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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

 ${\it Clack a mas Community College does not\ discriminate\ on\ the\ basis\ of\ race, color,\ religion,\ gender,\ sexual\ orientation,\ marital\ status,\ age,\ national\ origin/ancestry,\ and\ religion,\ gender,\ sexual\ orientation,\ marital\ status,\ age,\ national\ origin/ancestry,\ and\ religion,\ gender,\ sexual\ orientation,\ marital\ status,\ age,\ national\ origin/ancestry,\ and\ religion,\ gender,\ sexual\ orientation,\ marital\ status,\ age,\ national\ origin/ancestry,\ and\ religion,\ gender,\ sexual\ orientation,\ marital\ status,\ age,\ national\ origin/ancestry,\ and\ religion,\ gender,\ sexual\ orientation,\ marital\ status,\ age,\ national\ origin/ancestry,\ and\ religion,\ gender,\ sexual\ orientation,\ marital\ status,\ age,\ national\ origin/ancestry,\ and\ religion,\ gender,\ sexual\ orientation,\ marital\ status,\ age,\ national\ origin/ancestry,\ and\ religion,\ gender,\ gender,$ 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 *	FALL 2025	WINTER 2026	SPRING TERM 2026			
Financial aid: All required CCC financial aid documentation due to ensure funding for term	June 23	Sept. 29	Jan. 5			
Registration begins	May 19	Nov. 17	Feb. 23			
Classes begin	Sept. 29	Jan. 5	March 30			
Last day to add classes without instructor consent	Instructor consent required once course begins					
Last day to drop a class with a refund (see p. 5 for more info)	Oct. 12	Jan.18	April 12			
Last day to drop classes and receive a "W" automatically	Nov. 21	Feb. 27	May 22			
Last day to submit petition for graduation	Nov. 7	Feb. 13	May 8			
Last day to change grading option	Dec. 5	March 13	June 5			
Account balance due: \$100 non-payment fee applied if not paid	Nov. 7	Feb. 13	May 8			
Final week	Dec. 8-13	March 16-21	June 8-13			
Last day of term	Dec. 13	March 21	June 13			
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

FALL TERM: Nov. 11 Veterans Day, Nov. 27-28 Thanksgiving, Dec. 24-25 Winter Holiday

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

SPRING TERM: May 25 Memorial Day

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.

Clackama	s In Your Community				2025/FA
01.0			DA-107	DENTAL MATERIALS I	2 CREDITS
CLAC	KAMAS IN YOUR		DA-107L	DENTAL MATERIALS I LAB	1 CREDIT
			DA-110	CLINICAL PRACTICUM I	1 CREDIT
CUM	MUNITY		DA-115	DENTAL SCIENCE	2 CREDITS
UUM	MUNIII		DA-125	DENTAL INFECTION CONTROL	2 CREDITS
	l non-credit courses offered at Clac ty College sites near you Fall 2025	kamas	Emergeno	cy Medical Technology	
Communit	y College siles flear you Fall 2025		EMT-101	EMERGENCY MEDICAL	6 CREDITS
			EMT-105	TECHNICIAN PART I INTRODUCTION TO EMERGENCY	3 CREDITS
Harmor	ny Community Campus			MEDICAL SERVICES	
Complete c	ourse information available in Credit C	Course		or Speakers of Other Languages	
Listings. In	ndicated with: HAR		ESOL-012	BEGINNING ESOL	0 CREDIT
Biology			ESOL-015	BEGINNING READING, WRITING, AND GRAMMAR	0 CREDIT
BI-112	GENERAL BIOLOGY FOR HEALTH	4 CREDITS	ESOL-020	UPPER BEGINNING GRAMMAR	0 CREDIT
	SCIENCES		ESOL-022	UPPER BEGINNING CONVERSATION	0 CREDIT
BI-112L	GENERAL BIOLOGY FOR HEALTH SCIENCES LAB	0 CREDIT	ESOL-024	UPPER BEGINNING READING & WRITING	0 CREDIT
BI-120	INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY	4 CREDITS	ESOL-030	INTERMEDIATE GRAMMAR A	0 CREDIT
BI-120L	INTRODUCTION TO HUMAN	0 CREDIT	ESOL-031	INTERMEDIATE GRAMMAR B	0 CREDIT
D: 1202	ANATOMY AND PHYSIOLOGY LAB	O ONLEST	ESOL-032	INTERMEDIATE CONVERSATION 1	0 CREDIT
BI-231	HUMAN ANATOMY & PHYSIOLOGY I	4 CREDITS	ESOL-034	INTERMEDIATE READING & WRITING	0 CREDIT
BI-231L	HUMAN ANATOMY & PHYSIOLOGY I LAB	0 CREDIT	ESOL-042	UPPER INTERMEDIATE CONVERSATION 1	0 CREDIT
Chemistry			ESOL-046	EDITING FOR BETTER WRITING	0 CREDIT
CH-112	CHEMISTRY FOR HEALTH	4 CREDITS	ESOL-050	ADVANCED GRAMMAR A	0 CREDIT
CHITZ	SCIENCES	4 ONEDITS	ESOL-052	ADVANCED COMMUNICATION SKILLS 1	0 CREDIT
CH-112L	CHEMISTRY FOR HEALTH SCIENCES LAB	0 CREDIT	ESOL-054	ADVANCED READING & WRITING	0 CREDIT
	SCIENCES LAB		ESOL-082	ASSESS/EVALUATE NEW	0 CREDIT
Communic	cation Studies		2002 002	STUDENTS	0 01.12011
	PUBLIC SPEAKING INTERPERSONAL	4 CREDITS 4 CREDITS	ESOL-083	EDUCATIONAL PLANNING FOR RETURNING STUDENTS	0 CREDIT
COMMINI-2 162	COMMUNICATION	4 CHEDITS	Environm	ental Science	
Criminal J	ustica		ESR-171	INTRODUCTION TO	4 CREDITS
CJA-101	CRIMINOLOGY	4 CREDITS	2011 17 1	ENVIRONMENTAL SCIENCE	1 01125110
CJA-101	INTRODUCTION TO LAW ENFORCEMENT	3 CREDITS	ESR-171L	INTRODUCTION TO ENVIRONMENTAL SCIENCE LAB	0 CREDIT
CJA-122	CRIMINAL LAW	4 CREDITS	Food & No	utrition	
CJA-206	TRAUMA INFORMED PRACTICES	3 CREDITS	FN-110	PERSONAL NUTRITION	3 CREDITS
CJA-210	CRIMINAL INVESTIGATION I	3 CREDITS	FN-225	NUTRITION	4 CREDITS
CJA-214	INTIMATE PARTNER VIOLENCE	3 CREDITS	FIN-225	NOTATION	4 CHEDITS
CJA-223	CRIMINAL JUSTICE ETHICS	3 CREDITS	General D	Development Education (GED)	
CJA-252	INTRODUCTION TO RESTORATIVE	3 CREDITS	GED-011	GED IN ESPAÑOL	0 CREDIT
	JUSTICE	-	GED-015	GED PREPARATION	0 CREDIT
Dental Ass	sistant		GED-049	LATINO GED & LIFE SKILLS	0 CREDIT
DA-101	DENTAL RADIOLOGY I	2 CREDITS	Geology		
DA-101L	DENTAL RADIOLOGY I LAB	1 CREDIT	G-101	GENERAL GEOLOGY	4 CREDITS
DA-104	CLINICAL PROCEDURES I	2 CREDITS	G-101 G-101L	GENERAL GEOLOGY GENERAL GEOLOGY LAB	0 CREDIT
DA-104L	CLINICAL PROCEDURES I LAB	1 CREDIT			
D/1 107L	SENTIONE I MODEDONEO LEAD	· OILDII	G-201	GENERAL GEOLOGY	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) Tuition Instructor Crs. Fee Total Instructor Crs. Fee Total

COURSE LISTING

Credit and non-credit Courses offered Fall 2025

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.

341112 MTWTH ABE-012-07 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 341113 TTH \$520.00 \$52.00 \$0.00 K. BACA \$572.00

ANT-102 ARCHAEOLOGY & PREHISTORY, 4 CREDITS

Introduces the methods and theories used by archaeologists to study the development of human cultures. Provides a survey of world prehistory, tracing the transition of human societies from hunting and gathering to farming, to the beginning of urban life and the rise of early civilizations.

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

OC NCT	ANT-102-01	341114 TTH	·11:50 AM	
	K. BACA	\$520.00	\$52.00 \$0.	00 \$572.00
ONL NCT	ANT-102-02	341115		
	K. BACA	\$520.00	\$52.00 \$0.	00 \$572.00

ANT-103 CULTURAL ANTHROPOLOGY, 4 CREDITS

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

ONL NCT ANT-103-01 341116 \$520.00 \$52.00 \$0.00 K. BACA \$572.00

ANTHROPOLOGY/CWE, 2-6 CREDITS (VAR) ANT-280

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 ANT-280-01 341117

K. BACA \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Corequisite: Take the following CWE-281-06.

Art

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.

ART-101-01 341239 \$390.00 \$39.00 \$6.00 C. SIEGFRIED \$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 NCT	ART-115-01	341242	MW		1-3:50 PM	
	C. SIEGFRIED		\$520.00	\$52.00	\$80.00	\$652.00
OC NCT	ART-115-02	341248	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 NCT ART-119-01 341253 K. SIMMONS \$520.00 \$52.00 \$80.00 Required: Pick up supplies on campus 10/2, 10:00-12:00pm.

INTRODUCTION TO DRAWING, 4 CREDITS ART-131

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.

ONL NCT	ART-131-01 3	341256		
	A. SCHROER	\$520.00	\$52.00 \$80.00	\$652.00
	Required: Pick ι	up supplies on c	ampus 10/1, 10:00-	12:00pm.
OC NCT	ART-131-02 3	341262 MW	9-11:50 A	M
	R. KALMAN	\$520.00	\$52.00 \$80.00	\$652.00
OC NCT	ART-131-03 3	341264 MW	1-3:50 PN	Л
	R. KALMAN	\$520.00	\$52.00 \$80.00	\$652.00
ONL NCT	ART-131-04 3	341265		
	A. SCHROER	\$520.00	\$52.00 \$80.00	\$652.00
	Required: Pick ι	up supplies on c	ampus 10/1, 10:00-	12:00pm.

ART-161 **PHOTOGRAPHY I, 4 CREDITS**

Introduction to basic camera operation and basic darkroom processes in developing and printing film. Elements of composition, content, and historical reference will be explored.

Required: Access to a 35mm black and white camera with adjustable exposure controls (no digital cameras)

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, 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,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC NCT	ART-161-01	34126	6 TTH		1-3:50 PI	М	OC NCT	ART-257-01	341289	TTH		9-11:50 A	M
	C. GIFFEN		\$520.00	\$52.00	\$150.00	\$722.00		J. IIJIMA		\$520.00	\$52.00	\$80.00	\$652.00

ART-162 PHOTOGRAPHY II, 4 CREDITS

This course is the second of a sequence of three darkroom photography courses. This course explores camera operation and darkroom processes in developing and printing film. Photography II explores the photo processes and elements of composition, content, and historical/contemporary references at an intermediate level.

