family relationships. The course includes classroom and clinical learning experiences.

Required: Acceptance into the CCC nursing program

Corequisites: NRS-221

Prerequisites: NRS-222 and NRS-222C

HAR	NRS-221C-01 A. DROUIN K. KABAT	342533	 \$65.00	\$378.00	\$1,093.00
HAR	K. RICHARDS NRS-221C-02 A. DROUIN K. KABAT	342534	 \$65.00	\$378.00	\$1,093.00
HAR	K. RICHARDS NRS-221C-03 A. DROUIN K. KABAT K RICHARDS	342535	 \$65.00	\$378.00	\$1,093.00
HAR	NRS-221C-04 A. DROUIN K. KABAT K. RICHARDS	342536	 \$65.00	\$378.00	\$1,093.00
HAR	NRS-221C-05 A. DROUIN	342537	 \$65.00	\$378.00	\$1,093.00

NRS-231 CLINICAL PHARMACOLOGY II, 3 CREDITS

This sequel to NRS-230 continues to provide the theoretical background that enables students to provide safe and effective nursing care related to drugs and natural products to persons throughout the lifespan. Students will learn to make selected clinical decisions in the context of nursing regarding using current, reliable sources of information, monitoring and evaluating the effectiveness of drug therapy, teaching persons from diverse populations regarding safe and effective use of drugs and natural products, intervening to increase therapeutic benefits and reduce potential negative effects, and communicating appropriately with other health professionals regarding drug therapy. The course addresses additional classes of drugs and related natural products not contained in NRS-230.

Required: Acceptance into the CCC nursing program Prerequisites: NRS-110, NRS-110C, and NRS-230 Corequisites: NRS-111, NRS-111C, and NRS-232

HAR HYB NRS-231-01 342538 F 8:30 -10:20 AM K. RICHARDS \$390.00 \$39.00 \$90.00 \$519.00

NRS-232 PATHOPHYSIOLOGICAL PROCESSES I, 3 CREDITS

This course introduces pathophysiological processes that contribute to many different disease states across the lifespan and human responses to those processes. It includes the foundational concepts of cellular adaptation, injury, and death; inflammation and tissue healing; fluid and electrolyte imbalances; and physiologic response to stressors, as well as additional pathophysiological processes. Students will learn to make selective clinical decisions in the context of nursing regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused nursing assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes.

Required: Acceptance into the CCC nursing program Prerequisites: NRS-110, NRS-110C, and NRS-230 Corequisites: NRS-111, NRS-111C, and NRS-231

HAR HYB NRS-232-01 342539 M 12:30 -2:20 PM \$390.00 \$39.00 \$170.00 A. DROUIN \$599 00

NUR-100 NURSING ASSISTANT I. 6.5 CREDITS

This course provides the student with the skills to perform basic level nursing care. Certified Nursing Assistants are defined by law as people who assist licensed nursing personnel in the provision of nursing care. Prepares the student to perform routine nursing assistant tasks to clients in sub-acute care settings as well as in the community. Includes didactic and skills lab instruction. Major topics covered include: collaboration with health care team, communication & interpersonal skills, person-centered care, infection control and prevention, safety and emergency procedures, assisting with activities of daily living, mental health and social service needs of clients, technical skills, acquiring observation and reporting skills, documentation of care provided and end-of-life care. Upon successful completion of this course, students may apply for the Oregon State Board of Nursing certification exam for nursing assistants (CNA 1). This course is approved by the Oregon State Board of Nursing. Required: Student Petition.

Required: Must be at least 18 years of age; High School Diploma or equivalent; Must be formally accepted by Health Sciences Admissions and attend a mandatory orientation session. During the orientation, students will start the process for completing all non-academic requirements. Non-academic requirements include: Immunizations (MMR, Varicella, Tdap, Hep B, COVID-19, seasonal Flu); complete a Criminal Background Check; Drug Screen; Tuberculosis test; BLS/CPR for Healthcare Providers certification through American Heart Association (AHA)

Corequisites: NUR-100C

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

K KABAT

K. RICHARDS

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Course No	Course Title, C	redits					Course No	Course Title, 0	Credits				
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T	,W,TH.F,S,SU) Fee	Time Crs. Fee	Total
HAR HYB	MUR-100-01 M. BAKER S. ELLSBERG Required: Stu be posted to t website for ap	ident Pet the nursir oplication	\$845.00 ition. Info ng assista & orienta	rmation s ant websit	ession det e. Please mation.	\$1,279.50 ails will see	This course employmen summarizin professiona	PROFESSIOn is designed to the exploring gessential skill portfolio for exacceptance interests.	o support nationally ills related employme	the trans recognized to phleb nt.	ition from zed crede ootomy, ar	practicum to ntialing option	ıs,
HAR HYB	NUR-100-02 M. BAKER S. ELLSBERO	-		\$84.50	1-5:30 Pl \$350.00	VI \$1,279.50	Prerequisit	es: PHB-110, es: PHB-130		,			
	J. LAFRANCE Required: Stu be posted to t	dent Pet					ONL	PHB-125-01 E. ZUNIGA	342547	\$130.00	\$13.00	\$100.00	243.00
	website for ap	plication	& orienta	ation infor	mation.		PHB-130	PHLEBOTON	IY PRAC	TICUM,	5 CREDIT	s	

NUR-100C NURSING ASSISTANT I CLINICAL, 0 CREDIT

Prepares the student to perform routine nursing assistant tasks to clients in hospitals, long-term and skilled care facilities, as well as the community. Includes clinical practicum. Required: Student Petition.

Corequisites: NUR-100

HAR	NUR-100C-01 342543	TWTH			
	M. BAKER	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Student Pet	ition.			
HAR	NUR-100C-02 342544	TWTH			
	J. LAFRANCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Student Pet	ition.			
HAR	NUR-100C-03 342546	TWTH			
	TBA	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Student Pet	ition			

Philosophy

PHL-101 PHILOSOPHICAL PROBLEMS, 4 CREDITS

Introduces basic philosophical questions such as: What is reality? What is knowledge? What is truth? Can humans freely choose? What is human awareness? What is a meaningful life?

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	PHL-101-01	343339	TTH		1-2:50 PM	
	K. SEVERSON	1	\$520.00	\$52.00	\$0.00	\$572.00

PHL-102 ETHICS, 4 CREDITS

Introduces the study of morality with concepts of good, harm, habits, character, perception, behavior and action. Also considers the different theories of human capacity for responsibility.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC HYB NCT	PHL-102-01	343351 W		1-2:50 PM	
ONL NCT	M. BAILEY PHL-102-02	\$520.00 343345	\$52.00	\$0.00	\$572.00
	M. BAILEY	0.00.0	\$52.00	\$0.00	\$572.00

PHL-103 CRITICAL REASONING, 4 CREDITS

Helps students identify and understand the process by which they themselves and others arrive at conclusions; improves their critical reasoning skills; introduces basic logical concepts of argument; and gives opportunity for students to apply course skills to relevant matters.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ONL LCT	PHL-103-01	343352	
	K. HADDIX	\$520.00 \$52.00 \$0.00	\$572.00

Phlebotomy

Campus Locations: Distance Education Notification:

HAR: Harmony Community Campus OC: Oregon City Campus

WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class

Provide hands-on experience in a supervised and accredited laboratory or clinical environment, providing the opportunity for students to apply practical skills and knowledge learned in previous courses and gain professional experience in a healthcare environment.

Required: Acceptance into the Phlebotomy program. Compliance with the Oregon Health Authority rules for students. Vaccination records for Tdap, MMR, Varicella, Hep B, COVID-19. Completed criminal background check, drug screen, and BLS CPR card through the American Heart Association

Prerequisites: PHB-110, PHB-112, and PHB-115

Corequisites: PHB-125

PHB-130-01 342548 TBA

J. ALLISON \$650.00 \$65.00 \$135.00 \$850.00 E. ZUNIGA

Physical Education

PE-185 PHYSICAL ACTIVITY CLASSES, 1 CREDIT

Recommended: Current physical examination before enrolling DAGEDALL GONDITIONING LA ODEDIT

	BASEBALL CONDITIONING I, 1 CREDIT							
OC NCT	PE-185-008	347621 MWF		8-8:50 A	M			
	J. HOPPEL	\$130.00	\$13.00	\$30.00	\$173.00			
	Required: Student Petition.							

CROSS TRAINING II, 1 CREDIT ONL NCT PE-185-051 343302

\$130.00 \$13.00 \$30.00 B STAMME \$173.00

CROSS TRAINING II, 1 CREDIT

ONL NCT PE-185-053 347618 \$130.00 \$13.00 \$30.00 \$173.00 TBA

Required: Student Petition.

CROSS TRAINING II, 1 CREDIT

ONL NCT PE-185-050 347620

> B. STAMME \$130.00 \$13.00 \$30.00 \$173.00

SOFTBALL CONDITIONING I, 1 CREDIT

OC NCT PE-185-088 347617 TTH 7:30 -8:50 AM

> J. BUEL \$130.00 \$13.00 \$30.00 \$173.00

Required: Student Petition.

TRACK CONDITIONING I, 1 CREDIT

OC NCT PE-185-105 347615 MWF 2:30 -5:20 PM K. MCHONE \$130.00 \$13.00 \$30.00 \$173.00

Required: Student Petition.

VOLLEYBALL, POWER I, 1 CREDIT OC NCT PE-185-030 347619 T 6:30 -9:20 PM A. ITAMI \$130.00 \$13.00 \$30.00 \$173.00

Required: Student Petition.

Course No	Course Title, Co	redits				
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total
ONL NCT	WALK, JOG, PE-185-002 K. MCHONE	FITNES: 343295	,		\$30.00	\$173.00
ONL NCT	WEIGHT TRA PE-185-064 B. STAMME	INING II 343310	•		\$30.00	\$173.00
OC NCT	WEIGHT TRA PE-185-063 B. STAMME J. STEINKE	INING II 343308	TTH		10-11:20 A \$30.00	AM \$173.00
ONL NCT	YOGA II, 1 CF PE-185-001 E. HANCOCK	343293	\$ \$130.00	\$13.00	\$30.00	\$173.00

PE-194 PROFESSIONAL ACTIVITIES, 1 CREDIT

Team skills and strategy courses. Designed to provide the student with basic skills and methodology necessary to conduct physical fitness programs in the school, corporate, and community setting. Emphasis is placed on fitness concepts, techniques of weight training and aerobic exercises to encourage life-long physical activity. Course offerings are: baseball, basketball, cross-country, soccer, softball, track and field, volleyball, and wrestling. Required: Student Petition.

	BASKETBALL SKILLS & STRATEGIES, T CREDIT							
OC NCT	PE-194-02	347613 MWF		12-12:50 PM				
	B. STAMME	\$130.00	\$13.00	\$30.00	\$173.00			
	Required: Student Petition.							
	BASKETBALL SKILLS & STRATEGIES, 1 CREDIT							
OC NCT	PE-194-03	347614 MWF		3-3:50 PM	1			
	K. GUELSDOF	RF \$130.00	\$13.00	\$30.00	\$173.00			
	Required: Student Petition.							

DACKETBALL CHILLS & CTDATECIES 4 CDEDIT

STRENGTH & CONDITIONING THEORY & TECHNIQUES, PE-240 3 CREDITS

An overview of introductory exercise physiology, biomechanics, program design, and exercise techniques that prepares students to design and implement physical training programs and exercise for clients and athletes

OC HYB	PE-240-01	343319 W		11-11:50 AM		
1101	K MCHONE	\$390 00	\$39 00	\$0.00	\$429 00	

PE-270 SPORT AND EXERCISE PSYCHOLOGY, 3 CREDITS

The course is designed to provide students with the basic understanding and knowledge of psychological skills used to improve physical performance in themselves, peers, teammates, and athletes they coach. The course would be well-suited for athletes, coaches, or exercise leaders.

ONL NCT	PE-270-01	343321			
	K. MCHONE	\$390.00	\$39.00	\$0.00	\$429.00

PE-280 PHYSICAL EDUCATION/CWE, 2-6 CREDITS

Cooperative work experience. Provides students with on-the-job experience and training related to the Physical Education field. Covers job problems and procedures, evaluation of students' job performance by qualified college staff and site supervision. May be repeated for up to 12 credits. Required: Student Petition.

Corequisites: CWE-281

http://www.clackamas.edu/CWE-Students.aspx prior to registering. Corequisite: Take the following CWE-281-06.

ONL NCT

PH-121 **ASTRONOMY, 4 CREDITS**

Course No Course Title, Credits Section No

Instructor

PE-280-01

T. NELSON

A lab course including the history of astronomy, the Earth and moon, all planets in our solar system, along with asteroids, meteors and comets. Prerequisites: MTH-065 or MTH-098 with a C or better or placement in

Crs Reg.

343322

Days (M,T,W,TH.F,S,SU)

Fee

\$780.00 \$78.00 \$45.00

Tuition

Required: Student Petition. Review the registration process and complete the online application to the program at

Crs. Fee

Total

\$903.00V

MTH-095

Physics

Corequisites: PH-121L

Prerequisites: WRD-090 or placement in WRD-098

ONL LCT	PH-121-40	343329			
	C. SHARON	\$520.00	\$52.00	\$25.00	\$597.00
	Lab included.				