Prerequisites: ART-161

Required: Access to a 35mm black and white camera with adjustable exposure controls (no digital cameras)

OC NCT	ART-162-01	ART-162-01 341268 TTH		1-3:50 PM	1
	C. GIFFEN	\$520.00	\$52.00	\$150.00	\$722.00

ART-204 HISTORY OF ART/ANCIENT THROUGH MEDIEVAL, 4 **CREDITS**

Examines art, cultures, and history from the Paleolithic era through the early Medieval eras. This is a broad overview of art history that promotes an understanding of art and its history through readings, discussion,

Recommended Prerequisites: WR-121Z

ONL NCT	ART-204-01	340733			
	J SIMONE	\$520.00	\$52 00	\$21.00	\$593 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 NCT	ART-250-01	341270	TTH		9-11:50 AN	Л
	N. BRODNICK	İ	\$520.00	\$52.00	\$79.00	\$651.00
OC NCT	ART-250-02	341277	TTH		1-3:50 PM	
	N. BRODNICK	İ	\$520.00	\$52.00	\$79.00	\$651.00
OC NCT	ART-250-03	341278	TTH		6-8:50 PM	
	N. WARRENS		\$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 NCT	ART-253-01 341281	TTH		9-11:50 AM	Л
	N. BRODNICKI	\$520.00	\$52.00	\$79.00	\$651.00
OC NCT	ART-253-02 341284	I TTH		1-3:50 PM	
	N. BRODNICKI	\$520.00	\$52.00	\$79.00	\$651.00
OC NCT	ART-253-03 341286	S TTH		6-8:50 PM	
	N. WARRENS	\$520.00	\$52.00	\$79.00	\$651.00

ART-257 METALSMITHING/JEWELRY, 4 CREDITS

This course examines basic techniques in metalsmithing and jewelrymaking. Students will learn basic techniques and processes of metalsmithing such as sawing, cold connection, soldering, metal inlay, fabrication, forming, surface treatments and casting. The focus of this class will be placed on creating forms for body adornment. Critiques, discussions and presentations are included in this course.

ART-258 **METALSMITHING/JEWELRY: INTERMEDIATE, 4 CREDITS**

This course continues the study of applied design principles in metalsmithing and jewelry-making, with an emphasis on creating original designs. Students will learn more advanced technical processes and engage in discussions about the relationship between jewelry/art metal and different fields. Students who aspire to pursue a career in the jewelry and metalsmithing trades will receive practical guidelines to help them achieve their goals.

Prerequisites: ART-257

OC NCT	ART-258-01	341293 TTH		9-11:50	AM
	J. IIJIMA	\$520.00	\$52 00	\$20.00	\$592 00

ART-261 PHOTOGRAPHY III, 4 CREDITS

This course is the third of a sequence of three darkroom photography courses. This course explores camera operation and darkroom processes in developing and printing film. Photography III explores the photo processes and elements of composition, content, and historical/ contemporary references at an advanced level.

Prerequisites: ART-161 and ART-162

Required: Access to a 35mm black and white camera with adjustable exposure controls (no digital cameras)

OC NCT	ART-261-01	341294 TTH	1294 TTH 1-3:50 P		
	C. GIFFEN	\$520.00	\$52.00	\$80.00	\$652.00

ART-262 **DIGITAL PHOTOGRAPHY & PHOTO-IMAGING, 4 CREDITS**

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

Required: Access to a digital camera with adjustable exposure controls

OC NCT	ART-262-01	341295	TTH		9-11:50	AM
	D. OLSEN		\$520.00	\$52.00	\$80.00	\$652.00
ONL NCT	ART-262-02	341300				
	S. ELIOT		\$520.00	\$52.00	\$80.00	\$652.00
	Adobe Photos	shop is us	sed.			

ART-281 PAINTING: STILL LIFE/BEGINNING, 4 CREDITS

Introduces basic painting tools, materials, techniques, and elements of composition, color, value, and space. Projects involve observational painting with a focus on Still Life and its relationship to volume and form on a two-dimensional plane. Course includes painting, readings and group critiques.

Prerequisites: ART-131 or Student Petition

OC NCT	ART-281-01	341302 F		9-2:50 PM	
	D. ANDERSE	\$52 ا	0.00 \$52.00	\$110.00	\$682.00

ART-284 PAINTING: STILL LIFE/INTERMEDIATE, 4 CREDITS

Learn intermediate painting tools, materials, techniques, and elements of composition, color, value and space. Projects involve observational painting with a focus on Still Life and its relationship to volume and form on a two-dimensional plane. Course includes painting, readings and group critiques.

Prerequisites: ART-281 or Student Petition

OC NCT	ART-284-01	341306	F		9-2:50 PM	
	D. ANDERSE	V	\$520.00	\$52.00	\$110.00	\$682.00

SCULPTURE, 4 CREDITS ART-291

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

Introduction to the processes and concepts of sculpture; the elements of form and space will be explored. Clay, plaster, mold making, carving, and assemblage will be introduced. Reference to historical and aesthetic content will be presented.

OC NCT ART-291-01 341307 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.

COLLISION REPAIR WELDING I, 2 CREDITS AB-112

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 NCT 341149 F AB-112-01 8-12:20 PM C. DAHLSRUD-\$260.00 \$26.00 \$230.00 \$516.00 **RIVERA** J. PHELPS

COLLISION REPAIR I/NONSTRUCTURAL, 6 CREDITS ΔB-113

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

OC NCT AB-113-01 341151 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 damage repair.

Prerequisites: AB-112

OC NCT AB-123-01 341156 F 8-12:20 PM C. DAHLSRUD-\$260.00 \$26.00 \$158.00 \$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

OC NCT AB-133-01 341157 MT 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00

M. HOUSE

AB-149 COLLISION REPAIR ESTIMATING I, 2 CREDITS

This course provides instruction in procedure and terminology used in the collision repair estimating field. Body part component identification and the effects of a collision on a vehicle will be studied.

OC NCT 341159 M 1:30 -3:50 PM AB-149-01 A. YAGER-ROUNDS \$260.00 \$26.00 \$120.00 \$406.00

AB-222 COLLISION REPAIR III/ADVANCED STRUCTURAL, 6 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

OC NCT AB-222-01 341161 MT 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

COLLISION REPAIR IV/ADVANCED STRUCTURAL, 6 AB-224 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 NCT AB-224-01 341164 MT 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

COLLISION REPAIR V/ADVANCED STRUCTURAL, 6 AB-226 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

OC NCT AB-226-01 341165 MT 7-12:20 PM M GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

COLLISION REPAIR WELDING III, 2 CREDITS AB-235

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

OC NCT AB-235-01 341166 F 8-12:20 PM 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

OC NCT AB-280-01 341169 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

OC NCT ABR-125-01 341172 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

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 Crs. Fee Total

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 NCT ABR-127-01 341178 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 OC NCT 341179 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.

Prerequisites: ABR-129

OC NCT ABR-225-01 341182 WTH 7-12:20 PM M. GRIFFITH \$780.00 \$78.00 \$337.00 \$1,195.00 M. HOUSE

RESTORATION PRACTICES, 6 CREDITS

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

OC NCT 341184 WTH ABR-227-01 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.

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

oc AM-101-01 341191 MTWTHF 1-5:50 PM

N ROBERTS \$260.00 \$26.00 \$22.00 \$308.00

Meets: 9/29-10/3.

ELECTRICAL SYSTEMS I, 5 CREDITS AM-129

This course is designed to provide students with the entry-level skills necessary to repair automobile electrical systems. Students will learn about general electrical systems diagnosis; servicing and repair of batteries, starting systems, and charging systems.

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

ос AM-129-01 341210 MTWTH 1-5:50 PM J LFUCK \$650.00 \$65.00 \$211.00 \$926.00 Meets: 10/6-11/6. oc AM-129-02 341215 MTWTH 1-5:50 PM J. LEUCK \$650.00 \$65.00 \$211.00 \$926.00 Meets: 11/10-12/11.

BRAKE SYSTEMS, 5 CREDITS AM-130

In this theory and lab course students will learn about the construction and operation of basic hydraulics, brake fluids, friction materials, seals, disc and drum brakes, hydraulic and vacuum brake boosters systems. Students will also learn to service and repair automotive brake systems.

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-130-01 341216 MTWTH 1-5:50 PM W. VAN RIPER \$650.00 \$65.00 \$211.00 \$926.00 Meets: 10/6-11/6. OC. AM-130-02 341217 MTWTH 1-5:50 PM W. VAN RIPER \$650.00 \$65.00 \$211.00 \$926.00

AM-201 **AUTOMOTIVE INTERNSHIP, 3 CREDITS**

Meets: 11/10-12/11.

Students will be completing a portfolio project to present to companies in the automotive industry. Students will learn best practices for interview preparedness and resume development. There will be a scheduled interview day with partners in industry to help place students in the workforce for internship. Students will prepare for Auto Service Excellence (ASE) certification tests.

Prerequisites: AM-101

AM-201-01 341218 F 7-12:20 PM N. ROBERTS \$390.00 \$39.00 \$5.00 \$434.00 Meets: 10/3-11/7.

COMFORT SYSTEMS, 5 CREDITS

In this course, students will learn design, construction, testing, maintenance, and repair of automotive heating and air conditioning systems. Prepares a student to take the Section 609 Environmental Protection Agency certification test.

Prerequisites: AM-129

341219 MTWTH AM-224-01 7-11:50 AM D. BLACKMON \$134.00 \$849.00 \$650.00 \$65.00 Meets: 9/29-10/30. AM-224-02 341224 MTWTH 7-11:50 AM oc D. BLACKMON \$650.00 \$65.00 \$134.00 \$849.00 Meets: 11/4-12/5.

ELECTRICAL SYSTEMS II. 5 CREDITS AM-229

In this course students will learn fundamentals of electronics, diagnosis, and repair of general electrical including, lighting systems, instrument cluster and driver information systems, and body electrical systems.

Prerequisites: AM-129

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

Total

ос	AM-229-01	341225	MTWTH		7-11:50	ΔM
	N. ROBERTS		\$650.00	\$65.00	\$211.00	\$926.00
	Meets: 9/29-10	0/30.				
ОС	AM-229-02	341226	MTWTH		7-11:50	ΔM
	N. ROBERTS		\$650.00	\$65.00	\$211.00	\$926.00

Tuition

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

Fee

Meets: 11/3-12/4.

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

Crs Reg.

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

Corequisites: CWE-281

OC NCT AM-280-01 341227

Course No Course Title, Credits

Instructor

Section No

N. ROBERTS \$780.00 \$78.00 \$45.00 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

ос	BI-101-01	341310	MW		1-2:20 F	PM
	E. DEBEY		\$520.00	\$52.00	\$55.00	\$627.00
	Corequisite: 7 BI-101L-03.	Γake 1 of	the follow	ing BI-10	01L-01, B	I-101L-02,
ОС	BI-101-02	341311	TTH		9-10:20	AM
	E. DEBEY		\$520.00	\$52.00	\$55.00	\$627.00
	Corequisite: 7 BI-101L-03.	Γake 1 of	the follow	ing BI-10	01L-01, B	I-101L-02,
ONL	BI-101-40	341315	;			
	E. DEBEY		\$520.00	\$52.00	\$55.00	\$627.00
	Corequisite: 7	Take the	following I	BI-101L-	40.	
ONL	BI-101-41	341316	;			
	T. BLACKWE	LL	\$520.00	\$52.00	\$55.00	\$627.00

BI-101L **GENERAL BIOLOGY; CELLULAR BIOLOGY LAB, 0** CREDIT

Corequisite: Take the following BI-101L-41.

Lab course for BI-101 Corequisites: BI-101

ос	BI-101L-01	341318 MW		2:30 -3:50	PM
	E. DEBEY	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: 7	Γake 1 of the follov	ving BI-1	01-01, BI-10	1-02.
oc	BI-101L-02	341319 TTH		10:30 -11:5	50 AM
	E. DEBEY	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: 7	Take 1 of the follow	ving BI-1	01-01, BI-10 ⁻	1-02.
ос	BI-101L-03	341320 TTH		1-2:20 PM	
	E. DEBEY	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: 7	Take 1 of the follow	ving BI-1	01-01, BI-10 ⁻	1-02.
ONL LCT	BI-101L-40	341323			
	E. DEBEY	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: 7	Take the following	BI-101-4	0.	
ONL	BI-101L-41	341325			
	T. BLACKWE	LL \$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: 7	Take the following	BI-101-4	1.	

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

BI-102 **GENERAL BIOLOGY; ANIMAL SYSTEMS, 4 CREDITS**

Tuition

Crs Reg.

An inquiry-based laboratory course focusing on human and animal body systems; including teratogens, Hox genes and hormone mimics in embryonic development. Activities emphasize comparisons across animal phyla to better understand the diversity of life. The class uses student centered activities in a collaborative learning environment to enhance appreciation of the animal kingdom.

Corequisites: BI-102L

Recommended Prerequisites: MTH-060 or MTH-098 or placement in

MTH-065; and WRD-098 or placement in WR-121Z

ONL BI-102-40 341326

Course No Course Title, Credits

Section No

Instructor

S SOLL \$520.00 \$52.00 \$55.00 \$627.00

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

Fee

Time

Crs. Fee

Total

GENERAL BIOLOGY; ANIMAL SYSTEMS LAB, 0 CREDIT BI-102L

Lab course for BI-102 Corequisites: BI-102

ONL BI-102L-40 341328

\$0.00 S. SOLL \$0.00 \$0.00 \$0.00

BI-103 GENERAL BIOLOGY; PLANTS & THE ECOSYSTEM, 4 CREDITS

An inquiry-based laboratory course focusing on plants and the ecosystem; including plant identification, population dynamics, productivity and energy flow. Activities include an integrated approach to understanding environmental issues and the impact of humans on the biosphere. The class uses student centered activities in a collaborative learning environment to enhance appreciation of the biological world.

Corequisites: BI-103L

Recommended Prerequisites: MTH-060 or MTH-098 or placement in

MTH-065; and WRD-098 or placement in WR-121Z

BI-103-40 341330 K. OSTLUND \$520.00 \$52.00 \$55.00 \$627.00

GENERAL BIOLOGY; PLANTS & THE ECOSYSTEM LAB, **BI-103L** 0 CREDIT

Lab course for BI-103 Corequisites: BI-103

ONL BI-103L-40 341331

\$0.00 \$0.00 K. OSTLUND \$0.00 \$0.00

BI-112 GENERAL BIOLOGY FOR HEALTH SCIENCES, 4 CREDITS

A one-term preparatory course that introduces the Health Occupations 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-231 and BI-234.

Corequisites: BI-112L

department first class

VAR: Variable credit class

Recommended Corequisite: CH-112

Recommended Prerequisites: MTH-060 or MTH-098 or placement in

MTH-065, and WRD-098 or placement in WR-121Z

BI-112-01 oc 341332 TTH 11-12:20 PM J. BOWN \$520.00 \$52.00 \$55.00 \$627.00 Corequisite: Take 1 of the following BI-112L-01, BI-112L-02. HAR BI-112-15 341335 MW 9-10:20 AM P. JONES \$520.00 \$52.00 \$55.00 \$627.00 Corequisite: Take the following BI-112L-15. ONL BI-112-20 341336 \$520.00 \$52.00 \$55.00 S. KELSEY \$627.00 Corequisite: Take the following BI-112L-20.

Other Coding Translations: ESPAÑOL: Enseñado en español TBA: To be arranged: contact

LCT: Low-Cost Text NCT: No-Cost Text

Course No	Course Title, Cr	edits					Course No	Course Title, Cr	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
ONL	BI-112-40 M. ANDURI- F	341337 LYNN	\$520.00	\$52.00	\$55.00	4007.00		e natural proces					

BI-112L GENERAL BIOLOGY FOR HEALTH SCIENCES LAB, 0

Corequisite: Take the following BI-112L-40.

CREDIT
Lab course for BI-112

Corequisites: BI-112 oc BI-112L-01 341339 T 1-3:50 PM \$0.00 M. PLUMMER \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-112-01. BI-112L-02 341340 TH 8-10:50 AM oc J. BOWN \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-112-01. BI-112L-15 341342 MW 10:30 -11:50 AM HAR P. JONES \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-112-15. oc BI-112L-20 341344 M 6-8:50 PM K. OSTLUND \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-112-20. ONL BI-112L-40 341347 M. ANDURI- FLYNN \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-112-40.

BI-120 INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY, 4 CREDITS

This course is designed to serve students as an overview introductory course to human anatomy and physiology. Material covered includes the structure and function of the human body. Basic chemistry and cell structures are covered, as well as the organization of tissues, organs, and organ systems. Correlations can then be made between this material and disease states commonly encountered in health care. Dissection of animal tissues is required.

Corequisites: BI-120L

HAR	BI-120-15	341348 MW		1-2:20 I	PM		
	P. JONES	\$520.00	\$52.00	\$55.00	\$627.00		
	This class is	This class is intended as a pre-requisite for the Medical					
	Assistant and Medical Coding and Billing Programs						

BI-120L INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY LAB, 0 CREDIT

Lab course for BI-120 **Corequisites:** BI-120

HAR BI-120L-15 341349 MW 2:30 -3:50 PM
P. JONES \$0.00 \$0.00 \$0.00 \$0.00

BI-165C NATURAL HISTORY OF THE OREGON COAST, 3 CREDITS

Explores the natural processes that form our Northwest coastal environment: geologic development, shoreline processes, oceanography, and environmental hazards. Topics include the ecology of marine mammals, fish, birds, estuaries, tidepools, sand dunes, and coastal forests.

ОС	BI-165C-20	341351 M		6-8:50 l	PM
	J. BOWN	\$390.00	\$39.00	\$20.00	\$449.00

BI-165CL NATURAL HISTORY OF THE OREGON COAST WITH LAB, 4 CREDITS

Explores the natural processes that form our Northwest coastal environment: geologic development, shoreline processes, oceanography, and environmental hazards. Topics include the ecology of marine mammals and birds, estuaries, tide pools, sand dunes and coastal forests. Lab included with field trips and lab activities.

ОС	BI-165CL-20	341352 M		6-8:50 PM	1
	J. BOWN	\$520.00	\$52.00	\$60.00	\$632.00
	Field trips to tl determined.	he Oregon coast re	equired.	Dates to be	;

BI-215 GENERAL ZOOLOGY, 4 CREDITS

A lecture and lab course offering cellular and molecular basis of animal life including genetics, embryology, evolution, systematics, and protozoan diversity.

Corequisites: BI-215L

Prerequisites: MTH-095 or placement in MTH-111Z

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

ос	BI-215-01	347128 MW	347128 MW		
	J. BOWN	\$520.00	\$52.00	\$55.00	\$627.00

BI-215L GENERAL ZOOLOGY LAB, 0 CREDIT

Lab course for BI-215 **Corequisites:** BI-215

oc **BI-215L-01 347129 W 1-3:50 PM**J. BOWN \$0.00 \$0.00 \$0.00 \$0.00

BI-221LZ PRINCIPLES OF BIOLOGY: CELLS LAB, 0 CREDIT

Lab course for BI-221Z **Corequisites:** BI-221Z

UC	BI-221LZ-U1 3413		8-10:50 AW			
	T. BLACKWELL	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 1	of the follo	wing BI-2	21Z-01, BI-	221Z-02.	
ОС	BI-221LZ-02 3413	57 TH		1-3:50 PN	Л	
	T. BLACKWELL	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 1	of the follo	wina BI-2	217-01 BI-	2217-02	

BI-221Z PRINCIPLES OF BIOLOGY: CELLS, 5 CREDITS

Explores fundamental biological concepts and theories about the cellular and molecular basis of life including cell structure and function, metabolism, genetic basis of inheritance and how information flows from DNA to proteins, with a focus on the iterative process of science. Intended for science majors.

Corequisites: BI-221LZ

ONL

Prerequisite or Corequisite: CH-104, or CH-221Z and CH-227Z

Prerequisites: MTH-111Z or placement in MTH-112Z

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

ос	BI-221Z-01	341353	MW		8-9:50	АМ
	T. BLACKWEL	L	\$650.00	\$65.00	\$55.00	\$770.00
	Corequisite: Ta	ake 1 of	owing BI-221LZ-01, BI-221LZ-			
	00					

BI-221Z-02 341354

T. BLACKWELL \$650.00 \$65.00 \$55.00 \$770.00 This class has an in-person lab requirement. Corequisite: Take 1 of the following BI-221LZ-01, BI-221LZ-02.

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.

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

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

BI-231-01 341359 M 10-11:50 AM M. PATTERSON \$520.00 \$52.00 \$55.00 \$627.00 Corequisite: Take 1 of the following BI-231L-01, BI-231L-02,

BI-231L-03.

BI-231-02 OC HYB 341360 T 1-2:50 PM

B. KOP \$520.00 \$52.00 \$55.00 \$627.00 This section has in-person lecture and lab requirements and online lecture assignments. Corequisite: Take 1 of the following BI-231L-01, BI-231L-02, BI-231L-03.

HAR BI-231-15 341361 TTH 9-10:20 AM M. PATTERSON \$520.00 \$52.00 \$55.00 \$627.00

Corequisite: Take the following BI-231L-15.

OC HYB BI-231-20 341364 M 6:30 -9:00 PM B. KOP \$520.00 \$52.00 \$55.00 \$627.00 Corequisite: Take the following BI-231L-20.