PH-121L ASTRONOMY LAB, 0 CREDIT

Lab course for PH-121L Corequisites: PH-121

ONL PH-121L-40 343332 C SHARON \$0.00 \$0.00 \$0.00 \$0.00

GENERAL ASTRONOMY, 4 CREDITS PH-122

A lab course including the properties of our sun, other stars and stellar evolution.

Prerequisites: PH-121 or GS-107 Corequisites: PH-122L

343333 PH-122-40

> \$520.00 \$52.00 \$20.00 C. SHARON \$592.00

GENERAL ASTRONOMY LAB, 0 CREDIT PH-122L

Lab course for PH-122 Corequisites: PH-122 PH-122L-40 343334

C. SHARON \$0.00 \$0.00 \$0.00 \$0.00

GENERAL PHYSICS, 5 CREDITS PH-202

A lab course covering electricity, magnetism, DC and AC circuits, and electromagnetic radiation.

Prerequisites: PH-201

Corequisites: PH-202L and PH-202S

ос	PH-202-01	343336 MW	11-12:20 PM		
	E. ALHATMI	\$650.00	\$65.00	\$50.00	\$765.00

PH-202L GENERAL PHYSICS LAB, 0 CREDIT

Lab course for PH-202

Corequisites: PH-202 and PH-202S

ос	PH-202L-01 34	3337 T		9-11:50 A	М
	E. ALHATMI	\$0.00	\$0.00	\$0.00	\$0.00
ос	PH-202L-02 34	7580 T		1-3:50 PM	
	E. ALHATMI	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Take	2 of the follow	wing PH-	202-01, PH-	202S-
	01.		-		
ос	PH-202L-03 34	3340 TH		1-3:50 PM	l
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	Course Title, Cr	edits	•				Course No	Course Title, Co	redits				
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T,\ Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
ос	PH-202L-04	343341	F		11-1:50 PM		ос	PH-212S-03	343354	F		2-2:50 PM	
	G. BOSTROM		\$0.00	\$0.00	\$0.00	\$0.00		G. BOSTROM		\$0.00	\$0.00	\$0.00	\$0.00
								Corequisite: Ta	ake 2 of t	he follow	ing PH-2	12-01, PH-21:	2-02,
PH-202S	GENERAL PH	YSICS S	SEMINA	R, 0 CRE	DIT			PH-212L-01, F	H-212L-	03, PH-2	12L-04.		

Seminar course for PH-202

Corequisites: PH-202 and PH-202L

PH-202S-01 343342 MW 12:25 -12:50 PM E. ALHATMI \$0.00 \$0.00 \$0.00 \$0.00

PH-212 **GENERAL PHYSICS WITH CALCULUS, 5 CREDITS**

A lab course covering electricity, magnetism, DC and AC circuits, and electromagnetic radiation.

Prerequisites: MTH-252Z and PH-211 Corequisites: PH-212L and PH-212S **Recommended Prerequisites: MTH-254**

OC PH-212-01 343343 MW 11-12:20 PM G. BOSTROM \$650.00 \$65.00 \$50.00 \$765.00 Corequisite: Take 2 of the following PH-212L-01, PH-212L-03, PH-212L-04, PH-212S-01, PH-212S-02, PH-212S-03, PH-212I -02

oc PH-212-02 343346 MW 1-2:20 PM G. BOSTROM \$650.00 \$65.00 \$50.00 \$765.00 Corequisite: Take 2 of the following PH-212L-01, PH-212L-03, PH-212L-04, PH-212S-01, PH-212S-02, PH-212S-03, PH-212L-02.

GENERAL PHYSICS WITH CALCULUS LAB, 0 CREDIT PH-212L

343347 T

Lab course for PH-212

oc

Corequisites: PH-212 and PH-212S PH-212L-01

E. ALHATMI

	Corequisite: Take 2 of the following PH-212-01, PH-212-02					
	PH-212S-01, PH-2	12S-02, PH-	-212S-03	•		
oc	PH-212L-02 347	579 T		1-3:50 PM	1	
	E. ALHATMI	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2	of the follo	wing PH-	212-01, PH-	-212-02,	
	PH-212S-01, PH-2	12S-02, PH-	-212S-03	•		
oc	PH-212L-03 343	348 TH		1-3:50 PM	Λ	
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2	of the follo	wing PH-	212-01, PH-	-212-02,	
	PH-212S-01, PH-2	12S-02, PH-	-212S-03			
oc	PH-212L-04 343	349 F		11-1:50 P	M	
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2	of the follow	wina PH-	212-01. PH-	-212-02.	

\$0.00

aviolate. Take 0 of the following DLI 010 01 DLI 010 00

GENERAL PHYSICS WITH CALCULUS SEMINAR, 0 PH-212S **CREDIT**

PH-212S-01, PH-212S-02, PH-212S-03.

Seminar course for PH-212

Corequisites: PH-212 and PH-212L

oc	PH-212S-01 343	11-11:50 AM			
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Take	2 of the follo	wing PH-2	212-01, PH-	212-02,
	PH-212L-01, PH-2	212L-03, PH-	212L-04.		
OC	PH-212S-02 34:	3353 TH		4-4:50 PM	1

G. BOSTROM \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 2 of the following PH-212-01, PH-212-02, PH-212L-01, PH-212L-03, PH-212L-04.

Political Science

PS-201 **AMERICAN GOVERNMENT AND POLITICS, 4 CREDITS**

Examines the founding principles of the American government, as well as the Constitution, the separation of powers, and the three branches of government, political parties and elections, and the role of interest groups and the media in the political process. In addition, assesses the growing power of the executive branch, the expansion and reach of the federal bureaucracy, governmental policies, and the civil liberties and civil rights of American citizens.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL NCT	PS-201-01	343359			
	J. HITE	\$520.00	\$52.00	\$0.00	\$572.00

PS-280 POLITICAL SCIENCE/CWE, 2-6 CREDITS (VAR)

Cooperative work experience. Provides students with on-the-job work experience in the field of political science. Required: Student Petition.

Corequisites: CWE-281

OC NCT	PS-280-01	343360			
	J. HITE	\$780.00	\$78.00	\$45.00	\$903.00V
	D. LOUGEE				
	Required: Stu	dent Petition. Cor	equisite:	Take the	following
	CWE-281-06				ŭ

PS-297 **INTRODUCTION TO ENVIRONMENTAL POLITICS, 4 CREDITS**

Explores and assesses the politics informing environmental policy; the tension between politics, policy and scientific expertise; the role of the legislative, executive, and judicial branches of government in crafting and implementing environmental policy; and the critical impact nongovernmental institutions and pressure groups have on environmental policy development and outcomes.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ONL LCT	PS-297-01	343363			
	J. HITE	\$520.00	\$52.00	\$0.00	\$572.00

Psychology

PSY-101 HUMAN RELATIONS, 3 CREDITS

Focuses on developing skills and strategies necessary to build and maintain successful personal and professional relationships. Applies psychological principles to understanding relationships with ourselves and others in social, workplace, and digital contexts. Includes an overview of basic psychology principles in addition to skill development in the following areas: dealing with emotions, interpersonal communication, developing close relationships, resolving conflicts, and managing stress. Includes individual and group activities, lecture, and discussions with an emphasis on student participation.

Recommended Prerequisites: WRD-090 or placement in WRD-098

OC NCT PSY-101-01		343365 TTH		10-11:20 A	AM
	E. SAUBER	\$390.00	\$39.00	\$0.00	\$429.00
HAR	PSY-101-02	343374 MW		1-2:20 PM	
	J. VELEZ	\$390.00	\$39.00	\$0.00	\$429.00
ONL NCT	PSY-101-03	343373			
	M. MALLATT	\$390.00	\$39.00	\$0.00	\$429.00

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

9-11:50 AM

. **. . .**

\$0.00

\$0.00 \$0.00

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class

Course No	Course Title, Co	redits				
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition	/,TH.F,S,SU) Fee	Time Crs. Fee	Total
ONL NCT	PSY-101-04	343372	= .			
	M MALLATT		\$390.00	\$39.00	\$O OO	\$429 00

PSY-201Z INTRODUCTION TO PSYCHOLOGY I, 4 CREDITS

Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Research Methods, Behavioral Neuroscience, Consciousness, Sensation/Perception, Learning, Memory, Thinking and Intelligence, and

Recommended Prerequisites: WRD-090 or placement in WRD-098

OC NCT	PSY-201Z-01	343377 TTH		8-9:50 AM	
	J. KISSLER	\$520.00	\$52.00	\$0.00	\$572.00
OC NCT	PSY-201Z-02	343379 TTH		10-11:50 A	Μ
	J. KISSLER	\$520.00	\$52.00	\$0.00	\$572.00
ONL	PSY-201Z-03	343381			
	S. TOBIN	\$520.00	\$52.00	\$0.00	\$572.00

PSY-202Z INTRODUCTION TO PSYCHOLOGY II, 4 CREDITS

Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Personality, Social Psychology, Health and Well-Being, Motivation and Emotion, Disorders, Therapies, Lifespan Development, and related

Recommended Prerequisites: WRD-090 or placement in WRD-098

OC NCT	PSY-202Z-01 34338	33 MW		1-2:50 PM	
	I. MANCINELLI-	\$520.00	\$52.00	\$0.00	\$572.00
	FRANCONI				
ONL NCT	PSY-202Z-02 34338	35			
	J. KISSLER	\$520.00	\$52.00	\$0.00	\$572.00

PSY-215 INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY, 4 **CREDITS**

Research and theories regarding the development of the individual from conception to death, including physical, social and cognitive changes.

Prerequisite or Corequisite: WRD-098 or placement in WR-121Z Recommended Prerequisite or Corequisite: FYE-101

HAR	PSY-215-01	343396	MW		10-11:50 A	M
	J. VELEZ		\$520.00	\$52.00	\$0.00	\$572.00
ос нув	PSY-215-02	347514	Т		1-2:50 PM	
	S. KISER		\$520.00	\$52.00	\$0.00	\$572.00
ONL NCT	PSY-215-03	343387				
	I. MANCINELL	.l-	\$520.00	\$52.00	\$0.00	\$572.00
	FRANCONI					
ONL NCT	PSY-215-04	343390				
	T. THOMAS		\$520.00	\$52.00	\$0.00	\$572.00
ONL	PSY-215-05	343392				
	K. KRASKA		\$520.00	\$52.00	\$87.25	\$659.25
	Online textboo	k include	ed in secti	ion fees.		

PSY-219 **INTRODUCTION TO PSYCHOLOGICAL DISORDERS, 4** CREDITS

Introduction to clinical psychology, including common mental health concerns and approaches to treatment.

Prerequisite or Corequisite: WRD-098 or placement in WR-121Z

OC NCT	PSY-219-01	343397 MW		8-9:50 AM	
	E. SAUBER	\$520.00	\$52.00	\$0.00	\$572.00
OC NCT	PSY-219-02	343399 TTH		1-2:50 PM	
	E. SAUBER	\$520.00	\$52.00	\$0.00	\$572.00
ONL	PSY-219-03	343400			
	S. KISER	\$520.00	\$52.00	\$0.00	\$572.00

Introduction to research and theories of human sexual behavior, including: sexual relationships, communication and intimacy, sex roles, the development of gender, social trends regarding sexuality, human sexual response, biology of sexuality, and conception.

Days (M,T,W,TH.F,S,SU)

Tuition

Crs. Fee

Total

Prerequisite or Corequisite: WRD-098 or placement in WR-121Z

Crs Reg.

OC NCT	PSY-231-01	343404 MW	10-11:50 AM		50 AM
	E. SAUBER	\$520.00	\$52.00	\$0.00	\$572.00

PSY-280 PSYCHOLOGY/CWE, 2-6 CREDITS (VAR)

Cooperative work experience. This course allows students to engage in real-world learning and apply their academic knowledge in the field of psychology. Required: Student Petition.

Corequisites: CWE-281

PSY-280-01 343406

Course No Course Title, Credits Section No

Instructor

J. KISSLER \$780.00 \$78.00 \$45.00 Required: Student Petition. Corequisite: Take the following CWE-281-06.

Religion

R-103 **ASIAN RELIGIONS, 4 CREDITS**

An introduction to the history, ideas, and philosophy of Asian religions including Hinduism, Buddhism, Jainism, Sikhism, Taoism, Confucianism, and Shintoism. Examine Asian religions' impact on contemporary culture.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL	R-103-01	343409			
	J. SHELTON	\$520.00	\$52.00	\$0.00	\$572.00

R-211 HISTORY OF THE OLD TESTAMENT, 4 CREDITS

An introduction to the Old Testament/Tanakh that covers the early developments of the Hebrew community: Patriarchs, Abraham, Moses, and Sinai. Examines Old Testament monarchy, prophets, and wisdom literature. Examines modern theories of biblical interpretation.