BI-2311 **HUMAN ANATOMY & PHYSIOLOGY I LAB, 0 CREDIT**

Lab course for BI-231 Corequisites: BI-231

oc BI-231L-01 341366 M 1-3:50 PM M. PATTERSON \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following BI-231-01, BI-231-02. oc BI-231L-02 341371 T 3:30 -6:20 PM J. GALLEGOS \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following BI-231-01, BI-231-02. BI-231L-03 oc 341374 W 9-11:50 AM M. PATTERSON \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following BI-231-01, BI-231-02. HAR BI-231L-15 341376 TTH 10:30 -11:50 AM M. PATTERSON \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-231-15. ОС 6:30 -9:20 PM BI-231L-20 341378 W J. GALLEGOS \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-231-20.

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

OC HYB BI-232-01 9-10:50 AM 341382 T B. KOP \$520.00 \$52.00 \$55.00

This section has in-person lecture and lab requirements and

online lecture assignments.

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

Lab course for BI-232 Corequisites: BI-232

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

OC: Oregon City Campus

341387 T 11:30 -2:20 PM BI-232L-01 J. GALLEGOS \$0.00 \$0.00 \$0.00 \$0.00

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.

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

Prerequisites: BI-232 with a C or better

Corequisites: BI-233L

ос нув BI-233-01 1-2:50 PM 341394 M R KOP \$520.00 \$52.00 \$55.00 \$627.00 This section has in-person lecture and lab requirements and

online lecture assignments.

BI-233L **HUMAN ANATOMY & PHYSIOLOGY III LAB, 0 CREDIT**

Lab course for BI-233 Corequisites: BI-233

BI-233L-01 341400 M 4-6:50 PM M. PATTERSON \$0.00 \$0.00 \$0.00 \$0.00

BI-234 **INTRODUCTORY MICROBIOLOGY, 4 CREDITS**

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

BI-234-01 341407 TTH 1-2:20 PM \$520.00 \$52.00 \$55.00 S. SOLL \$627.00 Corequisite: Take the following BI-234L-01.

BI-234-20 341412 TTH 6-7:20 PM \$627.00 M. PLUMMER \$520.00 \$52.00 \$55.00 Corequisite: Take the following BI-234L-20. ONL 341415

\$742.00

BI-234-40 S. SOLL \$520.00 \$52.00 \$170.00

INTRODUCTORY MICROBIOLOGY LAB, 0 CREDIT BI-2341

Corequisite: Take the following BI-234L-40.

Lab course for BI-234 Corequisites: BI-234

oc BI-234L-01 341417 TTH 2:30 -3:50 PM S SOLL \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-234-01.

BI-234L-20 341422 TTH

oc 7:30 -8:50 PM M. PLUMMER \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-234-20.

ONI BI-234L-40 341425

A KAPII A \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following BI-234-40.

Business Administration

BA-101Z INTRODUCTION TO BUSINESS, 4 CREDITS

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

BA-101Z-01 341263 TTH 8-9:50 AM J. EICHENBERGER \$520.00 \$52.00 \$5.00 \$577.00

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		
REM LCT	BA-101Z-02	341267	' T		10-11:50 A	M		
	B. FORNEY		\$520.00	\$52.00	\$44.38	\$616.38		
	Online textboo	k includ	ed in sect	ion fees.				
OC HYB LCT	BA-101Z-03	341269	TH		10-11:50 A	M		
	J. EICHENBER	RGER	\$520.00	\$52.00	\$5.00	\$577.00		
OC HYB LCT	BA-101Z-04	341271	W		1-2:50 PM			
	J. AMAN		\$520.00	\$52.00	\$44.38	\$616.38		
	Online textboo	k includ	ed in sect	ion fees.				
ONL LCT	BA-101Z-05	341272	?					
	M. MOISO		\$520.00	\$52.00	\$5.00	\$577.00		
ONL LCT	BA-101Z-06	341273	}					
	K. HEINIG		\$520.00	\$52.00	\$44.38	\$616.38		
	Online textboo	k includ	ed in sect	ion fees.				
ONL LCT	BA-101Z-07	341274	ļ					
	M. MOISO		\$520.00	\$52.00	\$5.00	\$577.00		
ONL LCT	BA-101Z-08	341275	;					
	S. RAHN		\$520.00	\$52.00	\$44.38	\$616.38		
	Online textboo	k includ	ed in sect	ion fees.				

GENERAL ACCOUNTING I, 3 CREDITS BA-111

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

oc	BA-111-01	341280	Т		9-11:50	AM.
	J. SAN-CLAI	RE	\$390.00	\$39.00	\$114.99	\$543.99
	Online textbo	ok include	ed in sect	ion fees.		
ONL	BA-111-02	341282				
	K. JANICKI		\$390.00	\$39.00	\$114.99	\$543.99
Online textbook included in section fees.						

GENERAL ACCOUNTING II, 4 CREDITS BA-112

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 J. SAN-CLAIRE \$520.00 \$52.00 \$114.99 \$686.99 Online textbook included in section fees.

BA-119 PROJECT MANAGEMENT PRACTICES, 2 CREDITS

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.

ONL LCT	BA-119-01	341285				
	C. PLOWMAN		\$260.00	\$26.00	\$5.00	\$291.00
ONL LCT	BA-119-02	341287				
	C. PLOWMAN		\$260.00	\$26.00	\$5.00	\$291.00

PROJECT MANAGEMENT FUNDAMENTALS, 4 CREDITS **BA-120**

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.

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

Crs. Fee

Total

Tuition

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

ONI RA-120-01 341288 S. RAHN \$520.00 \$52.00 \$5.00 \$577 00

BA-125 PROJECT MANAGEMENT PREP, 5 CREDITS

Tools and processes employed in the project knowledge areas of project communication, risk, procurement, and quality. Major topics include project communication planning and preferred communication channels and approaches; risk assessment and risk management in a project environment; project procurement planning and management with an emphasis on contract types and contract awards and administration; and approaches to project quality planning, quality assurance, control and improvement.

Prerequisite or Corequisite: BA-120

Course No Course Title, Credits Section No

Instructor

OC HYB	BA-125-01	341290 T		6-8:20 PM	
	S. RAHN	\$650.00	\$65.00	\$5.00	\$720.00

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 341291 S. RAHN \$520.00 \$52.00 \$20.00 \$592.00

INTRODUCTION TO BUSINESS COMPUTING, 4 CREDITS BA-131

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

OC HYB BA-131-01 10-11:50 AM \$520.00 \$52.00 \$137.33 F MFYFRS \$709.33 Office 2021 version is used. Online textbook included in section fees OC HYB BA-131-02 341296 W 1-2:50 PM

F. MEYERS \$520.00 \$52.00 \$137.33 \$709.33 Office 2021 version is used. Online textbook included in section fees.

OC HYB BA-131-03 341297 T 1-2:50 PM M. SORRENTINO \$520.00 \$52.00 \$137.33 \$709.33 Office 2021 version is used. Online textbook included in

section fees

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	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
REM	BA-131-04 J. AMAN	341298		\$52.00	6-8:20 PM \$137.33	\$709.33	ONL	BA-211Z-02 J. SAN-CLAIR	341313 F		\$52.00	\$134.99	\$706.99
	Office 2021 version is used. Online textbook included in section fees.						REM	Online textboo BA-211Z-03	_	ed in sect		1-2:50 PM	,
ONL	BA-131-05 D. HEINIG Office 2021 ve	34129 9 ersion is	\$520.00		\$137.33 ook include	\$709.33 d in		I. SETO Online textboo		\$520.00		\$134.99	\$706.99
ONL	section fees. BA-131-06	341301	1				BA-213Z	PRINCIPLES CREDITS	OF MAN	IAGERIA	L ACCO	UNTING, 4	
	D. HEINIG Office 2021 ve section fees.	ersion is			\$137.33 ook include	\$709.33 d in	business, fo	inderstanding of ocusing on the coduction costs	developn	nent and	use of inf	formation to	
ONL	BA-131-07 K. HEINIG	341303	\$520.00		\$137.33	\$709.33	short- and l	long-term organ tes: BA-211Z w	izational	decision			
	Office 2021 ve section fees.	ersion is	used. On	iine texto	OOK INCIUGE	a in	ONL	BA-213Z-01 J. SAN-CLAIR		•		\$124.99	\$696.99
BA-169Z	DATA ANAL'	YSIS US	ING MICI	ROSOFT	EXCEL. 4 (CREDITS		Online textboo	ik iriciude	ea in seci	uon rees.		

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

ONL BA-169Z-30 340939

> \$520.00 \$52.00 \$20.00 \$592.00 D. CARINO

BA-205 BUSINESS COMMUNICATIONS WITH TECHNOLOGY, 4 CREDITS

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 341304

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

BA-206-01 341305

> J. AMAN \$520.00 \$52.00 \$131.08 \$703.08

Online textbook included in section fees.

PRINCIPLES OF FINANCIAL ACCOUNTING, 4 CREDITS BA-211Z

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

BA-211Z-01 OC HYB 341309 M 9-11:50 AM I. SETO \$520.00 \$52.00 \$134.99 \$706.99 Online textbook included in section fees.

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:

department first class VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Budgeting is a crucial managerial decision-making and planning tool that also incorporates performance evaluation through variance analysis. This course examines developing and managing department and project budgets in-depth, as well as how they fit into the overall organizational framework. Specifically, this course includes coverage of static, flexible. and rolling budgets, capital budgeting, variance analysis, break-even and contribution margin analysis, profit planning, manufacturing costs, sales forecasts, and cost behavior.

BUDGETING FOR MANAGERS, 3 CREDITS

Prerequisites: BA-211Z

BA-217

Recommended Prerequisites: BA-213Z or some experience in budgeting

ONL NCT BA-217-01 341324

> T. FRANK \$390.00 \$39.00 \$5.00 \$434 00

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

BA-218-01 9-10:50 AM J. AMAN \$520.00 \$52.00 \$134.99 \$706.99 Online textbook included in section fees.

PRINCIPLES OF MARKETING, 4 CREDITS **BA-223**

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

BA-223-01 341329 C. CHATTERTON \$520.00 \$52.00 \$5.00 \$577.00 ONI BA-223-02 341333 J. EICHENBERGER \$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.

TBA: To be arranged: contact

Course No	ourse 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	V,TH.F,S,SU) Fee	Time Crs. Fee	Total
ONL	BA-224-01	341334											

\$620.75

Online textbook included in section fees.

\$520.00 \$52.00 \$48.75

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	341338
	M. MOISO	\$520.00 \$52.00 \$52.59 \$624.59
	Online textbo	ok included in section fees.
ONL	BA-226Z-02	341341
	M MOISO	\$520.00 \$52.00 \$52.59 \$624.59

Online textbook included in section fees.

BA-228 COMPUTERIZED ACCOUNTING, 4 CREDITS

An introductory, hands-on experience with Quickbooks Online, a cloudbased software application used as the bookkeeping system for small to mid-sized service businesses and merchandisers. Includes business setup and transactions for customer, vendor, and banking modules, transactions for a full accounting cycle, inventory management, financial reporting, and troubleshooting.

Prerequisites: BA-111 or BA-211Z

M MOISO

Recommended Prerequisites: BA-131 or CS-120

OC HYB	BA-228-01	10-11:50 AM			
	TBA	\$520.00	\$52.00	\$121.33	\$693.33

Online textbook included in section fees.

BA-249 RETAILING, 3 CREDITS

Provides an understanding of the types of retail businesses, strategies, operations, formats and environments through which retailing is carried out, including a multi-disciplinary approach to understand the structure of effective retail management.

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

ONL	BA-249-01	341346	
	T. FRANK	\$390.00 \$39.00 \$5.00 \$43	34.00

SUPERVISORY MANAGEMENT, 3 CREDITS **BA-251**

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

ONL	BA-251-01	341350			
	D. HEINIG	\$390.00	\$39.00	\$51.66	\$480.66
	Online textbo	ook included in sect	ion fees		

BA-270 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	341356				
	C. CHATTER	TON	\$520.00	\$52.00	\$5.00	\$577.00

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

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 341358 \$780.00 \$78.00 \$45.00 B. FORNEY Required: Student Petition. Corequisite: Take the following

CWE-281-06.

ONL NCT BA-280-02 341362

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

CWF-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	BA-285-01	341363	
	TBA	\$520.00 \$52.00 \$51.66 \$623.6	36
	Online textbo	ook included in section fees.	
ONL	BA-285-02	341365	
	J. HERNAND	DEZ \$520.00 \$52.00 \$51.66 \$623.6	36
	Online textbo	ook included in section fees.	

Business Technology

PERSONAL KEYBOARDING, 2 CREDITS BT-120

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	341367
	S. SIMMONS	\$260.00 \$26.00 \$10.00 \$296.00
ONL	BT-120-02	341370
	S. SIMMONS	\$260.00 \$26.00 \$10.00 \$296.00

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

TBA: To be arranged: contact

department first class

VAR: Variable credit class

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	341372
	S. SIMMONS	\$130.00 \$13.00 \$10.00 \$153.00
ONL	BT-121-02	341379
	S. SIMMONS	\$130.00 \$13.00 \$10.00 \$153.00

BT-122 **KEYBOARDING SKILLBUILDING, 2 CREDITS**

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.

Other Coding Translations: ESPAÑOL: Enseñado en español

LCT: Low-Cost Text NCT: No-Cost Text

Course No Course Title, Credits					Course No	Course Title, Co	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
	Prerequisi	tes: BT-120						A lab transf	er course for st	udents ir	nursing	, allied he	alth fields ar	nd
	0111	DT 400 04	044004	1				liboral arte	Tonice include:	oheania	tion ma	scuraman	t composition	on

\$296.00

BT-122-01 341381

S. SIMMONS

S. SIMMONS \$260.00 \$26.00 \$10.00 \$296.00 ONL BT-122-02 341389

BUSINESS EDITING I, 3 CREDITS BT-124

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

BT-124-01 ONL NCT 341390

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

\$260.00 \$26.00 \$10.00

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 NCT BT-125-01 345261

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

MS WORD FOR BUSINESS & THE WORKPLACE, 4 BT-150 **CREDITS**

This course provides a comprehensive introduction to Microsoft Word, progressing from beginning to intermediate skills essential for business and workplace applications. Students will learn to create, format, and edit professional documents. Emphasis will be placed on efficiency, accuracy, and professional presentation, preparing students to use Word effectively in an organizational setting. Hands-on exercises, real-world business scenarios, and projects will reinforce learning.

ONL BT-150-01

> \$520.00 \$52.00 \$92.25 \$664.25 F. MEYERS Office 2021 version is used. Online textbook included in section fees.

BT-262 **INTEGRATED PROJECTS, 4 CREDITS**

Advanced use and integration of Microsoft Word, Excel, Access and PowerPoint skills in creating letters, reports, and forms; creation of advanced Excel worksheet reports and budgets; creation of Access databases to generate reports and forms; creation of PowerPoint presentations. Introduction to the use of Adobe Professional for use with documents, forms, and web pages. Google applications such as documents, presentations, spreadsheets, and Gmail.

Prerequisites: BA-131 and BT-150

ONL BT-262-01

> **B FORNEY** \$520.00 \$52.00 \$127.33 \$699.33 Office 2021 version is used. Online textbook included in

section fees.

Chemistry

INTRODUCTORY CHEMISTRY, 5 CREDITS CH-104

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

CH-104-01 341437 MW 2-3:20 PM S. MCDONALD \$650.00 \$65.00 \$50.00 \$765.00 Corequisite: Take the following CH-104S-01, CH-104L-01. CH-104-40 ONL 341452 \$650.00 \$65.00 \$50.00 X. DONG \$765.00

Corequisite: Take the following CH-104S-40, CH-104L-40.

CH-104L INTRODUCTORY CHEMISTRY LAB, 0 CREDIT

Lab course for CH-104

Corequisites: CH-104 and CH-104S

oc CH-104L-01 G. BURGESS \$0.00 \$0.00 \$0.00 \$0.00 Open Lab: Students must spend 3 hours per week in Chemistry Tutorial Lab. Lab Hours: Wed: 9 AM-4PM, Thursday: 9 AM-8 PM, & Friday: 9 AM-4 PM. Corequisite: Take the following CH-104-01, CH-104S-01. CH-104L-40 341455 TBA OC.

G. BURGESS \$0.00 \$0.00 \$0.00 \$0.00 Open Lab: Students must spend 3 hours per week in Chemistry Tutorial Lab. Lab Hours: Wed: 9 AM-4 PM, Thursday: 9 AM-8 PM, & Friday: 9 AM-4 PM Corequisite: Take the following CH-104-40, CH-104S-40.

INTRODUCTORY CHEMISTRY SEMINAR, 0 CREDIT

Seminar course for CH-104

Corequisites: CH-104 and CH-104L

CH-104S-01 341457 TH 1-1:50 PM S. MCDONALD \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following CH-104-01, CH-104S-01. oc CH-104S-40 341464 TH 2-2:50 PM \$0.00 X DONG \$0.00 \$0.00 \$0.00 Corequisite: Take the following CH-104-40, CH-104L-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

CH-112-01 341465 MW 10-11:20 AM S. MCDONALD \$520.00 \$52.00 \$50.00 \$622.00 Corequisite: Take 1 of the following CH-112L-01, CH-112L-02.

CH-112-15 ONL LCT

\$520.00 \$52.00 \$50.00 N. DAS \$622.00 Corequisite: Take the following CH-112L-15.

ONL LCT CH-112-20

D. PAUL \$520.00 \$52.00 \$50.00 \$622.00

Corequisite: Take the following CH-112L-20.

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	Course Listing											2	025/FA
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,W,TF Tuition Fe		Time Crs. Fee	Total
OC HYB LCT	CH-112-40	341475					Seminar co	ourse for CH-22	1Z				
	D. PAUL			\$52.00		\$622.00	Corequisit	es: CH-221Z a	nd CH-22	77			
	In-person exa						•					44.00 40	-00 DM
	December 3.	Corequis	site: Take	the follow	wing CH-112L	40.	ос	CH-221SZ-01 D. MYERS	341538		0.00	11:30 -12 \$0.00	\$0.00
011 4401	OUEMICTOV	FOD 11	. A I TI I O			DIT		Corequisite: T	aka 2 of	, , , ,			
CH-112L CHEMISTRY FOR HEALTH SCIENCES LAB, 0 CREDIT					ווטו		01, CH-227Z-		the following	J 011-2	Z1Z-01, OI	11-2212-	
	e for CH-112						ос	CH-221SZ-02		w		1-1:50 PM	1
Corequisit	tes: CH-112							D. MYERS	•		0.00	\$0.00	\$0.00
ос	CH-112L-01	341477	7 W		1-3:50 PM			Corequisite: Take 2 of the following CH-			CH-2	21Z-01, CI	H-227Z-
	D. PAUL		\$0.00	\$0.00	\$0.00	\$0.00		01, CH-227Z-	02.			•	
	Corequisite: T	ake the	following	CH-112-	01.		ОС	CH-221SZ-20	341542	TH		6-6:50 PM	Λ
ос	CH-112L-02	341483	3 TH		9-11:50 AM			J. DU BOULA	Υ	\$0.00 \$0	0.00	\$0.00	\$0.00
	S. MCDONAL	_	\$0.00	\$0.00	\$0.00	\$0.00	Corequisite: T		•	-221Z-	20, CH-22	7Z-20.	
	Corequisite: T		·	CH-112-			ос	CH-221SZ-40		=		1-1:50 PM	-
HAR	CH-112L-15	341486			1-3:50 PM			J. DU BOULA				\$0.00	\$0.00
	N. DAS		\$0.00	\$0.00	\$0.00	\$0.00		Corequisite: T	ake the f	ollowing CH	-221Z-	40, CH-22	7Z-40.
	Corequisite: T			CH-112-			011 0047	OFNEDAL O	IEMIOTE	4 ODE	O.T.O.		
ОС	CH-112L-20	341489		40.00	6-8:50 PM	40.00	CH-221Z	GENERAL CI		,			
	D. PAUL		\$0.00	\$0.00	\$0.00	\$0.00		nd applies princ					
0111	Corequisite: T			CH-112-	20.			ement, compon					
ONL	CH-112L-40 D. PAUL	341491	\$0.00	\$0.00	\$0.00	ድር ርር		e relationships i	•			•	•
	Corequisite: T	aka tha			+	\$0.00 classes of chemical reactions. CH-221Z is a least the laboratory component.		ZZIZ IS a Iec	clure c	burse, Cn-	·2212 IS		
	Corequisite. I	ake ine	lollowing	UH-112-	40.			, ,		5 - OLI 450		- 0	
CH-150	PREPARATO	BY CHE	MISTRY	4 CREE	DITS			tes: CH-104 an n school chemis					
				•		rol		passed all terms			inc yea	ais oi begii	iiiiig
	oreparatory cou					ıaı	"	es CH-2277 a		0 /			

chemistry sequence (CH-221Z, CH-222Z, CH-223Z) but have no chemistry background.

Corequisites: CH-150S

Prerequisites: MTH-095 or placement in MTH-111Z

oc	CH-150-01	341498 MWF	10-10:50) AM
	N. DAS	\$520.00	\$52.00 \$20.00	\$592.00
	Corequisite:	Take 1 of the follow	ving CH-150S-01, (CH-150S-
	02, CH-150S	S-03.		
ONL	CH-150-02	341502		
	D. MYERS	\$520.00	\$52.00 \$20.00	\$592.00
	Corequisite:	Take 1 of the follow	ving CH-150S-01, (CH-150S-
	02, CH-150S	S-03.	_	
ONL	CH-150-03	341504		
	V DONG	¢500.00	¢50.00 ¢00.00	¢ E00 00

\$520.00 \$52.00 \$20.00 X. DONG \$592.00 This section includes an in-person seminar requirement. Corequisite: Take 1 of the following CH-150S-01, CH-150S-02, CH-150S-03.