Recommended Prerequisites: WRD-090 or placement in WRD-098

ONL	R-211-01	343411			
	J. SHELTON	\$520.00	\$52.00	\$0.00	\$572.00

R-280 **RELIGION/CWE, 2-6 CREDITS (VAR)**

Cooperative work experience. Provides students with on-the-job work experience in the field of religion. Required: Student Petition.

Corequisites: CWE-281

OC NCT	R-280-01	343413			
	D. LOUGEE	\$780.00	\$78.00	\$45.00	\$903.00V
	J. SHELTON				
	Required: Stu	dent Petition. Core	equisite:	Take the	following
	CWE-281-06.		•		ŭ

Renewable Energy Technology

All degree seeking students should arrange to speak to a faculty advisor prior to registering. Call 503-594-3318 for more information, or contact Advising, 503-594-3475.

RENEWABLE ENERGY SYSTEMS, 2 CREDITS RET-200

INTRODUCTION TO HUMAN SEXUALITY, 4 CREDITS PSY-231

Campus Locations: HAR: Harmony Community Campus

OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No Course Title, Credits						Course No	Course Title, Cı	edits					
	Section No	Crs Reg.	Days (M,T,V	V,TH.F,S,SU)	Time			Section No	Crs Reg.		W,TH.F,S,SU)	Time	
	Instructor		Tuition	Fee	Crs. Fee	Total		Instructor		Tuition	Fee	Crs. Fee	Total

This course provides a survey of various renewable energy systems. Participants will learn about the benefits and limitations of each type of energy source as well as their functional principles. Students will participate in several field learning exercises related to energy systems. The intended audiences are technical students wishing to explore the Renewable Energy field and students from the humanities and social sciences wanting a better understanding of this socially important technology.

ос	RET-200-01	343355 MW	9-10:20 AM		
	S. PAVEY	\$260.00	\$26.00	\$87.50	\$373.50

RET-215 RENEWABLE ENERGY IV: SYSTEMS DESIGN, 3 CREDITS

This fourth course in the series will concentrate on systems design for renewable energy applications. Students will work together and apply concepts to evaluate, design and select one or more renewable energy systems for solar, wind or micro-hydro installations. Topics will include site surveys, structural elements, electrical generators, energy storage and electrical inversion.

Prerequisites: RET-213

ОС	RET-215-01	343362 TTH	9-11:50 AM		
	S. PAVEY	\$390.00	\$39.00	\$131.25	\$560.25

RET-280 RENEWABLE ENERGY/CWE, 1-12 CREDITS

Cooperative work experience. Major emphasis on work-based learning experience in the renewable energy field. Coordination of instruction and evaluation of student job performance will be provided by college faculty in conjunction with the student's employer/supervisor. Required: Student Petition.

Corequisites: CWE-281

ONL RET-280-01 343364

C. CONNORS \$1,560.0 \$156.00 \$570.00 \$2,286.00V

0

Required: Student Petition. Corequisite: Take the following CWE-281-06.

0112 201 00.

Small Business Development Center

Registration for these workshops does not require college admission. E-mail <u>bizcenter@clackamas.edu</u> for online registration instructions.

For more information on these classes or other questions regarding your small business needs, contact the Small Business Development Center (SBDC) at 503-594-0738.

Website: www.oregonsbdc.org/clackamas

SBM-010 REAL ESTATE BROKER LICENSE, 0 CREDIT

Prepares students to qualify for the Oregon Real Estate Broker's License exam by studying statutes, rules and anti-discrimination laws pertaining to the licensing and professional real estate activity required by all licensees of the State of Oregon.

REM	SBM-010-	347603 TH	6-9:00 PM	
	01WI	S	9-5:00 PM	
	TBA			

SBM-011 PROPERTY MANAGEMENT PRE-LICENSE, 0 CREDIT

Prepares students to qualify for the Oregon Real Estate Property Management License exam by studying laws and statutes pertaining to the licensing and professional property management activity required by all licensees of the State of Oregon.

REM	SBM-011-	347604 T	6-8:00 PM
	01WI		
	TBA		

SBM-020 LAUNCH & GROW: SMALL BUSINESS BASICS, 0 CREDIT

Two-term intensive training program designed to assist entrepreneurs in planning their business startups, and to develop existing businesses to make them more profitable and to create jobs. Students do extensive individual work on developing business plans with counseling from instructor. Greenhouse small business management.

			-
REM	SBM-020- 05WI	347605 T	6:30 -9:30 PM
REM	J. SELBY SBM-020- 06WI	347606 T	6:30 -9:30 PM
REM	J. SELBY SBM-020-	347607 T	6:30 -9:30 PM
REM	07WI J. SELBY SBM-020-	347608 T	6:30 -9:30 PM
	08WI J. SELBY		

SBM-024A EXIT SMART: RETIRING WITH SELLING & SUCCESSION STRATEGIES, 0 CREDIT

Learn how to harvest your small farm business, not just your crops. Succession planning in small farm ownership is a critical and complex 3-10 year process that, when done properly, helps farmers maximize their return on their farm investment so they can reach their long-term goals in retirement. This hands-on, 3 month program is designed to teach farmers and individuals who want to buy a farm, how to make it happen. Course consists of monthly class meetings, individual business counseling, peer networking, and work in/on the business.

HAR HYB	SBM-024A- 01WI D. TOURNEY	347660 TH	1-4:00 PM
HAR HYB	SBM-024A- 02WI	347661 TH	1-4:00 PM
HAR HYB	D. TOURNEY SBM-024A- 03WI D. TOURNEY	347662 TH	1-4:00 PM

SBM-028A CONTRACTOR ESSENTIALS MANAGEMENT - PART 1, 0

Provides information on starting and growing a successful construction business. Teaches students marketing techniques, estimating methods, tax strategies and recordkeeping. Discusses best practices of working with subcontractors and hiring and managing employees.

ONL SBM-028A- 347663 01WI D. TOURNEY

SBM-028B CONTRACTOR ESSENTIAL MANAGEMENT - PART 2, 0 CREDIT

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Cou	Course No Course Title, Credits						Course No	Course Title, Credits						
		Section No Instructor	Crs Reg.	Days (M,T,) Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
bus	Provides information on starting and growing a successful construction business. Teaches students marketing techniques, estimating methods,					nethods,	REM	SBM-031A- 01WI	347673	Т		6:30 -8:00 P	М	
tax	tax strategies and recordkeeping. Discusses best practices of working								D. TOURNEY					

with subcontractors and hiring and managing employees. ONL SBM-028B-347664 02WI D. TOURNEY

ONL SBM-028B-347665 03WI

D. TOURNEY

SBM-029A NEXT LEVEL CONTRACTING: ADVANCED BUSINESS STRATEGIES FOR CONTRACTORS - PART 1, 0 CREDIT

Provides information on continuing to grow a successful construction business. Teaches students technology and software options and intermediate marketing techniques and strategies. Discusses construction math and conversions.

REM	SBM-029A-	347668	W	6:30 -8:00 PM
	01WI			
	D. TOURNEY			

SBM-029B NEXT LEVEL CONTRACTING: ADVANCED BUSINESS STRATEGIES FOR CONTRACTORS - PART 2, 0 CREDIT

Provides information on continuing to grow a successful construction business. Teaches students technology and software options and intermediate marketing techniques and strategies. Discusses construction math and conversions.

REM	SBM-029B-	347670 W	6:30 -8:00 PM
	02WI		
	D TOURNEY	/	

SBM-029C NEXT LEVEL CONTRACTING: ADVANCED BUSINESS STRATEGIES FOR CONTRACTORS - PART 3, 0 CREDIT

Provides information on continuing to grow a successful construction business. Teaches students about payroll and benefits and registering for government contracts in the construction industry. Discusses long term business planning.

REM	SBM-029C-	347671	W	6:30 -8:00 PM
	03WI			
	D. TOURNEY			

PROFITABILITY & RESILIENCY SMALL BUSINESS SBM-030 **MANAGEMENT, 0 CREDIT**

Provides education for assessment of existing business model, diagnosis of the business and a prescriptive action plan to improve the business. Teaches students to research, study and apply content learned in class.

REM	SBM-030-	347666	T	6:30 -8:00 PM
	01WI			
	D. TOURNEY			

SBM-031A SCOREBOARDS IN BUSINESS - PART 1, 0 CREDIT

Your scoreboard appears on financial statements in your business: Balance Sheet, Income Statement (Profit & Loss) and Statement of Cash Flows. There are key metrics that run your business. Explore each statement and gain great information to work effectively with your staff, customers, vendors, banks, and your accountant. Learn what the scoreboard is telling you and others. This is not a highly technical class it's practical and will be a guide.

SBM-031B SCOREBOARDS IN BUSINESS - PART 2, 0 CREDIT

Your scoreboard appears on financial statements in your business: Balance Sheet, Income Statement (Profit & Loss) and Statement of Cash Flows. There are key metrics that run your business. Explore each statement and gain great information to work effectively with your staff, customers, vendors, banks, and your accountant. Learn what the scoreboard is telling you and others. This is not a highly technical class it's practical and will be a guide.

REM	SBM-031B-	347674 T	6:30 -8:00 PM
	02WI		
	D. TOURNEY		

SBM-031C SCOREBOARDS IN BUSINESS - PART 3, 0 CREDIT

Your scoreboard appears on financial statements in your business: Balance Sheet, Income Statement (Profit & Loss) and Statement of Cash Flows. There are key metrics that run your business. Explore each statement and gain great information to work effectively with your staff, customers, vendors, banks, and your accountant. Learn what the scoreboard is telling you and others. This is not a highly technical class it's practical and will be a guide.

REM	SBM-031C-	347675 T	6:30 -8:00 PM
	03WI		
	D. TOURNEY		

XSBM-**GOING INTO BUSINESS, 0 CREDIT** 0003

Going Into Business orientation introduces the steps you need to take to start-up and successfully operate a small business in Oregon. Before you go too far, find out what it takes to start up your own business. This workshop will help you assess whether business ownership is the right path for you. Discover what resources are available to you for researching, starting-up, financing, and managing your new business.

REM	XSBM-0003- 01WI	347585 TH	6:30 -9:30 PM
REM	J. SELBY XSBM-0003- 02WI	347586 TH	6:30 -9:30 PM
REM	J. SELBY XSBM-0003-	347587 TH	6:30 -9:30 PM
	03WI J. SELBY		

XSBM-**GOING OUT OF BUSINESS, 0 CREDIT** 0005

This is a class that helps a business owner begin understanding steps involved in transitioning their business. There are many considerations both for the owner, family members/heirs, employees, customers and vendors as well as the community.

REM	XSBM-0005- 01WI	347588	TH	6:30 -8:30 PM
REM	D. TOURNEY XSBM-0005- 02WI	347609	тн	6:30 -8:30 PM
REM	D. TOURNEY XSBM-0005-	347610	тн	6:30 -8:30 PM
	03WI D. TOURNEY			

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text

Course No Course Title, Credits					Course No	Course Title, C	redits						
	Section No Instructor	Crs Reg.	Days (M,T,) Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total

XSBM- PREPARING FOR THE CCB EXAM, 0 CREDIT 0010

This class will prepare students to qualify for and successfully pass the Construction Contractors Board (CCB) exam required for contractor certification in Oregon. The class is taught by a certified CCB education provider and fulfills the CCB pre-exam educational requirement as stipulated under Oregon Revised Statute 701.280.

HAR	XSBM-0010- 30WI O. FERRER	347597 THF	8-5:00 PM
HAR	XSBM-0010- 31WI O. FERRER	347598 TTH	8-5:00 PM
HAR	XSBM-0010- 32WI O. FERRER	347599 THF	8-5:00 PM
HAR	XSBM-0010- 33WI TBA	347600 THF	8-5:00 PM
HAR	XSBM-0010- 34WI TBA	347601 THF	8-5:00 PM
HAR	XSBM-0010- 35WI TBA	347602 THF	8-5:00 PM

XSBM- QUICKBOOKS PRO: PART I, 0 CREDIT 0011

Learn how to set up and use QuickBooks. Students enter company, customer and vendor information, produce invoices, accept payments, make deposits and pay bills using QuickBooks.

HAR	XSBM-0011-	347594	W	6-9:00 PM
	22WI			
	C. WEESNER			

XSBM- QUICKBOOKS PRO: PART II, 0 CREDIT 0012

In this continuation class, topics include creating and customizing forms and reports, basic job costing, memorizing transactions and reconciling bank and credit card statements.

HAR	XSBM-0012- 22WI	347595 S	9-5:00 PM
	C WEESNEE	}	

CONSTRUCTION BUSINESS FUNDAMENTALS: ACCURATE ESTIMATING & FINANCIAL RECORDS, 0

CREDIT

This class is designed to help those students who have successfully completed the Proporting for the CCR Event class as in a basic

completed the Preparing for the CCB Exam class gain a basic understanding of recordkeeping and entry level estimating practices.

ONL XSBM-0024- 347596 40WI D. TOURNEY

Social Science

XSBM-

0024

SSC-160 FAITH & REASON, 4 CREDITS

An introduction of how personal concepts of faith & reason and institutions of science & religion shape personal intellectual landscapes. Examines classical philosophy, sacred texts, worldviews, modern fiction, poetry, theology, cosmology, and evolutionary biology.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ONL SSC-160-01 343444 J. SHELTON \$520.00 \$52.00 \$0.00 \$572.00

Sociology

SOC-204Z INTRODUCTION TO SOCIOLOGY, 4 CREDITS

Introduces the central concepts, theories, and methods that define the sociological approach to investigating the social forces that shape our lives. Topics may include social structure, culture, socialization, race, class, gender, sexuality, and inequality.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC HYB	SOC-204Z-01	343416 TH	AM		
	E. PFEIFER	\$520.00	\$52.00	\$0.00	\$572.00
OC HYB	SOC-204Z-02	343417 W		1-2:50 PM	
	E. PFEIFER	\$520.00	\$52.00	\$0.00	\$572.00

SOC-205Z SOCIAL CHANGE AND INSTITUTIONS, 4 CREDITS

Sociological analysis of social institutions, such as family, education, health care, the economy, and the state. Includes an examination of connections among institutions and their impact on patterns of inequality and individual outcomes. Examines the forces and dynamics behind social change, such as social movements, culture, economic forces, technologies, and the environment.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ONL LCT SOC-205Z-01 343424

J. LOVELESS \$520.00 \$52.00 \$0.00 \$572.00

SOC-206Z SOCIAL PROBLEMS, 4 CREDITS

Applies the sociological perspective to the study of social problems, including their social construction, causes, and consequences. Explores the complexities surrounding their solutions, such as how solutions are socially constructed and policy proposals from sociologists and social movements. Topics may include poverty, discrimination, interpersonal violence, crime, addiction, ecological crises, war/global conflict, and health inequality.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC HYB	SOC-206Z-01	343429 W		10-11:50 A	M
	E. PFEIFER	\$520.00	\$52.00	\$0.00	\$572.00
OC HYB	SOC-206Z-02	345539 TH		1-2:50 PM	
	E. PFEIFER	\$520.00	\$52.00	\$0.00	\$572.00

SOC-207 SOCIAL STRATIFICATION & SOCIAL SYSTEMS, 4 CREDITS

This course explores the inequality that exists in our society. Social stratification is the unequal distribution of resources and opportunities in a society. Issues like gender, race, poverty, education and capitalism will be explored and discussed in an attempt to understand their impact on the inequality that we experience in our society. Various sociological theories will be introduced and utilized to explore and enhance our understanding of these issues.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ONL LCT SOC-207-01 345332 J. LOVELESS \$520.00 \$52.00 \$0.00 \$572.00

SOC-210 MARRIAGE, FAMILY, & INTIMATE RELATIONS, 4 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings)
HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text

Course No Course Title, Credits Course No Course Title, Credits Days (M,T,W,TH.F,S,SU) Section No Crs Reg. Time Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

This course will introduce students to the study of marriage, intimate relations and family systems from the sociological viewpoint. Students will examine the ways in which race, class, gender, sexuality, community, and society influence patterns of courtship, intimate relations, marriage, and family, and explore the various challenges facing families today.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

SOC-210-01 343426

> J. LOVELESS \$520.00 \$52.00 \$0.00 \$572.00

SOC-280 SOCIOLOGY/CWE, 2-6 CREDITS (VAR)

Cooperative work experience. This course allows students who are already working in the field of sociology to earn college credit for that work. Required: Student Petition.

Corequisites: CWE-281

SOC-280-01 OC NCT

E. PFEIFER \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

Statistics

ELEMENTARY STATISTICS I, 4 CREDITS STAT-243Z

A first course in statistics focusing on the interpretation and communication of statistical concepts. Introduces exploratory data analysis, descriptive statistics, sampling methods and distributions, point and interval estimates, hypothesis tests for means and proportions, and elements of probability and correlation. Technology will be used when

Prerequisites: MTH-105Z or MTH-111Z with a C or better, or placement in STAT-243Z

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	STAT-243Z-01 34344	5 MW		10-11:50	AM
	M. YANNOTTA	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	STAT-243Z-02 34344	7 MW		1-2:50 PM	1
	T. BIEBER	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	STAT-243Z-03 34344	9 TTH		1-2:50 PM	1
	T. BIEBER	\$520.00	\$52.00	\$20.00	\$592.00
ONL NCT	STAT-243Z-10 34345	1			
	K. AMREIN	\$520.00	\$52.00	\$20.00	\$592.00

Theatre Arts

TA-102 **APPRECIATION OF THEATRE, 4 CREDITS**

Students will be introduced to the many aspects of theatre arts at an intermediate level by attending multiple area productions. Plays will be reviewed and evaluated through writing assignments and discussions.

Recommended Prerequisites: TA-101 and WRD-098 or placement in WR-121Z

ONL TA-102-01 347630

> \$520.00 \$52.00 \$110.00 A. MOON \$682.00

FUNDAMENTALS OF TECHNICAL THEATRE, 4 CREDITS TA-112

Second class of a three-part series. Intermediate study and practice in techniques of mounting various types of productions for presentation. Includes basic principles and techniques in stage design, construction, and lighting. Flexible laboratory sessions available. Students must attend a performance as well as participate in the focus and strike (10 total hours) of a production. Students are required to maintain an independent journal/study (12 total hours) of outside class activity and observations of Technical Theatre applications.

TA-112-01 342421 TTH 1-3:50 PM C. WHITTEN \$520.00 \$52.00 \$35.00 \$607.00

COSTUMING II, 3 CREDITS TA-122

Second in a three-part series. Study and practice in theatrical costuming techniques for various types of live theatrical productions. Students will analyze scripts, research historical background, and study period fashion to develop character wardrobes. This is a project-based course where students will construct and tailor costume and prop pieces for cast members. No experience necessary; limited seats.

Recommended Prerequisites: TA-121

OC LCT TA-122-01 342430 MW 10-12:50 PM A. MCFARLAND \$390.00 \$39.00 \$0.00 \$429 00

TA-142 **ACTING II, 4 CREDITS**

Further studies the methods, techniques, and theories of acting as an art form. Workshop, discussion, and performance of exercises and monologues/scenes from dramatic literature with written assignments to include response and analysis papers. Intermediate work on vocal, physical, and script analysis skills with special focus on language. Second in a series.

Recommended Prerequisites: TA-141 and WRD-098 or placement in WR-121Z

OC LCT TA-142-01 342434 MW 10-11:50 AM A. MOON \$520.00 \$52.00 \$35.00 \$607.00

TA-153 THEATRE REHEARSAL & PERFORMANCE, 1-3 CREDITS

Training in theatre production through intensive study and rehearsal of scenes and plays for public performance. May be repeated for up to 6 credits. Required: Student Petition.

Required: Successful audition/interview

Recommended Prerequisites: TA-141 and TA-142, or TA-143; or TA-111 and TA-112, or TA-113

OC LCT TA-153-01 342440 MWF 3-5:50 PM A. MOON \$390.00 \$39.00 \$25.00 \$454.00V Required: Student Petition.

TA-195 STUDENT PERFORMANCE SHOWCASE, 1-3 CREDITS (VAR)

Training in special forms of theatrical presentation through in-class intensive preparation, study, and program development for public presentation, including comedy improvisation, stand-up comedy, and student directed one-act plays. Roles in one-act plays require a successful audition. Other opportunities open to all. May be repeated for up to 6 credits.

OC LCT TA-195-01 342446 MWF 12-2:50 PM M. MAZZA \$390.00 \$39.00 \$35.00 \$464,00V A. MOON

C. WHITTEN

Meets: One-Acts 12-2:50pm, Writing for Theatre 12-1:30pm M/W, Singing for Theatre 12-2:50pm F.

Campus Locations:

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department first class VAR: Variable credit class ESPAÑOL: Enseñado en español LCT: Low-Cost Text

Course No Course Title, Credits Course No Course Title, Credits Crs Reg. Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Section No Days (M,T,W,TH.F,S,SU) Crs. Fee Instructor Crs. Fee Total Instructor Tuition Total

TA-212 TECHNICAL THEATRE STUDY, 4 CREDITS

Second class of a three part series. Comprehensive study and practice in presentational graphics, scene design, lighting design and chromatics. The full creative process of staging a production will be explored through aesthetic research and design projects. Includes hands-on participation in CCC's main stage productions. Students must attend a performance as well as participate in the focus and strike (10 total hours) of a production. Students are required to maintain a journal/study (12 total hours) of outside class activities and observing Technical Theatre applications.

Prerequisites: TA-111, TA-112, and TA-113

Recommended Prerequisites: WRD-098 or placement in WR-121Z

TA-212-01 342451 TTH 1-3:50 PM C. WHITTEN \$520.00 \$52.00 \$35.00 \$607.00

TA-253 THEATRE REHEARSAL & PERFORMANCE, 1-3 CREDITS

Intermediate training in theatre production through intensive study and rehearsal of scenes and plays for public performance. May be repeated for up to 6 credits. Required: Student Petition.

Required: Successful audition/interview **Recommended Prerequisites: TA-153**

OC LCT TA-253-01 342454 MWF 3-5:50 PM

A. MOON \$390.00 \$39.00 \$25.00 \$454.00V

Required: Student Petition.

THEATRE/CWE, 2-6 CREDITS (VAR) TA-280

Cooperative work experience. Provides students with a learning experience related to course of study and career goal. Major emphasis will be given to on-the-job experience and training. Required: Student

Corequisites: CWE-281

OC LCT TA-280-01 342458

C. WHITTEN \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

STUDENT PERFORMANCE SHOWCASE, 1-3 CREDITS TA-295 (VAR)

Training in special forms of theatrical presentation through in-class intensive preparation, study, and program development for public presentation, including comedy improvisation, stand-up comedy, and student directed one-act plays. Roles in one-act plays require a successful audition. Other opportunities open to all. May be repeated for up to 6 credits.

TA-295-01 342464 MWF OC LCT 12-2:50 PM M. MAZZA \$390.00 \$39.00 \$35.00 \$464.00V A. MOON

C. WHITTEN

Meets: One-Acts 12-2:50pm, Writing for Theatre 12-1:30pm M/W, Singing for Theatre 12-2:50pm F.

XATH-PLAYS & REHEARSALS, 0 CREDIT 0001

Training in theatre production through intensive study and rehearsal of scenes and plays for public performance.

XATH-0001-01 347628 MWF 3-5:50 PM OC A. MOON \$0.00 \$35.00 \$0.00 \$35.00

XATH-STAGECRAFT, 0 CREDIT 0002

Training in special forms of theatrical presentation through in-class intensive preparation, study and program development for public presentation to the community.

XATH-0002-01 347629 MWF 3-5:50 PM A MOON \$0.00 \$35.00 \$35.00

Water & Environmental Technology

WET-020 WASTEWATER OPERATIONS II, 3 CREDITS

For professional upgrade only. Does not meet the requirements for the certificate or degree. Secondary wastewater treatment alternatives with municipal application. Fixed and suspended film systems and clarification process. Includes biological sludge treatment.

Prerequisites: WET-010

WET-020-01 343369 M 6-8:50 PM M. LAFORCE \$390.00 \$39.00 \$15.00 \$444.00 Remote options available with this section.

WET-021 WATERWORKS OPERATIONS II, 3 CREDITS

For professional upgrade only. Does not meet the requirements for the certificate or degree. Basic hydrology, ground water and surface water sources, well construction and operation, introduction to water chemistry, waterworks hydraulics, and fundamentals of pumps and pumping.

J. NURMI \$390.00 \$39.00 \$15.00 \$444.00 Remote options available with this section.

CROSS-CONNECTION CONTROL PROGRAM SPECIALIST, 3 CREDITS

Specialized training for those who want to be involved in administering cross-connection control programs. Elements of a cross-connection control program, basic hydraulics, state specific regulations, identifying possible cross-connections and site surveys in order to determine proper type of backflow protection, if needed.

WET-108-01 343375 MTWTH 8-4:50 PM J. NURMI \$390.00 \$39.00 \$0.00 \$429.00 Meets: 3/16-3/19.

WET-109 **BACKFLOW ASSEMBLY OPERATION AND TESTING, 4** CREDITS

Lecture course with hands on activities that focuses on backflow assembly hydraulics, operations, installation, and testing

WET-109-01 343378 MTWTHF M. LAFORCE \$520.00 \$52.00 \$0.00 \$572.00 Required: Student Petition. Meets: 3/16-3/20.

WASTEWATER OPERATIONS II, 3 CREDITS

Secondary wastewater treatment alternatives with municipal application. Fixed and suspended film systems with the associated clarification process will be presented.

Corequisites: MTH-082C Prerequisites: WET-110

WET-120-01 343380 M 6-8:50 PM M. LAFORCE \$390.00 \$39.00 \$15.00 \$444.00 Remote options available with this section

WET-121 WATERWORKS OPERATIONS II, 3 CREDITS

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

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Other Coding Translations:

TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

Course No Course Title, Credits					Course No	Course Title, C	redits						
	Section No	Crs Reg.	Days (M,T,	N,TH.F,S,SU)	Time			Section No	Crs Reg.	Days (M,T,	W,TH.F,S,SU)	Time	
	Instructor		Tuition	Fee	Crs. Fee	Total		Instructor		Tuition	Fee	Crs. Fee	Total

An introduction to water distribution, with a focus on water regulations, operator math, water chemistry, and specific water distribution processes. Also examines distribution system design, water mains, hydrants and valves, water pumps, water system supply security, and public relations. Everything you need to know to pass the water distribution grade 1 state certification.