CH-150S PREPARATORY CHEMISTRY SEMINAR, 0 CREDIT

Seminar course for CH-150 Corequisites: CH-150

ос	CH-150S-01	341506 F		11-11:50	AM
	N. DAS	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: T	ake 1 of the follov	ving CH-	150-01, CH-	-150-02,
	CH-150-03.		•		
ос	CH-150S-02	341510 W		2-2:50 PN	1
	D. MYERS	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: T	ake 1 of the follow	ving CH-	150-01, CH	-150-02,
	CH-150-03.		•		
ОС	CH-150S-03	341513 TH		11-11:50	AM
	X. DONG	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: T CH-150-03.	ake 1 of the follov	ving CH-	150-01, CH	-150-02,

CH-221SZ GENERAL CHEMISTRY I SEMINAR, 0 CREDIT

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

\$130.00 \$13.00 \$50.00

Corequisites: CH-227Z and CH-221SZ

ONL LCT

oc

OC LCT	CH-221Z-01	345094 MW		O AM		
	D. MYERS	\$520.00	\$52.00	\$0.00	\$572.00	
	Corequisite: Take 2 of the following CH-221SZ-01, CH-					
	221SZ-02, CI	H-227Z-01, CH-227	7Z-02.			
ONLICT	CH-2217-20	245005				

J. DU BOULAY \$520.00 \$52.00 \$0.00 \$572.00 This class has an in-person lab requirement. Corequisite: Take the following CH-221SZ-20, CH-227Z-20.

CH-221Z-40 345096 \$520.00 \$52.00 \$0.00 J. DU BOULAY \$572.00 This section has an in-person lab requirement and seminar requirement. Corequisite: Take the following CH-221SZ-40, CH-227Z-40.

CH-227Z GENERAL CHEMISTRY I LABORATORY, 1 CREDIT

345097 TH

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 CH-227Z-01

D. MYERS

	D. WITEITO	Ψ100.00	φ10.00 φ00	.00 ψ100.00
	Corequisite: Take	2 of the follow	ing CH-221Z-	01, CH-
	221SZ-01, CH-22	1SZ-02.		
ос	CH-227Z-02 34		1-3:	50 PM
	D. MYERS	\$130.00	\$13.00 \$50	.00 \$193.00
	Corequisite: Take		ing CH-221Z-	01, CH-
	221SZ-01, CH-22	1SZ-02.		
ОС	CH-227Z-20 34	5099 TH	7-9:	50 PM
	J. DU BOULAY	\$130.00	\$13.00 \$50	.00 \$193.00
	Corequisite: Take	the following (CH-221Z-20,	CH-221SZ-20.
ос	CH-227Z-40 34	5100 F	2-4:	50 PM
	J. DU BOULAY	\$130.00	\$13.00 \$50	.00 \$193.00
	Corequisite: Take	the following (CH-221Z-40,	CH-221SZ-40.

Campus Locations:

9-11:50 AM

\$193.00

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) Instructor Crs. Fee Total Instructor Tuition Crs. Fee Total OC NCT HD-121-02 341674 MTWTHF 10-11:50 AM CH-241 **ORGANIC CHEMISTRY I, 5 CREDITS** E. PFEIFER \$390.00 \$39.00 \$0.00 \$429.00

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

Prerequisites: CH-223Z and CH-229Z Corequisites: CH-241L and CH-241S

CH-241-01 341547 MW 1-2:20 PM G. BURGESS \$650.00 \$65.00 \$50.00 \$765.00

CH-241L ORGANIC CHEMISTRY I LAB, 0 CREDIT

Lab course for CH-241

Corequisites: CH-241 and CH-241S

CH-241L-01 341551 F 9-11:50 AM G. BURGESS \$0.00 \$0.00 \$0.00 \$0.00

CH-241S ORGANIC CHEMISTRY I SEMINAR, 0 CREDIT

Seminar course for CH-241

Corequisites: CH-241 and CH-241L

CH-241S-01 G. BURGESS \$0.00 \$0.00 \$0.00 \$0.00

This section has in-person lecture and lab requirements.

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

EL-103-13 ONL NCT 341521

> \$130.00 \$13.00 \$0.00 **B. MALONEY** \$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 341523 T 1-2:20 PM

> **B. MALONEY** \$390.00 \$39.00 \$15.00 \$444.00

Meets: 10/13-12/13.

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.

ONL NCT HD-102-01

J. GINSBURG \$780.00 \$78.00 \$0.00 \$858.00V

Required: Student Petition.

HD-121 **COLLEGE SUCCESS, 3 CREDITS**

Provides strategies for creating college success by understanding one's role in their learning and by gaining critical skills necessary to learn across contexts

ONL NCT HD-121-01 341672

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

Meets: 9/8-10/4. Required: Student Petition.

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

CAREER EXPLORATION, 3 CREDITS HD-140

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 341695

Petition.

\$390.00 \$39.00 \$10.00 TBA \$439.00

Meets: 9/8-9/26. Additional 3 hours TBA. Required: Student

HD-145 STRESS MANAGEMENT, 1 CREDIT

Identifies specific personal stressors and focuses on developing skills that enable students to deal more effectively with stress.

HD-145-01

M. MALLATT \$130.00 \$13.00 \$10.00 \$153.00

Meets: 10/14-10/28

HD-146 **VALUES CLARIFICATION - THE TALK YOU WALK, 1 CREDIT**

Helps students examine beliefs, attitudes, and values behind decisions and actions. The students will examine whether behavior matches their stated beliefs, evaluate the consequences of choices, and focus on clarifying a personal value system.

ONL NCT HD-146-01

> TBA \$130.00 \$13.00 \$10.00 \$153.00

Meets: 11/4-11/18.

HD-220 INTRODUCTION TO STUDENT LEADERSHIP. 2 CREDITS

Introduces leadership concepts with application to the student environment. A discussion-oriented course on how leadership practices are put to use in campus leadership roles and beyond. Begins exploration of aspects of emotional intelligence, such as emotional selfperception, healthy self-esteem, and initiative. 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.

OC NCT	HD-220-03	341713 M		3-4:50 PM	
	M. BAKER	\$260.00	\$26.00	\$0.00	\$286.00
REM NCT	HD-220-04	341714 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 NCT	COMM-100Z- 01	340853 MW		10-11:50	AM
	A. SAMBOR	\$520.00	\$52.00	\$0.00	\$572.00
OC NCT	COMM-100Z-	340860 TTH		10-11:50	AM.
	02				
	L. HANN	\$520.00	\$52.00	\$0.00	\$572.00
OC NCT	COMM-100Z- 03	340862 TTH		1-2:50 PM	
	L. HANN	\$520.00	\$52.00	\$0.00	\$572.00

Campus Locations:

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

VAR: Variable credit class

ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Course No	Course Title, Cr	edits					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
OC NCT	COMM-100Z-	345177	' MW		3-4:50 PM		HAR NCT	COMM-111Z-	340895	MW		6-7:50 PM	
	04 L. HANN		\$520.00	\$52 00	\$0.00	\$572.00		16 J. NETZER		\$520.00	\$52.00	\$20.00	\$592.00

COMM- HABLANDO EN PUBLICO, 4 CREDITS 111ESZ

COMM-111ESZ enfatiza el desarrollo de habilidades de comunicación al examinar y demostrar cómo la autoconciencia, la audiencia, el contenido y la ocasión influyen en la creación y entrega de discursos y presentaciones.

Prerequisites: WR-124ES

	COMM-	345175	TTH		6-7:50 PM	
ESPAÑOL	111ESZ-01					
	A. MOSEY		\$520.00	\$52.00	\$20.00	\$592.00

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

Recommended Prerequisite or Corequisite: FYE-101

OC NCT	COMM-111Z- 01					
REM NCT	K. HUGHES COMM-111Z- 02	340870	\$520.00 MW	\$52.00	\$20.00 8-9:50 AM	\$592.00
OC NCT	J. SMITH	340872	\$520.00 TTH	\$52.00	\$20.00 8-9:50 AM	\$592.00
REM NCT	K. MCCONNE COMM-111Z- 04	LL 340874	\$520.00 TTH	\$52.00	\$20.00 8-9:50 AM	\$592.00
OC NCT	K. HUGHES COMM-111Z-	340876	\$520.00 MW	\$52.00	\$20.00 10-11:50 A	\$592.00 M
OC NCT	K. HUGHES COMM-111Z-					
REM NCT	J. HULT	340880	\$520.00 MW	\$52.00	\$20.00 10-11:50 A	\$592.00 . M
OC NCT	J. SMITH COMM-111Z- 08		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	K. MCCONNE COMM-111Z- 09	LL 340887	\$520.00 TTH	\$52.00	\$20.00 10-11:50 A	\$592.00 M
REM NCT	A. SAMBOR COMM-111Z-	340889	\$520.00 TTH	\$52.00	\$20.00 10-11:50 A	\$592.00 . M
OC NCT	K. HUGHES COMM-111Z-	340890	\$520.00 MW	\$52.00	\$20.00 1-2:50 PM	\$592.00
OC NCT	A. SAMBOR COMM-111Z- 12	340891	\$520.00 TTH	\$52.00	\$20.00 1-2:50 PM	\$592.00
	A. SAMBOR COMM-111Z-	345176	Т		6-9:50 PM	
HAR NCT	K. DOSS COMM-111Z-	340893	\$520.00 TTH	\$52.00	\$20.00 1-2:50 PM	\$592.00
	J. HULT		\$520.00	\$52.00	\$20.00	\$592.00

COMM- INTRO TO COMMUNICATION, GENDER, AND SEXUALITY, 4 CREDITS

This course explores the relationships among communication, gender, sexuality, and other intersections of identity. We will examine how contact produces and perpetuates constructions and performances of gender, as well as how understandings of gender influence communication practices. We will learn about various approaches to the study of gender and communication, and we will identify predominant patterns of gendering that shape our culture.

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

OC NCT	COMM-126-01 340	0898 MW	MW 1-2:50 F		
	L. HANN	\$520.00	\$52.00	\$0.00	\$572.00

COMM- INTRODUCTION TO INTERCULTURAL COMMUNICATION, 4 CREDITS

Intercultural Communication is a course dedicated to exploring the impact cultural differences have on the communication process. Students explore their own cultural behaviors and possible ways to deal with difficult situations when cultural differences cause a problem(s). Emphasis is given to the influence of culture on the interpretation of the communication act and to the communication skills that enhance crosscultural communication.

Required: Non-native English speakers must have a Student Performance Level of 8 as measured by the BEST Plus. There is not a requirement for native speakers

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

			P		
ONL NCT	COMM-140-01 34090	0			
	K. HUGHES	\$520.00	\$52.00	\$0.00	\$572.00

COMM- 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.

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

ОС	COMM-212-01 34	0903 MW	10-11:50 AM				
	M. JONES	\$520.00	\$52.00	\$10.00	\$582.00		

COMM- 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	340908	MW	10-11:50 AM			
	M. WILLIAMS		\$520.00	\$52.00	\$0.00	\$572.00	
HAR NCT	COMM-218Z- 15	340913	TTH		10-11:50	AM	
	J. HULT		\$520.00	\$52.00	\$0.00	\$572.00	

COMM- 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

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

Campus Locations:

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

Distance Education Notification:

www.clackamas.edu 19

Cours	se No	Course Title, C	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
									00 400					

ONL NCT COMM-280-01 340916

> K. HUGHES \$780.00 \$78.00 \$45.00 \$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	340922	W		1-2:50 PN	I
			M		1-2:50 PN	l
	M. SORRENTI	NO	\$520.00	\$52.00	\$190.65	\$762.65
	Section meets	Monday	s remote	via Zoor	n from 1-2:5	50.
	Section meets	in-perso	on on cam	pus on V	Nednesday	s from 1-
	2:50. Office 20		on is use	d. Online	textbook in	cluded
	in section fees	-				

ONL CS-120-30 340928

> M. SORRENTINO \$520.00 \$52.00 \$190.65 \$762.65 Office 2021 version is 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

OC HYB	CS-125H-01	340931 T		10-11:50	AM
		TH		10-11:50	AM
	D. CARINO	\$520.00	\$52.00	\$20.00	\$592.00
	Section meets	Tuesdays remot	e via Zoo	m from 10-	-11:50am.
	Section meets	s in-person on car	npus on 7	Thursdays	from 10-
	11:50am.				
ONL	CS-125H-30	340936			

CS-125H-30 340936

D. CARINO \$520.00 \$52.00 \$20.00 \$592.00

CS-135DB MICROSOFT ACCESS, 3 CREDITS

Focuses on the advanced database capabilities using a current version of Microsoft Access. Topics include design, construction, and documentation of a database management system, designing reports, forms, advanced form techniques, advanced queries, customizing tables, and creating and using an application system with macros.

Prerequisites: BA-131 or CS-120 or higher or placement into CS-135DB

OC HYB	CS-135DB-01	340937 W	10-11:20 AM		
		M		10-11:2	0 AM
	D. CARINO	\$390.00	\$39.00	\$20.00	\$449.00
	Section meets	Mondays remote	via Zoor	n from 10	-11:20am.
	Section meets	in-person on cam	npus on V	Vednesda	ays from
	10-11:20am.				

INTRODUCTION TO OPERATING SYSTEMS, 4 CREDITS CS-140

Introduction to the theory and practical foundations of the Windows. Linux/UNIX, and macOS desktop operating systems. Discussion of and practice with OS administration through installation, configuration, networking, security, and virtualization.

Prerequisites: CS-120 or equivalent placement

Prerequisites: MTH-050 or MTH-060 or placement in MTH-065 or higher

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

OC HYB NCT CS-140-01 340942 T 1-2:50 PM TH 1-2:50 PM R. CARINO \$520.00 \$52.00 \$20.00 \$592.00 Section meets Tuesdays remote via Zoom from 1-2:50pm. Section meets in-person on campus on Thursdays from 1-2:50pm

CS-140I **LINUX FOR PROGRAMMERS, 4 CREDITS**

Introduction to the Linux command line and software development tools. Covers how to use the command line and build tools, including VIM, GCC/G++, make, gdb, and others. Students will gain experience with the build tools by writing and debugging relatively complex programs in both C and C++.

Prerequisites: CS-162

ONL LCT CS-140L-30 340944 R. ALBERS \$520.00 \$52.00 \$20.00 \$592.00

CS-153 **NETWORKING 3, 4 CREDITS**

This course describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access. It also introduces software-defined networking, virtualization, and automation concepts that support the digitalization of networks. This course, along with CS-151 and CS-152, covers the topics of the Cisco CCNA certification exam.

Prerequisites: CS-152

OC HYB	CS-153-01	340946 T		10-11:5	0 AM
NCT		TH		10-11:5	0 AM
	R. CARINO	\$520.0	0 \$52.00	\$20.00	\$592.00
	Section meet	s Tuesdays remo	te via Zoc	m from 10	0-11:50am.
	Section meet	s in-person on ca	ampus on	Thursdays	s from 10-
	11:50am.				

CS-160 **COMPUTER SCIENCE ORIENTATION, 4 CREDITS**

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

OC NCT	CS-160-01	340947 TTH 10-11:50 AM
	R. ALBERS	\$520.00 \$52.00 \$20.00 \$592.00
ONL NCT	CS-160-02	340950
	R. ALBERS	\$520.00 \$52.00 \$20.00 \$592.00
ONL NCT	CS-160-03	340951
	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

oc CS-161-01 340955 MW 10-11:50 AM 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

ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Course No	Course Title, Credits							
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	/,TH.F,S,SU) Fee	Time Crs. Fee	Total		
ONL	CS-161-02	340957	,					
	J. MILLER		\$520.00	\$52.00	\$20.00	\$592.00		
ONL	CS-161-03	340959)					
	J. MILLER		\$520.00	\$52.00	\$20.00	\$592.00		

CS-225 COMPUTER END USER SUPPORT, 3 CREDITS

Addresses professional and interpersonal skills needed by technicians who support and manage hardware and software information systems. Customer service skills; troubleshooting; helpdesk operation; product needs analysis, evaluation, purchase, and installation; technical documentation and training.

Prerequisites: CS-120 or placement in CS-121 or equivalent experience **Prerequisites:** WRD-098 or placement in WR-101 or WR-121Z

ONL CS-225-30 340960

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

CS-227 COMPUTER HARDWARE & REPAIR, 4 CREDITS

An in-depth course in computer hardware. Covers operational concepts, identification, installation, configuration, and troubleshooting of power supplies, motherboards, microprocessors, memory modules, disk drives, optical drives, and expansion cards. This course, in conjunction with CS-228, covers the topics of the CompTIA A+ certification exam.

oc	CS-227-01	340963 MW		9-11:50	AM
	R. ALBERS	\$520.00	\$52.00	\$20.00	\$592.00

CS-233W FULL-STACK WEB DEVELOPMENT I, 4 CREDITS

Begin exploring the power of server-side JavaScript using Node.JS, NPM, and Express. Students will: use server-side JavaScript to implement common packages and bundle their own applications for consumer use; build custom web server applications to respond directly to HTTP requests; create, query, and manage NoSQL databases; and create views to combine user requests, database data, and static content into responsive, data-driven web applications.

Prerequisites: CS-133J

OC HYB NCT	CS-233W-01	340965 W		1-2:50	PM			
		M		1-2:50	PM			
	D. CARINO	\$520.00	\$52.00	\$20.00	\$592.00			
	Section meets Mondays remote via Zoom from 1-2:50pm.							
	Section meets in-person on campus on Wednesdays from 1-							
	2:50pm.							

CS-240L LINUX ADMINISTRATION 1, 4 CREDITS

Covers the fundamentals of the Linux operating system. Topics include: system architecture, installation, command line and file system. This course covers the topics of the Linux LPIC-1 Exam 101 certification.

Prerequisites: CS-140

CS-260 DATA STRUCTURES, 4 CREDITS

Covers common data structures used for the storage and manipulation of data, as well as data abstraction, sorting algorithms, and algorithm analysis. Data structures include linked lists, stacks, queues, binary trees, btrees, hash tables, and graphs.

Prerequisites: CS-162

ONL CS-260-01 340972

J. MILLER \$520.00 \$52.00 \$20.00 \$592.00

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

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.

Corequisites: CWE-281

ONL NCT CS-280-01 340973

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.

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

Tuition

Time

Crs. Fee

Total

Computer-Aided Drafting Technology

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

CDT-102 SKETCHING & PROBLEM SOLVING, 3 CREDITS

Freehand sketching encountered in drafting engineering projects. Selecting views and implementing drafting standards. Dimensioning, lettering, sections and auxiliary views are covered. Problem solving in individual and group settings.

oc CDT-102-01 341427 TTH 12-2:50 PM J. TRAVER \$390.00 \$39.00 \$153.75 \$582.75

CDT-223 INVENTOR FUNDAMENTALS, 3 CREDITS

Introduces parametric and adaptive modeling techniques using Autodesk Inventor. This course will guide students through design environment setup, creation of simple and complex part geometry, assembly building, animation, and detailed 2D drawing output.

Recommended: Basic working knowledge of Windows operating system and Microsoft Excel

REM	CDT-223-01	341433 N	ИW		4:30 -7:20	PM
	M. ROTUNDO	\$	390.00	\$39.00	\$153.75	\$582.75

Cooperative Work Experience

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

DNL NCT CWE-281-03 340754

M. LAFORCE \$0.00 \$0.00 \$0.00 \$0.00

Required: Student Petition. Restricted to Water & Environmental Technology students. Contact: laforce@clackamas.edu or 503-594-3148.

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

\$592.00

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

department first class VAR: Variable credit class

Course No	Course Title, Co	redits				
	Section No Instructor	Crs Reg.	Days (M,T, Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
ONL NCT	CWE-281-05	340755	5			
	J. MILLER		\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stu students. Con 3138.					
ONL NCT	CWE-281-06	340756	6			
	J. STAPLETO	N	\$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.

CJA-101 CRIMINOLOGY, 4 CREDITS

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.

ONL LCT	CJA-101-01	340739				
	T. MUSGRAVI	≣ \$5	20.00	\$52.00	\$0.00	\$572.00
ONL LCT	CJA-101-02	340740				
	G. RONNING	\$5	20.00	\$52.00	\$0.00	\$572.00

CJA-110 INTRODUCTION TO LAW ENFORCEMENT, 3 CREDITS

Explores theories, philosophies, and concepts of American law enforcement. This course also examines the history of law enforcement, specific components of the system, public safety responses, and the professionals charged with peace keeping.

HAR HYB	CJA-110-01	340742	M		8-8:50 AM	
	T. MUSGRAV	E	\$390.00	\$39.00	\$20.00	\$449.00

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.

HAR LCT	CJA-122-01	340743 T		6-9:20 PM	
	S. HEALY	\$520.00	\$52.00	\$0.00	\$572.00
ONL LCT	CJA-122-02	340744			
	T. MUSGRAVE	\$520.00	\$52.00	\$0.00	\$572.00

CJA-206 TRAUMA INFORMED PRACTICES, 3 CREDITS

In this course, students will learn how to recognize and respond to the impact of traumatic stress. Students will gain knowledge and skills they can infuse into their practices and act in a way that maximizes physical and psychological safety for clients and themselves. Students will understand how trauma impacts the brain, body, as well as development. Topics such as vicarious trauma, cultural trauma, and secondary trauma will be examined and discussed.