Corequisites: MTH-082D Prerequisites: WET-111

WET-121-01 343382 T 6-8:50 PM J. NURMI \$390.00 \$39.00 \$15.00 \$444.00 Remote options available with this section.

WATER DISTRIBUTION AND WASTEWATER WET-122 **COLLECTION SYSTEMS, 3 CREDITS**

Elementary engineering aspects of water distribution and wastewater collection systems. System components, construction materials, pump station design, maintenance, operations, and other related topics.

Prerequisites: WET-110 Corequisites: WET-120

343384 T WET-122-01 12:30 -3:20 PM \$390.00 \$39.00 \$15.00 M. LAFORCE \$444.00

Remote options available with this section.

WET-123 ENVIRONMENTAL CHEMISTRY I, 3 CREDITS

Theory and applied laboratory techniques for testing water and wastewater. Students will test wastewater for NPDES required tests.

Corequisites: WET-123L

OC LCT	WET-123-01	343386 M		12-1:50	PM
	M. LAFORCE	\$390.00	\$39.00	\$50.00	\$479.00
ос	WET-123-02	343388 W		12-1:50	PM
	M. LAFORCE	\$390.00	\$39.00	\$50.00	\$479.00

WET-123L ENVIRONMENTAL CHEMISTRY I LAB, 0 CREDIT

Lab course for WET-123 Corequisites: WET-123

OC LCT	WET-123L-01	343389 M		2-4:50 PM	
	M. LAFORCE	\$0.00	\$0.00	\$28.00	\$28.00
oc	WET-123L-02	343391 W		2-4:50 PM	
	M. LAFORCE	\$0.00	\$0.00	\$28.00	\$28.00

WET-135 HIGH PURITY WATER PRODUCTION II, 4 CREDITS

A lab course focusing on the operation of equipment and unit processes in the production of high purity water. Emphasis on process equipment sizing and design, process control and troubleshooting.

Prerequisites: WET-125 and MTH-082E

REM	WET-135-01	343393 M	1-3:50 PM	
		M	4-6:50 PM	
	G CARR	\$520.00	\$52.00 \$0.00	\$572.00

WET-180 WATER & ENVIRONMENTAL PROJECTS I, 5 CREDITS

Cooperative work experience. Practical work experience in a municipal industrial treatment, distribution, or collection system. Placement in consulting firms, federal and state regulatory agencies, BLM, BPA, and other regulated governmental organizations.

Corequisites: CWE-281

ONL LCT WET-180-01 343395

> M. LAFORCE \$650.00 \$65.00 \$45.00 \$760.00 Required: Student Petition. Corequisite: Take the following

CWE-281-01.

Campus Locations: Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class

WATER & ENVIRONMENTAL PROJECTS II, 5 CREDITS WET-280

Cooperative work experience. Practical work experience in a municipal industrial treatment, distribution, or collection system. Placement in consulting firms, federal and state regulatory agencies, BLM, BPA, and other regulated governmental organizations. Practical experience in a municipal, public or private wastewater treatment facility of specific activated sludge design. Process loading criteria, data acquisition and trend charting, and relevant sanitary process strategies will be addressed

Corequisites: CWE-281

ONL LCT WET-280-01 343398

> \$650.00 \$65.00 \$45.00 M. LAFORCE \$760.00 Required: Student Petition. Corequisite: Take the following

CWE-281-01.

XWET-1-DAY CROSS CONNECTION SPECIALIST UPDATE, 0.70 C001 **CEUS**

Update on code information or any changes in the program.

OC LCT	XWET-C001-	343598 F		8-3:50 PM	
	J. NURMI	\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 3/6. Re	egister on www.co	cc-wet.ev	entbrite.com.	

XWET-1-DAY TESTER RENEWAL, 0.70 CEUS C002

Update on OARs and hands on testing to recertify student for backflow assembly certification through the State of Oregon.

OC LCT	XWET-C002-	343599 F		8-4:50 PM	
	M. LAFORCE	\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 2/6. Reg	gister at https://c	cc-wet.ev	entbrite.com/.	
ОС	XWET-C002-	343600 F		8-4:50 PM	
	12				
	M. LAFORCE	\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 3/6. Reg	gister at https://c	cc-wet.ev	ventbrite.com/.	

XWET-2-DAY TESTER RETRAIN/RENEWAL, 1.40 CEUS C003

Review of backflow prevention assemblies used for water/wastewater system cross connection control. Review will include overview of hydraulics and degree of hazards, proper backflow installation procedures, and approved testing/troubleshooting procedures. Students will learn to identify common, actual, and potential cross connection hazards; students will be introduced to the basic requirements for carrying out a cross connection program. Upon successful hands on and written exam completion, students will be issued certificate of completion by OBT/CCC and transcripted for appropriate number of CEUs. Students will be able to apply to Oregon Health Department for recertification by that agency.

ос	XWET-C003- 21	343601	THF		8-4:50 PM	
	M. LAFORCE		\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 1/15 & wet.eventbrite		egister at l	https://cc	C-	
ос	XWET-C003- 22	343602	THF		8-4:50 PM	
	M. LAFORCE Meets: 2/20-2/		\$0.00 ster at htt	\$0.00 ps://ccc-	\$0.00 wet.eventbrite.	\$0.00 .com/.

XWET-5-DAY BACKFLOW TESTER COURSE, 4.00 CEUS C005

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

ESPAÑOL: Enseñado en español

Course No Course Title, Credits	Course No	Course Title, C	redits	
Section No Crs Reg. Days (M,T,W,TH.F,S,SU) Time Instructor Tuition Fee Crs. Fee Total		Section No Instructor	Crs Reg. Days (M,T,W,T) Tuition Fe	TH.F,S,SU) Time Crs. Fee Total
Presentation of backflow prevention assemblies used for	ОС	WLD-103-01	343412 F	6-9:50 PM
water/wastewater system cross connection control. Class will include		M. TIZO	\$260.00 \$2	\$26.00 \$146.00 \$432.00
overview of hydraulics and degree of hazards, proper backflow	ос	WLD-103-02	343414 SU	10-1:50 PM
installation procedures, and approved testing/troubleshooting		M. TIZO	\$260.00 \$2	\$26.00 \$146.00 \$432.00

procedures. Students will learn to identify common, actual, and potential cross connection hazards; students will be introduced to the basic requirements for carrying out a cross connection program. Students will be able to apply to Oregon Health Authority for Certification by that agency.

ОС	XWET-C005- 3 51	343604 MTWTH	8-4:50 PM		
	M. LAFORCE	\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 3/16-3/2	0. Register at ht	tps://ccc	-wet.eventb	rite.com/.

Welding Technology

Must have ANSI approved eye protection first day and comply with College safety policy.

WLD-100 WELDER'S PRINT READING I, 3 CREDITS

Provides instruction in reading and interpretation of prints and symbols common in the welding industry. Participants will learn the interpretation and application of basic lines, dimensions, structural shapes, and specifications. Welding symbols and their application to different types of joint configurations will be covered, as well as how to develop basic shop drawings and prints.

ОС	WLD-100-01	343401	TH		2-4:50 PM	
	D. PODKOWA		\$390.00	\$39.00	\$219.00	\$648.00
oc	WLD-100-02	343403	T		6-8:50 PM	
	D. PODKOWA		\$390.00	\$39.00	\$219.00	\$648.00

WLD-102 INTRODUCTION TO WELDING, 2 CREDITS

Designed for the beginner and experimental welder. Includes: oxyacetylene cutting and welding, SMAW (Shielded Metal Arc Welding), GMAW & FCAW (Gas Metal Arc Welding & Flux Core Arc Welding) and GTAW (Gas Tungsten Arc Welding) and plasma arc cutting.

ОС	WLD-102-01	343405 F		6-9:50 PM	1
	A. TOWN	\$260.00	\$26.00	\$146.00	\$432.00
ос	WLD-102-02	343407 S		9-12:50 P	М
	K. DRURY	\$260.00	\$26.00	\$146.00	\$432.00
ОС	WLD-102-03	343408 S		2-5:50 PM	I
	K. DRURY	\$260.00	\$26.00	\$146.00	\$432.00

WLD-INTRODUCCIÓN A LA SOLDADURA, 2 CREDITS 102ES

Diseñado para soldaderos principantes y experimental. Incluye corte y soldadura oxiacetileno, soldadura por arco de metal blindado (SMAW), la soldaduro de arco de metal y gas (GMAW) y Soldadura por Arco con Nucleo de Fundente (FCAW) y soldadura por arco de gas tungsteno (GTAW) y corte por plasma.

OC WLD-102ES-		343410 S		6-9:50 PM		
ESPAÑOL	01					
	F. PAXTOR		\$260.00	\$26.00	\$146.00	\$432.00

WLD-103 BLACKSMITHING & TRADITIONAL IRON WORKING, 2 **CREDITS**

This course introduces the student to basic blacksmithing techniques and processes, as well as terminology, steel types, heat treating and tool making. Multiple projects allow the student to practice the varied methods of manual metal forming. No welding experience required.

WLD-110 WELDER CERTIFICATION, 4 CREDITS

This course provides theory and practical instruction to become a certified welder. Students will choose a welding process (flux core arc welding, shielded metal arc welding, or gas tungsten arc welding) for certification. Material needed for practice welding will be provided. Students will take a welding certification exam at the end of the class. May be repeated for up to 12 credits.

	poulou loi up to					
OC NCT						
	D. PODKOWA Required: Stud			\$52.00	\$432.00	\$1,004.00
OC NCT	•				1-4:50 P	М
	R. THOMAS		\$520.00			
	Required: Stud					
OC NCT	WLD-110-03	343421	MW		6-9:50 P	M
	M. TIZO		\$520.00	\$52.00	\$432.00	\$1,004.00
	Required: Stud	dent Peti	tion.			
OC NCT	WLD-110-04	343422	TTH		8-11:50	AM
	D. BATES		\$520.00	\$52.00	\$432.00	\$1,004.00
	Required: Stud	dent Peti	tion.			
OC NCT	WLD-110-05	343425	TTH		6-9:50 P	M
	B. MULLIGAN		\$520.00	\$52.00	\$432.00	\$1,004.00
	Required: Stud	dent Peti	tion.			
OC NCT	WLD-110-06	343427	TTH		1-4:50 P	М
	B. MULLIGAN		\$520.00	\$52.00	\$432.00	\$1,004.00
	Required: Stud	dent Peti	tion.			
ОС	WLD-110-07	347525	Т		12:01 -1:	:50 AM
			W		10-11:59	PM
			TH		12:01 -1:	:50 AM
			M		10-11:59	PM
	K. DRURY		\$520.00	\$52.00	\$432.00	\$1,004.00
	Required: Stud	dent Peti	tion.			

WLD-111 SHIELDED METAL ARC WELDING (STICK), 8 CREDITS

Provides students with the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet and groove welds in all positions with the SMAW process. Oxy-fuel cutting, air carbon arc cutting and gouging will be covered. Welding codes, standards, and specifications will be reviewed.

ОС	WLD-111-02	345493 TWTHF	12:01 -1:50 AM
		MTWTH	10-11:59 PM
	K. DRURY	\$1,040.0 0	\$104.00 \$584.00 \$1,728.00

WLD-111A SHIELDED METAL ARC WELDING (STICK), 4 CREDITS

The first half of WLD-111 which provides the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet welds in flat and horizontal positions with the SMAW process. Oxy-fuel cutting, air carbon arc cutting and gouging will be covered.

ОС	WLD-111A-02	345494 TTH		12:01 -1:	50 AM
		MW		10-11:59	PM
	K. DRURY	\$520.00	\$52.00	\$292.00	\$864.00

WLD-111B SHIELDED METAL ARC WELDING (STICK), 4 CREDITS

The second half of WLD-111 which provides the opportunity to acquire additional knowledge and skills needed to perform more advanced fillet and groove welds in vertical and overhead positions with the SMAW process. Welding codes, standards, and specifications will be reviewed.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

ос

oc

oc

OC

OC.

Course No Course Title, Credits

Section No

WLD-113B-

R. ABBOTT

WLD-113B-

R. ABBOTT

R. ABBOTT

WLD-113B-

Instructor

02A R. ABBOTT

03A

04A R. ABBOTT

	Instructor	ors neg.	Tuition	Fee	Crs. Fee	Total
Prerequis	ites: WLD-111A					
ОС	WLD-111B-02	345495	TTH WF		10-11:59 P 12:01 -1:50	
	K. DRURY		\$520.00	\$52.00	\$292.00	\$864.00

Cre Rea

Course No Course Title, Credits

WLD-113 GAS METAL ARC WELDING/FLUX CORE ARC WELDING (WIREFEED), 8 CREDITS

Provides students with the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet and groove welds in all positions with the Gas Metal Arc and Flux Core Arc Welding processes. Oxy-fuel cutting, and air carbon arc cutting and gouging will be covered. Welding codes, standards and specifications will be reviewed.

ОС	WLD-113-01	343428 MTWTH	6-9:50 P	M
	J. PHELPS	\$1,040.0	\$104.00 \$584.00	\$1,728.00
		0		

WLD-113A GAS METAL ARC WELDING/FLUX CORE ARC WELDING (WIREFEED), 4 CREDITS

The first half of WLD-113 which provides the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet welds in flat and horizontal positions with the Gas Metal Arc and Flux Core Arc Welding processes. Oxy-fuel cutting, air carbon arc cutting and gouging will be covered.

ОС	WLD-113A-01	343431	MW		6-9:50 PM	
	J. PHELPS		\$520.00	\$52.00	\$292.00	\$864.00
ос	WLD-113A-02	343433	MTWTH		7:30 -9:20	AM
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00
ОС	WLD-113A-	347527	MTWTH		7:30 -9:20	AM
	02A					
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00
	Required: Stud					or more
	information co	ntact HS	Connecti	ons 503-	-594-3161.	
ОС	WLD-113A-03	343437	MTWTH		1:15 -3:05	PM
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00
ос	WLD-113A-	347529	MTWTH		1:15 -3:05	PM
	03A					
	R. ABBOTT				\$292.00	
	Required: Stud					or more
	information co	ntact HS	Connecti	ons 503-	-594-3161.	
ос	WLD-113A-04					PM
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00
ос	WLD-113A- 04A	347531	MTWTH		3:30 -5:20	PM
	R. ABBOTT		\$520.00	\$52.00	\$202.00	\$864.00
	Required: Stud					
	information co					or more
ОС	WLD-113A-05	347526	SSU		6-9:50 PM	
	D. PODKOWA		\$520.00	\$52.00	\$292.00	\$864.00

WLD-113B GAS METAL ARC WELDING/FLUX CORE ARC WELDING (WIREFEED), 4 CREDITS

The second half of WLD-113 which provides the opportunity to acquire additional knowledge and skills needed to perform more advanced fillet and groove welds in vertical and overhead positions with the Gas Metal Arc and Flux Core Arc Welding processes. Welding codes, standards, and specifications will be reviewed.

Prerequisites: WLD-113A

Campus Locations:

OC: Oregon City Campus

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

OC	WLD-113B-01	343448 TTH		6-9:50 PM	
	J. PHELPS	\$520.00	\$52.00	\$292.00	\$864.00
ос	WLD-113B-02	343453 MTWTH		7:30 -9:20	AM
	R. ABBOTT	\$520.00	\$52.00	\$292.00	\$864.00

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español

LCT: Low-Cost Text NCT: No-Cost Text

WLD-115 GAS TUNGSTEN ARC WELDING (GTAW), 8 CREDITS

Crs Reg.

WLD-113B-03 343455 MTWTH

WLD-113B-04 343457 MTWTH

Days (M,T,W,TH.F,S,SU)

Required: Student Petition. CTE Pathways section, For more information contact HS Connections 503-594-3161.

Required: Student Petition. CTE Pathways section, For more

Required: Student Petition. CTE Pathways section. For more

Fee

\$520.00 \$52.00 \$292.00

\$520.00 \$52.00 \$292.00

\$520.00 \$52.00 \$292.00

\$520.00 \$52.00 \$292.00

\$520.00 \$52.00 \$292.00

Crs. Fee

7:30 -9:20 AM

1:15 -3:05 PM

1:15 -3:05 PM

3:30 -5:20 PM

3:30 -5:20 PM

Total

\$864 00

\$864 00

\$864.00

\$864.00

\$864.00

Tuition

347528 MTWTH

347530 MTWTH

information contact HS Connections 503-594-3161

information contact HS Connections 503-594-3161.

347532 MTWTH

Provides students with the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet and groove welds in all positions with the Gas Tungsten Arc Welding process. Plasma arc cutting will be covered. Welding codes, standards, and specifications will be reviewed.

ос	WLD-115-01	343459 MTWTH	8-11:50	AM
	R. THOMAS	\$1,040.0	\$104.00 \$584.00	\$1,728.00
		0		

WLD-115A GAS TUNGSTEN ARC WELDING (GTAW), 4 CREDITS

The first half of WLD-115 which provides the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet welds in flat and horizontal positions with the Gas Tungsten Arc Welding (GTAW) process. Plasma arc cutting will be covered.

ос	WLD-115A-01	343473 MW		8-11:50	AM
	R. THOMAS	\$520.00	\$52.00	\$292.00	\$864.00

WLD-115B GAS TUNGSTEN ARC WELDING (GTAW), 4 CREDITS

The second half of WLD-115 which provides the opportunity to acquire additional knowledge and skills needed to perform more advanced fillet and groove welds in vertical and overhead positions with the Gas Tungsten Arc Welding process. Welding codes, standards, and specifications will be reviewed.

Proroquicitos: WI D-115A

i icicquisi	tes. WED 115A					
ос	WLD-115B-01	343485	TTH		8-11:50	ΑM
	R. THOMAS		\$520.00	\$52.00	\$292.00	\$864.00

WLD-150 WELDING PROCESSES, 4 CREDITS

Covers oxy-fuel welding, brazing, cutting, SMAW (Shielded Metal Arc Welding), GMAW & FCAW (Gas Metal Arc Welding & Flux Core Arc Welding) and GTAW (Gas Tungsten Arc Welding) and plasma arc cutting and plasma cutting. This course includes safety, electrical fundamentals, routine maintenance, minor repairs, and welding terms and definitions

oc	WLD-150-01	343492	MW		6-9:50 PM	
	M. TIZO		\$520.00	\$52.00	\$292.00	\$864.00
ос	WLD-150-02	343496	MW		8-11:50 A	M
	D. PODKOWA		\$520.00	\$52.00	\$292.00	\$864.00

Course No	Course Title, Cr	edits					Course No	Course Title, Cr	redits				
	Section No	Crs Reg.	Days (M,T,V	V,TH.F,S,SU)	Time			Section No	Crs Reg.	Days (M,T,\	N,TH.F,S,SU)	Time	
	Instructor		Tuition	Fee	Crs. Fee	Total		Instructor		Tuition	Fee	Crs. Fee	Total

Provides instruction in reading and interpretation of prints and symbols common in welding industry. Participants will learn interpretation and application of blueprint views. Includes basic layout techniques and math review. American Welding Society symbols, International Standards Organization symbols, pipe welding symbols, and inspection symbols are covered.

Prerequisites: WLD-100

oc	WLD-200-01	343498 T		2-4:50 PM	
	D. PODKOWA	\$390.00	\$39.00	\$219.00	\$648.00

WLD-210 PIPE WELDING, 4 CREDITS

Provides beginning theory and practical instruction in the Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Core Arc Welding (FCAW), or Gas Tungsten Arc Welding (GTAW) processes on steel plate and pipe. The specific projects include: stringer beads, fillet and groove welds on plate with root and cover proficiency, pipe cutting using the oxy-fuel process, pipe beveling and groove welds on pipes in all positions. The student may choose which process or processes will be used to complete the lab assignments.

Prerequisites: WLD-111, or WLD-111A and WLD-111B. WLD-113, or WLD-113A and WLD-113B. WLD-115, or WLD-115A and WLD-115B. WLD-150 or prior experience in SMAW, GMAW, FCAW, or GTAW

ОС	WLD-210-01	343510 MW		1-4:50 P	М
	R. THOMAS	\$520.00	\$52.00	\$292.00	\$864.00
	Required: Stu	dent Petition.			

WLD-212 SHIELDED METAL ARC WELDING PIPE WELDING, 4 CREDITS

This class is designed to teach students the fundamentals of open root pipe welding. Theory and practical instruction in open root V groove pipe welding using E6010 and E7018 electrodes will be provided. Oxy-fuel pipe cutting is also included. Required: Student Petition.

Prerequisites: WLD-211

ос	WLD-212-01	343512 MW	1-4:50 PM		
	R. THOMAS	\$520.00	\$52.00	\$292.00	\$864.00
	Poquired: Stu	dont Potition			

Required: Student Petition.

WLD-213 ADVANCED GAS METAL ARC WELDING/FLUX CORE ARC WELDING, 4 CREDITS

This course provides the opportunity for students to acquire the knowledge and skills needed to perform quality fillet and groove welds in all positions using the Gas Metal Arc Welding (GMAW) and Flux Core Arc Welding (FCAW) processes. Advanced welding theory and procedures will also be included.

Prerequisites: WLD-113; or WLD-113A and WLD-113B

ос	WLD-213-01	343515 TTH		6-9:50 PM	
	B. MULLIGAN	\$520.00	\$52.00	\$292.00	\$864.00

WLD-215 ADVANCED GAS TUNGSTEN ARC WELDING, 4 CREDITS

This course provides the opportunity for students to acquire the knowledge and skills needed to perform quality fillet and groove welds in all positions using the Gas Tungsten Arc Welding (GTAW) process. Advanced welding theory and procedures will also be included.

Prerequisites: WLD-115; or WLD-115A and WLD-115B

ос	WLD-215-01	343516 TTH		8-11:50	AM
	D BATES	\$520.00	\$52.00	\$292.00	\$864.00

WLD-250 WELDING FABRICATION I BEGINNING PROJECT, 4 CREDITS

This course consists of lecture and lab and provides instruction in fabrication techniques including blueprint reading, layout, sketching, bills of material, job cost calculations, measuring, fitting, cutting and welding. Students will be assigned beginning fabrication projects. The student will be responsible for all aspects of managing the project to successful completion.

Prerequisites: WLD-111, WLD-111A and WLD-111B, WLD-113, WLD-113A and WLD-113B, WLD-115, or WLD-115A and WLD-115B

ос	WLD-250-01	343520 TTH		1-4:50 PM	l
	B. MULLIGAN	\$520.00	\$52.00	\$292.00	\$864.00

WLD-251 WELDING FABRICATION II INTERMEDIATE PROJECT, 4 CREDITS

This course consists of lecture and lab. Students will use the skills learned in WLD-250, such as blueprint reading, layout, sketching, bills of materials, job cost calculations, measuring, fitting, cutting and welding, and apply them to more challenging projects. Students will be assigned intermediate fabrication projects. The student will be responsible for all aspects of managing the project to successful completion.

Prerequisites: WLD-250

ос	WLD-251-01 343	526 TTH	1-4:50 PM	Л
	B. MULLIGAN	\$520.00 \$52.00	\$292.00	\$864.00

WLD-252 WELDING FABRICATION III ADVANCED PROJECT, 4 CREDITS

This course consists of lecture and lab. Students will use the skills learned in WLD-250 and WLD-251, such as blueprint reading, layout, sketching, bills of materials, job cost calculations, measuring, fitting, cutting and welding, and apply them to advanced projects. Students will be assigned advanced fabrication projects. The student will be responsible for all aspects of managing the project to successful completion.

Prerequisites: WLD-251

ос	WLD-252-01	343529 TTH		1-4:50 PN	Л
	B. MULLIGAN	\$520.00	\$52.00	\$292.00	\$864.00

WLD-261 WELDING SPECIAL PROJECTS, 1-2 CREDITS (VAR)

Allows students to improve their welding skills while working on instructor-approved projects. May be repeated for up to 12 credits.

ОС	WLD-261-01	343533	M		8-11:50 A	M
	R. THOMAS		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud					
oc	WLD-261-02	343536	M		1-4:50 PN	Л
	R. THOMAS		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud	dent Peti	tion.			
ОС	WLD-261-03	343538	M		6-9:50 PM	Л
	J. PHELPS		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud	dent Peti	tion.			
ОС	WLD-261-05	343541	T		8-11:50 A	M
	R. THOMAS		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud					
ос	WLD-261-07	343544	Т		6-9:50 PN	Л
	J. PHELPS		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud					
ОС	WLD-261-08	343545				
					12:01 -1:	
	K. DRURY		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud					
ос	WLD-261-09					
	R. THOMAS		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud	dent Peti	tion.			

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled mee

REM: Remote (w/ scheduled meetings) **HYB:** In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	Course Title, Cr	edits				
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition		Time Crs. Fee	Total
ос	WLD-261-10		W		1-4:50 P	
	R. THOMAS			\$26.00		\$432.00V
ос	WLD-261-11				6-9:50 P	
	J. PHELPS		\$260.00	\$26.00	\$146.00	\$432.00V
ос	WLD-261-13					
	R. THOMAS			\$26.00	\$146.00	\$432.00V
	Required: Stu					
ос	WLD-261-14				1-4:50 P	
	B. MULLIGAN		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stu	dent Peti	tion.			
ос	WLD-261-15				6-9:50 P	
	J. PHELPS		\$260.00	\$26.00	\$146.00	\$432.00V
ос	WLD-261-16	343558	TH		10-11:59	
			F		12:01 -1:	
	K. DRURY					\$432.00V
ос	WLD-261-19	343564			6-9:50 P	
	M. TIZO			\$26.00	\$146.00	\$432.00V
	Required: Stu					
ос	WLD-261-20	343565	-		9-12:50 I	
				\$26.00	\$146.00	\$432.00V
	Required: Stu					
ос	WLD-261-21		-		2-5:50 P	
	K. DRURY			\$26.00	\$146.00	\$432.00V
	Required: Stu					
ос	WLD-261-23	345481	SU		10-1:50 I	PM
	M. TIZO		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stu	dent Peti	tion.			

AMERICAN WELDING SOCIETY (WLD) CERTIFICATION 1 XWLD-**PLATE TEST, 0 CREDIT** 0001

Welder certification in accordance with AWS D1.1 for one position for students enrolled in any CCC welding course.

ос	XWLD-0001- 343 01	607 TBA			
	B. MULLIGAN	\$0.00	\$0.00	\$140.00	\$140.00
	Required: Student	Petition			

XWLD-**AMERICAN WELDING SOCIETY CERTIFICATION 2** 0002 PLATE OR 1 PIPE TEST, 0 CREDIT

Welder certification in any two positions, in accordance with AWS D1.1 for students enrolled in any CCC welding course.

ос	XWLD-0002- 343 01	608 TBA			
	B. MULLIGAN	\$0.00	\$0.00	\$280.00	\$280.00
	Required: Student	Petition.			

XWI D-AMERICAN WELDING SOCIETY CERTIFICATION 0003 **RETAKE TEST, 0 CREDIT**

Welder certification on retest in any position, in accordance with AWS D1.1 for students enrolled in any CCC welding course. Required: Student Petition.

ос	XWLD-0003- 343	609 TBA			
	B. MULLIGAN	\$0.00	\$0.00	\$25.00	\$25.00
	Required: Student I	Petition.			

Women's Studies

WS-101 **INTRODUCTION TO WOMEN'S STUDIES, 4 CREDITS**

Examines the history of the representation of women, the history of US feminism and the development of Women's Studies as an academic discipline. Critically explores social issues relevant to women's lives, including gender-expression, marginalization, reproduction, sexuality, economic status and the experience of violence.

Days (M,T,W,TH.F,S,SU)

Fee

Tuition

Time

Crs. Fee

Total

Crs Reg.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	WS-101-01 34356	S3 TTH		10-11:	50 AM
	K. SEVERSON	\$520.00	\$52.00	\$0.00	\$572.00
ONL NCT	WS-101-02 34356	66			
	K. SEVERSON	\$520.00	\$52.00	\$0.00	\$572.00

World Languages

Course No Course Title, Credits

Section No

Instructor

ASL-101 FIRST-YEAR AMERICAN SIGN LANGUAGE I, 4 CREDITS

First term of a three-term introductory course. Everyday communication is the centerpiece of each lesson. Topics revolve around sharing information about ourselves and our environment. Grammar is introduced in context, with an emphasis on developing question and answering skills. Strategies are presented to help the student maintain a conversation.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC.	ASL-101-01	342701 WW	10-11:50 AM				
	A. ELLIS	\$520.00	\$52.00	\$10.00	\$582.00		
	One-time text	book purchase for	ASL-101	- ASL-102.			
ONL	ASL-101-02	342703					
	A. ELLIS	\$520.00	\$52.00	\$10.00	\$582.00		
	One-time text	book purchase for	ASL-101	- ASL-102.			

ASL-102 FIRST-YEAR AMERICAN SIGN LANGUAGE II, 4 CREDITS

Second term of a three-term introductory course. Emphasis will be on increasing communicative abilities. Course will focus on language functions such as making requests, describing others, and/or telling a short story. Grammar and vocabulary will also be emphasized throughout the course.

Prerequisites: ASL-101 with a C or better

ос	ASL-102-01	342705 MW	1-2	2:50 PM	
	A. ELLIS	\$520.00	\$52.00 \$10	0.00 \$582.	.00
	One-time text	book purchase for	ASL-101 - A	SL-102.	
ONL	ASL-102-02	342706			
	A. ELLIS	\$520.00	\$52.00 \$10	0.00 \$582.	00

One-time textbook purchase for ASL-101 & ASL-102.

ASL-202 SECOND-YEAR AMERICAN SIGN LANGUAGE II, 4 **CREDITS**

Continuation of ASL-201. Emphasizes active communication in sign language. Increased emphasis on exploring, analyzing the rules, and presenting stories and literature in sign language.

Prerequisites: ASL-201 with a C or better

REM	ASL-202-01	342707 TTH		10-11:50 AM		
	A. ELLIS	\$520.00	\$52.00	\$10.00	\$582.00	
	One-time text	tbook purchase for	ASI -202	- ASI -203		

FR-102 **FIRST-YEAR FRENCH II, 4 CREDITS**

Second term of a three-term foundational, multimedia course in beginning French designed to give students basic communicative proficiency in the target language. Students will practice all four skills: listening, speaking, reading, and writing. Special attention will be paid to pronunciation, essential grammar structures, and attendant cultural elements. Student learning is assessed through a variety of guided exercises and assignments, interactive activities, homework, tests and quizzes, and other class projects and participation.

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

Course No	Course Title, C	redits					Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total

Prerequisites: FR-101

OC NCT FR-102-01 342998 TTH 10-11:50 AM E. HERNANDEZ \$520.00 \$52.00 \$10.00 \$582.00

GER-102 FIRST-YEAR GERMAN II, 4 CREDITS

Second term of a three-term foundational sequence in beginning German designed to give students basic communicative proficiency in the target language. Students will practice all four skills: listening, speaking, reading, and writing. Special attention is paid to pronunciation, essential grammar structures, and cross-cultural discussion and analysis.

Prerequisites: GER-101 or Student Petition

OC NCT GER-102-01 343091 MW T. NIKOLOPOULOS \$520.00 \$52.00 \$10.00 \$582.00

SPN-101 **FIRST-YEAR SPANISH I. 4 CREDITS**

First of a three-term foundational, multimedia course for beginners. Initial emphasis is on speaking and listening comprehension, with secondary emphasis on reading and writing. Various cultural themes are presented.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

OC NCT	SPN-101-01 34343	2 TTH		1-2:50 PM	Л
	A. METHADZOVIC	\$520.00	\$52.00	\$10.00	\$582.00
ONL NCT	SPN-101-02 34343	34			
	A. METHADZOVIC	\$520.00	\$52.00	\$10.00	\$582.00

SPN-102 FIRST-YEAR SPANISH II. 4 CREDITS

Second of a three-term foundational, multimedia course for beginners. Initial emphasis is on speaking and listening comprehension, with secondary emphasis on reading and writing. Various cultural themes are presented.

Prerequisites: SPN-101

Recommended Prerequisites: WRD-098 or placement in WR-121Z

			p. 1010 0 111				
OC NCT	SPN-102-01 34343	1 343436 TTH			10-11:50 AM		
	A. METHADZOVIC	\$520.00	\$52.00	\$10.00	\$582.00		
ONL NCT	SPN-102-02 34343	19					
	E. HERNANDEZ	\$520.00	\$52.00	\$10.00	\$582.00		
ONL NCT	SPN-102-03 34344	10					
	A. METHADZOVIC	\$520.00	\$52.00	\$10.00	\$582.00		

SPN-202 SECOND-YEAR SPANISH II, 4 CREDITS

Second of a three-term intermediate, multimedia course. Focus is on speaking, listening comprehension, reading and writing. Explores cultural differences among Spanish-speaking countries and between the latter and European-American culture.

Prerequisites: SPN-201

ONL NCT	SPN-202-01	343442	
	V. SHORT	\$520.00 \$52.00 \$1	0.00 \$582.00

Writing

WR-101 **WORKPLACE WRITING, 4 CREDITS**

Students in this course learn and practice basic modes of technical writing, including summaries, process analysis, instructions, and reports. Prerequisites: WRD-098 or placement in WR-101 or WR-121Z

OC HYB LCT	WR-101-01	343452	M		3-4:50 PM	
	W. DAWKINS		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-101-02	343460				
	L. ORMANDY		\$520.00	\$52.00	\$19.00	\$591.00

WR-121Z COMPOSITION I, 4 CREDITS

OC: Oregon City Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Campus Locations: Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings)

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

OCICT

ESPAÑOL: Enseñado en español LCT: Low-Cost Text NCT: No-Cost Text

WR-121Z engages students in the study and practice of critical thinking, reading, and writing. The course focuses on analyzing and composing across varied rhetorical situations and in multiple genres. Students will apply key rhetorical concepts flexibly and collaboratively throughout their writing and inquiry processes.

Prerequisites: WRD-098 or placement in WR-121Z

OC LCT	WR-121Z-01	343461			10-11:50 A	M
	E. WILDER-TA		\$520.00	\$52.00	•	\$591.00
OC LCT	WR-121Z-02	343463			10-11:50 A	
	J. BEREZHNO		\$520.00	\$52.00	•	\$591.00
OC LCT	WR-121Z-03	343465			1-2:50 PM	
	S. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-121Z-04	343466			10-11:50 A	
	R. DAVIS		\$520.00	\$52.00		\$591.00
OC LCT	WR-121Z-05	343467			1-2:50 PM	
	J. BEREZHNO		\$520.00	\$52.00	\$19.00	\$591.00
OC HYB LCT	WR-121Z-06	343468			10-11:50 A	
	C. BURNELL		\$520.00	\$52.00	\$19.00	\$591.00
OC HYB LCT	WR-121Z-07	343469			1-2:50 PM	
	C. BURNELL		\$520.00	\$52.00	•	\$591.00
OC HYB LCT	WR-121Z-08	343470		AFO 00	1-2:50 PM	A =0.4.00
	J. DAVIS	040474	\$520.00	\$52.00	\$19.00	\$591.00
OC HYB LCI	WR-121Z-09	343471		ΦΕΟ ΟΟ	10-11:50 A	
00 1170 1 07	S. NIZIOLEK	040470	\$520.00	\$52.00	\$19.00	\$591.00
OC HYB LCI	WR-121Z-10	343472		ФГО ОО	1-2:50 PM	Φ Γ Ω4 ΩΩ
ONL LCT	W. DAWKINS	040474	\$520.00	\$52.00	\$19.00	\$591.00
ONL LC1	WR-121Z-11	343474	ሲ ፎርርር ርርር	ΦEΩ ΩΩ	610.00	ΦEΩ1 ΩΩ
ONL LCT	M. WARREN	040475	\$520.00	\$52.00	\$19.00	\$591.00
ONL LC1	WR-121Z-12 R. DAVIS	343475	ሲ ፎርርር ርርር	ΦEΩ ΩΩ	610.00	ΦEΩ1 ΩΩ
ONL LCT		343476	\$520.00	\$52.00	\$19.00	\$591.00
ONL LC1	WR-121Z-13 T. DODGE	343476		ቀ ደረ ሰር	610.00	¢E01 00
ONL LCT	WR-121Z-14	343478	\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	T. DODGE	343476	\$520.00	\$52.00	\$19.00	\$591.00
HAR	WR-121Z-15	343479		φ32.00	1-2:50 PM	φυθ1.00
IIAII	J. PETERMAN		\$520.00	\$52.00		\$591.00
HAR HYB	WR-121Z-16	343480		ψυζ.00	6-7:50 PM	ψυσ1.00
	M. SCHUMACI		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-121Z-17	343481	ψ320.00	ψυΖ.00	ψ10.00	ψ551.00
	T. DODGE	5 10 10 1	\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-121Z-18	343482	40_0.00	402.00	Ţ10.00	Ç00 1.00
	R. DAVIS	- 10 10 <u>-</u>	\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-121Z-19	343483	4320.00	402.00	Ţ.0.00	4301.00
	T. DODGE	- 10 100	\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-121Z-20	343484	4320.00	402.00	Ţ.0.00	4301.00
	R. DAVIS		\$520.00	\$52.00	\$19.00	\$591.00
ONL	WR-121Z-21	343487	+ J=0.00	Ţ 0 <u></u> 0	+ . 0 . 0 0	÷5550
	B. EHLERS		\$520.00	\$52.00	\$19.00	\$591.00
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WR-122Z COMPOSITION II, 4 CREDITS

WR-122Z builds on concepts and processes emphasized in WR-121Z, engaging with inquiry, research, and argumentation in support of students' development as writers. The course focuses on composing and revising in research-based genres through the intentional use of rhetorical strategies. Students will find, evaluate, and interpret complex material, including lived experience; use this to frame and pursue their own research questions; and integrate material purposefully into their own compositions.

Prerequisites: WR-121Z with a C or better

WR-1227-01 3/3/191 MW

	***** **********	040401			10 11.007	~171
	R. MURPHY		\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-122Z-02	343493	8 MW		1-2:50 PM	
	E. WILDER-TA	ACK	\$520.00	\$52.00	\$19.00	\$591.00

10-11:50 AM

ONL LCT

HAR HYB

WR-241

Course No	Course Title, Credits							
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition	,TH.F,S,SU) Fee	Time Crs. Fee	Total		
OC LCT	WR-122Z-03	343494	TTH		1-2:50 PM			
	H. DIERDORF	F	\$520.00	\$52.00	\$19.00	\$591.00		
OC HYB LCT	WR-122Z-04	343495	M		1-2:50 PM			
	R. MURPHY		\$520.00	\$52.00	\$19.00	\$591.00		
OC HYB LCT	WR-122Z-05	343497	Т		10-11:50 A	M		
	C. BURNELL		\$520.00	\$52.00	\$19.00	\$591.00		
OC HYB LCT	WR-122Z-06	343499	T		3-4:50 PM			
	S. NIZIOLEK		\$520.00	\$52.00	\$19.00	\$591.00		
ONL LCT	WR-122Z-07	343500						
	M. SCHUMACI	HER	\$520.00	\$52.00	\$19.00	\$591.00		
ONL LCT	WR-122Z-08	343501						
	S. PESZNECK	ER	\$520.00	\$52.00	\$19.00	\$591.00		
ONL LCT	WR-122Z-09	343502						
	R. MURPHY		\$520.00	\$52.00	\$19.00	\$591.00		
ONL LCT	WR-122Z-10	343504						
	L. ORMANDY		\$520.00	\$52.00	\$19.00	\$591.00		
ONL LCT	WR-122Z-11	347533						
	J. PETERMAN		\$520.00	\$52.00	\$19.00	\$591.00		
HAR HYB	WR-122Z-15 M. SCHUMACI	343507 HER	M \$520.00	\$52.00	6-7:50 PM \$19.00	\$591.00		

WR-124ES ESCRITURA DE ENSAYOS DE NIVEL UNIVERSITARIO **EN ESPAÑOL, 4 CREDITS**

Este curso involucra a los estudiantes en el estudio y la práctica del pensamiento crítico, la lectura y la escritura. El curso se centra en el análisis y la composición en diversas situaciones retóricas y en múltiples géneros. Los estudiantes aplicarán conceptos retóricos clave de forma flexible y colaborativa en sus procesos de escritura e indagación.

Required: Estudiantes deben leer y escribir a nivel universitario, en

Español, antes de comenzar el curso

Prerequisites: WRD-098ES o tener un nivel de evaluación de WR-

124ES

Recommended Prerequisite or Corequisite: FYE-101ES

REM	WR-124ES-01	343508	Т		6-7:50 PM	
ESPAÑOL	A. ENCINAS		\$520.00	\$52.00	\$19.00	\$591.00

SCHOLARSHIP ESSAY WRITING, 1 CREDIT WR-127

Introduces scholarship resources and the application process. Examines and applies the concept of 'telling the story of me,' and drafting, revising, and editing a complete scholarship application essay.

ONL LCT	WR-127-01	343509			
	A. ENCINAS	\$130.00	\$13.00	\$19.00	\$162.00

WR-227Z TECHNICAL WRITING, 4 CREDITS

WR-227Z introduces students to producing instructive, informative, and persuasive technical/professional documents aimed at well-defined and achievable outcomes. The course focuses on presenting information using rhetorically appropriate style, design, vocabulary, structure, and visuals. Students can expect to gather, read, and analyze information and to learn a variety of strategies for producing accessible, usable, reader-centered deliverable documents that are clear, concise, and ethical

Prerequisites: WR-121Z with a C or better

OC LCT	WR-227Z-01	343514	TTH		10-11:50 A	M
	J. PETERMAN	1	\$520.00	\$52.00	\$19.00	\$591.00
OC HYB LC	T WR-227Z-02	343517	M		3-4:50 PM	
	S. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-227Z-03	343518	}			
	B. FOSTER		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-227Z-04	343519)			
	J. MCALPINE		\$520.00	\$52.00	\$19.00	\$591.00

Campus Locations: Distance Education Notification:

HAR: Harmony Community Campus

OC: Oregon City Campus WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

ONL: Online Only

REM: Remote (w/ scheduled meetings)

HYB: In-person plus online work

Other Coding Translations:

TBA: To be arranged: contact department first class

VAR: Variable credit class

specific emphasis on short prose forms.

Course No Course Title, Credits Section No

Instructor

WR-227Z-05

J. MCALPINE

WR-227Z-15

S. WARREN

Prerequisites: WRD-098 or placement in WR-121Z OC HYB LCT WR-241-01 343525 T 1-2:50 PM

FICTION WRITING I, 4 CREDITS

343521

343524 M

Introduction to the theory, art and creative practice of fiction writing, with

N ROSEVEAR \$520.00 \$52.00 \$19.00 \$591.00

Crs Reg. Days (M,T,W,TH.F,S,SU)

\$520.00 \$52.00 \$19.00

\$520.00 \$52.00 \$19.00

Tuition

Time

Crs. Fee

6-7:50 PM

Total

\$591.00

\$591.00

WR-242 **POETRY WRITING I, 4 CREDITS**

Provides the basic skills for writing and revising poems following contemporary trends in form and content; provides a supportive environment and the critical abilities to read and discuss poems confidently.

Prerequisites: WRD-098 or placement in WR-121Z

OC LCT WR-242-01 343527 MW 1-2:50 PM A. COFFEY \$520.00 \$52.00 \$19.00 \$591.00

WR-245 **POETRY WRITING II, 4 CREDITS**

For students with writing experience who wish to learn advanced techniques of writing poetry, including developing voice and style and exploring publishing.

Prerequisites: WR-242

OC LCT WR-245-01 347534 MW 1-2:50 PM \$591.00 A. COFFEY \$520.00 \$52.00 \$19.00

PUBLISHING LITERATURE: EDITING AND MARKETING WR-248 FOR PUBLICATION, 4 CREDITS

For students with an interest in creative writing and/or literary journal publication who wish to develop publishing skills. Students work collaboratively to copyedit manuscripts for publication and create marketing materials for an award-winning literary journal featuring poetry and short fiction from local and international authors. May be repeated for up to 8 credits.

Prerequisites: WRD-098 or placement in WR-121Z

OCICT WR-248-01 347535 TTH 10-11:50 AM M. WARREN \$520.00 \$52.00 \$60.00 \$632.00

WR-265 **DIGITAL STORYTELLING, 4 CREDITS**

Digital Storytelling is a contemporary expression of the ancient art of storytelling. In this class students will write and create unique digital first person narratives using cloud-based editing tools, photographic and film images, music, and voice. Students will further become active participants in both local and global communities of storytellers.

Recommended Prerequisites: WRD-098 or placement in WR-121Z

oc WR-265-01 345554 MW 10-11:50 AM A. COFFEY \$520.00 \$52.00 \$40.00 \$612.00

WRD-090 INTRODUCTORY COLLEGE READING & WRITING 1, 4 CREDITS

Students discuss a variety of short, pre-college-level readings, and learn a process for developing their own paragraphs and very short essays (up to two pages). Other topics include becoming an independent reader, summarizing, and writing academically.

Prerequisites: Placement in WRD-090

OC LCT WRD-090-01 343530 MW 10-11:50 AM W. DAWKINS \$520.00 \$52.00 \$19.00 \$591.00

> ESPAÑOL: Enseñado en español LCT: Low-Cost Text

Course No	Course Title, Co	redits					Course No	Course Title, C	redits				
	Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
ONL LCT	WRD-090-02 A. WARREN	343532	=	\$52.00	\$19.00	\$591.00	ос	Z-202L-01 J. BOWN	343611	W \$0.00	\$0.00	1-3:50 PM \$0.00	\$0.00

WRD-098 INTRODUCTORY COLLEGE READING & WRITING 2, 4 **CREDITS**

Preparation for writing in college-level courses. Students discuss a variety of early-college-level readings, and develop and refine their own essays (up to three pages) through a process of revision and multiple drafts. Other topics include becoming a confident reader, finding and using information, and giving credit to sources through informal citations.

Prerequisites: WRD-090 or placement in WRD-098

OC LCT	WRD-098-01	343535	TTH		10-11:50	AM
	H. DIERDORF	F	\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WRD-098-02	343540	MW		10-11:50	AM
	J. DAVIS		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WRD-098-03	343546	;			
	M. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WRD-098-04	343551				
	M. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
HAR	WRD-098-15	343562	MW		10-11:50	AM
	J. PONS		\$520.00	\$52.00	\$19.00	\$591.00

WRD-INTRODUCCIÓN A LA LECTURA Y ESCRITURA DE 098ES **NIVEL UNIVERSITARIO 2, 4 CREDITS**

Preparación para la escritura a nivel de cursos universitarios. El alumnado dialogará sobre una variedad de lecturas, en español, a nivel introductorio o pre-universitario, desarrollarán y perfeccionarán sus ensayos (máximo de tres páginas) por medio del proceso de revisión y múltiples bosquejos. Otros temas incluyen: tener confianza como lector, buscar y encontrar información, y citar las fuentes por medio de citas

Prerequisites: Tener un nivel de evaluación de WRD-098ES

REM	WRD-098ES-	347537	W		6-7:50 PM		
ESPAÑOL	01						
	A. ENCINAS		\$520.00	\$52.00	\$19.00	\$591.00	

XWR-0001 CHRYSALIS WOMEN WRITERS, 0 CREDIT

This club is for CCC students and non-students to support the creation of, practice of, and critique of creative writing. An honest and supportive critique group, welcomes both new and established women writers. Newcomers are welcome to attend without reading their own work until they are comfortable doing so. This workshop is led by local author Patricia Lichen.

OC HYB LCT XWR-0001-01		12-1:5	O PM	
P. LICHEN	\$0.00	\$0.00	\$0.00	\$0.00

Zoology

GENERAL ZOOLOGY, 4 CREDITS

A lecture and lab course covering the maintenance of the cellular, tissue, and organ levels of invertebrates, evolution of animal systems and the diversity of the invertebrate animal phyla.

Prerequisites: MTH-095 with a C or better or placement in MTH-111Z

Corequisites: Z-202L

Recommended Prerequisites: WRD-098 or placement in WR-121Z

ос Z-202-01 343610 MW 10:30 -11:50 AM J. BOWN \$520.00 \$52.00 \$55.00 \$627.00

7-2021 **GENERAL ZOOLOGY LAB, 0 CREDIT**

Lab course for Z-202 Corequisites: Z-202

Campus Locations:

HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center **OFF:** Other Off-Campus Location

Distance Education Notification:

ONL: Online Only

REM: Remote (w/ scheduled meetings) HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text

COMMUNITY EDUCATION

Please register directly through the Community Education partner hosting the class you would like to attend.

Build confidence in tech usage

CCC's Community Education continues to offer low-cost, beginner-friendly computer classes designed to help adults build confidence in using technology for everyday life. Held at the Harmony campus, these noncredit courses are perfect for those new to computers or looking to strengthen digital literacy. Basic Computer Skills covers essentials like using a mouse and keyboard, opening and saving files, and browsing the internet safely. Internet Basics focuses on navigating the web, using search engines, and understanding online safety. For Spanish-speaking learners, Habilidades de informática básicas provides the same foundational instruction in Spanish, with clear, step-by-step guidance and hands-on practice in a computer lab. New for winter 2026 will be Conceptos básicos de Internet for Spanish speakers. The cost for each class is \$35 and requires no prior experience.

Winter 2026 registration begins Nov. 17. Register today at www.clackamas.edu/academics/ community-education.

BASIC COMPUTER SKILLS

Tuesday 11:45 a.m.-12:45 p.m.

INTERNET BASICS

Tuesday 1-2 p.m.

HABILIDADES DE INFORMÁTICA BÁSICAS Saturday 9-10 a.m.

CONCEPTOS BÁSICOS DE INTERNET

Saturday 10:30-11:30 a.m.

For help or more information in English, call 503-594-0627; for Spanish assistance, call 503-594-0620.

Community Education strives to be a low-cost option for the district, with partners in many locations. If you would like to suggest a class please visit our website at www.clackamas.edu/ suggest-a-community-ed-class.

CANBY

Bridging Cultures

503-592-3781 | www.bridgingculturescanby.org

GLADSTONE

Gladstone Community School

503-650-2570 | www.clackamas.edu/gladstone

MILWAUKIE

Milwaukie Community Center

503-794-8092 | www.ncprd.com

North Clackamas Parks and Recreation

503-794-8080, ext. 0 | www.ncprd.com

OREGON CITY

Oregon City Community Education

503-785-8520 | https://ocsd62occe.org

Oregon City Swimming Pool

503-657-8273 | www.orcity.org/904/Aquatics

Pioneer Community Center

503-657-8287 | www.orcity.org/499/Pioneer-Community-Center

TEAM OREGON

Motorcycle/Scooter Safety Training

800-545-9944 | www.team-oregon.org

WEST LINN

West Linn Parks and Recreation

503-557-4700 | www.westlinnoregon.gov/parksrec

WILSONVILLE

City of Wilsonville Parks and Recreation

503-783-PLAY | www.wilsonvilleparksandrec.com/parksrec

West Linn/Wilsonville Family Empowerment Center

503-673-7690 | www.wlwv.k12.or.us/domain/3726



Seniors 62 years of age or older qualify for discounted tuition for many Community Education classes. Proof of age is required.