Recommended Prerequisites: CJA-101 or HS-100 or any other 100level course that discusses human behavior, development, or social interactions

ONL LCT	CJA-206-01	340745	
	C. BAKER	\$390.00 \$39.00 \$0.00 \$429.	OC

CJA-210 CRIMINAL INVESTIGATION I, 3 CREDITS

OFF: Other Off-Campus Location

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

department first class HYB: In-person plus online work VAR: Variable credit class

Other Coding Translations: TBA: To be arranged: contact

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

Introduces the history, theory and principles of criminal investigation in the criminal justice system. Describes crime scene investigation and courtroom aspects of crime scenes including interviews, evidence, follow-up, case preparation, and investigative techniques.

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

Tuition

Time

Crs. Fee

Total

Crs Reg.

Prerequisites: CJA-110 with a C or better Recommended Prerequisites: CJA-122

Course No Course Title, Credits Section No

Instructor

HAR HYB LCT CJA-210-01 340746 M 10-11:20 AM T. MUSGRAVE \$390.00 \$39.00 \$0.00 \$429.00

INTIMATE PARTNER VIOLENCE, 3 CREDITS CJA-214

This course will analyze the historical, social, legal, and psychological aspects of Intimate Partner Violence. Includes definitions of the problem, demographics, survivors, perpetrators, children who witness, strategies and tactics of abuse and survival, and core strategies for legal intervention.

Prerequisites: CJA-203 or HS-100

CJA-214-01 340747 T. BOYLE-\$390.00 \$39.00 \$0.00 \$429 00 **GALESTIANTZ**

CRIMINAL JUSTICE ETHICS, 3 CREDITS CJA-223

Surveys common ethical frameworks and then examines ethical issues, questions, challenges and consequences facing criminal justice professionals, including law enforcement, corrections, the courts and others.

HAR HYB	CJA-223-01	340748	3 M		9-9:50 AN	Л
	T MUSGRAV	'F	\$390.00	\$39.00	\$0.00	\$429.00

INTRODUCTION TO RESTORATIVE JUSTICE, 3 CREDITS CJA-252

Provides a critical introduction to restorative justice. Covers fundamental values and principles of restorative justice, and the experience and interests of key stakeholders (victims, offenders, communities, and systems).

ONL LCT CJA-252-01 340749 G. RONNING \$390.00 \$39.00 \$0.00 \$429.00

Dental Assistant

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

DA-101 **DENTAL RADIOLOGY I, 2 CREDITS**

Introduction to history and principles of dental radiology, terminology, and basic physics associated with x-rays, biological effects of x-rays, anatomical landmarks and infection control. Required: Student Petition.

Required: Acceptance into Dental Assistant program

Corequisites: DA-101L

HAR DA-101-01 340758 T 12-1:50 PM K HIATT \$260.00 \$26.00 \$175.00 \$461.00

DENTAL RADIOLOGY I LAB, 1 CREDIT

This course covers practical instruction in radiation health and safety, types of films, receptor holders, processing and mounting of dental films, use of x-ray equipment, infection control techniques, disposal of hazardous waste, and exposure techniques on x-ray manikans. Introduces digital and conventional x-ray exposures. All exposure techniques performed on x-ray manikins. Required: Student Petition.

Required: Acceptance into Dental Assistant program

Corequisites: DA-101

Course No	Course Title, Cı	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,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
HAR HYB	DA-101L-01	340759) T		9-11:50	AM	HAR HYB	DA-107L-02	340766	F		2-4:50 PM	
	M. BUTKOVIC	CH	\$130.00	\$13.00	\$0.00	\$143.00		M. BUTKOVIC	Н	\$130.00	\$13.00	\$0.00	\$143.00
	K. HIATT Arrive to class	5 minut	es early f	or a 9:00	AM sharp	start time.		Arrive to class	5 minute	es early fo	or a 2:00l	PM sharp st	art time.

HAR HYB DA-101L-02 340760 T 2-4:50 PM M. BUTKOVICH \$130.00 \$13.00 \$0.00 \$143.00 E. GORDON

Arrive to class 5 minutes early for a 2:00PM sharp start time.

DA-104 CLINICAL PROCEDURES I, 2 CREDITS

Discussion in the practice of patient care including the collection of patient medical and dental histories and maintenance of accurate treatment records. Explores the history of dentistry, dental ethics, law, and HIPAA. The dental healthcare team, dental office design and the dental profession will also be discussed. Required: Student Petition.

Required: Acceptance into Dental Assistant program

Corequisites: DA-104L

340761 W DA-104-01

10-11:00 AM

M. BUTKOVICH \$260.00 \$26.00 \$225.00 \$511.00 In-Person Course Orientation on Wednesday, 10/1 from 10-

DA-104L CLINICAL PROCEDURES I LAB, 1 CREDIT

This course prepares the student for basic chairside assisting and general procedures. Application of essential skills in seating and dismissing patients, ergonomics, taking and recording vital signs, and infection control are taught and practiced in a dental laboratory setting. Required: Student Petition.

Required: Acceptance into Dental Assistant program

Corequisites: DA-104

HAR HYB DA-104L-01 340762 TH 9-11:50 AM

M. BUTKOVICH \$130.00 \$13.00 \$0.00 \$143.00

Arrive to class 5 minutes early for a 9:00AM sharp start time. HAR HYB DA-104L-02 340763 TH 2-4:50 PM

M. BUTKOVICH \$130.00 \$13.00 \$0.00 \$143.00 Arrive to class 5 minutes early for a 2:00PM sharp start time.

DENTAL MATERIALS I, 2 CREDITS

This course is an in-depth level of instruction in the composition and manipulation of dental restorative materials, and dental cements. Examination of general dentistry and chairside assisting with direct permanent restorations such as amalgam and composite will also be covered. Required: Student Petition.

Required: Acceptance into Dental Assistant program

Corequisites: DA-107L

HAR HYB DA-107-01 340764 F 12-1:50 PM \$260.00 \$26.00 \$260.00 \$546.00 K. HIATT

DA-107L DENTAL MATERIALS I LAB, 1 CREDIT

This course covers the application of the essential skills necessary in assisting with amalgam and composite restorations. Covers tray-set-ups, pre and post-operative instructions, instrument transfer, and oral evacuation with amalgam and composite procedures. The identification and application of dental cements used in general dentistry will also be covered. Includes manipulation, storage and disposal of hazardous dental materials and cements. Required: Student Petition.

Required: Acceptance into Dental Assistant program

Corequisites: DA-107

HAR HYB DA-107L-01 340765 F 9-11:50 AM

M. BUTKOVICH \$130.00 \$13.00 \$0.00 \$143.00 Arrive to class 5 minutes early for a 9:00AM sharp start time.

ONL: Online Only REM: Remote (w/ scheduled meetings) department first class

VAR: Variable credit class

DA-110 CLINICAL PRACTICUM I, 1 CREDIT

Clinical practicum begins in the eighth week of class. Students begin to apply basic dental assisting procedures taught in weeks one through seven. OSHA, hazard communication and infection control are followed for student and patient safety. Twenty hours of supervised unpaid hours is required for term one practicum. Students will participate in a clinical practicum orientation and a medical emergency seminar held prior to clinical practicum. Students will also participate in a review session for the national Infection Control Exam (ICE). Required: Student Petition.

Required: Acceptance into Dental Assistant program

HAR HYB DA-110-01 340767 W 9-3:00 PM TRΔ М 9-1:00 PM

> K HIATT \$130.00 \$13.00 \$195.00 \$338 00 Clinical Practicum (offsite in dental clinic) meets for 20 hours total on: 11/19, 11/26, 12/3, 12/10. Mandatory orientation and Medical Emergency class on Wednesday, October 22, 2025 from 9 AM - 1:00 PM on the Harmony Campus. Online medical emergency training module to be completed online prior to October course. Infection Control Review Session on Zoom on Monday, 12/8 from 9AM-1 PM.

DA-115 DENTAL SCIENCE, 2 CREDITS

Introduction and general study of anatomy, physiology, and oral pathology. An in-depth level course of study in oral anatomy, histology and embryology. Introduction to charting will also be covered. Required: Student Petition.

Required: Acceptance into Dental Assistant program

HAR HYB DA-115-01 340768 W 8-9:00 AM R. MASCARENHAS \$260.00 \$26.00 \$125.00 \$411.00 Course orientation, in person, on Wed, 10/1 from 8 AM - 9

DA-125 DENTAL INFECTION CONTROL, 2 CREDITS

This course covers the introduction and general study of microbiology, major groups of microorganisms, viral and bacterial diseases. Disease transmission, infection prevention, disinfection and instrument processing techniques will also be covered. An in-depth level of the Bloodborne Pathogens Standards and Hazard Communication will be taught and integrated throughout the didactic, preclinical, laboratory and clinical course of study. Required: Student Petition.

Required: Acceptance into Dental Assistant program

HAR HYR DA-125-01 340769 TH 12-1:50 PM K. HIATT \$260.00 \$26.00 \$240.00 \$526.00

Digital Media Communications

DMC-100 INTRODUCTION TO MEDIA ARTS, 3 CREDITS

Presents an overview of career opportunities in the media industry. Introduces basic principles common to success in the media industry, common media industry entrance strategies, health and safety best practices and the history of the industry from film to online media. In addition, this course will cover basic theories behind what shapes and drives the media industry.

DMC-100-01 340734 MW 1-2:20 PM M. DEVENDORF \$390.00 \$39.00 \$30.00 \$459.00

Campus Locations:

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

HYB: In-person plus online work

Other Coding Translations: TBA: To be arranged: contact

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

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 NCT DMC-104-01 341556 TTH 1-3:50 PM \$520.00 \$52.00 \$120.00 M. DEVENDORF \$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

OC NCT DMC-106-01 341561 TTH 1-3:50 PM \$520.00 \$52.00 \$120.00 T WASSON \$692.00

DMC-109 INTRODUCTION TO STOP MOTION ANIMATION, 4 CREDITS

Introduces basic stop motion animation tools, materials, techniques and elements of storyboarding, scripting, narrative development, compositing, special effects and audio integration into a final group film. Assignments include character development, rigging, set creation, photography, video compositing, and audio recording and synching. Uses digital cameras and industry-standard stop motion software.

Recommended Prerequisites: DMC-106 and DMC-225

OC NCT DMC-109-01 341566 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.

OC NCT	DMC-147-01	340735 F			6:30 -8:50 PM		
				S		9-5:50 P	M
		B. ROSE		\$130.00	\$13.00	\$99.00	\$242.00
		Meets: 10/17 8	R 10/18				

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

OC NCT DMC-225-01 341571 MW 9-11:50 AM T WASSON \$120.00 \$692 00 \$520.00 \$52.00 OC NCT DMC-225-02 341575 TTH 9-11:50 AM B. THWING \$520.00 \$52.00 \$120.00 \$692.00

DMC-247 SOUND FOR MEDIA, 3 CREDITS

Introduction to sound as related to film making, animation, and video games. Students will have the opportunity to create and assemble sound for media into a finished product. Explores the basic components of commercial film/video, animation, and game production as they relate to sound.

Recommended: Experience using a DAW (Digital Audio Workstation) or video editing software

DMC-247-01 340736 W 3-5:50 PM B. ROSE \$390.00 \$39.00 \$90.00 \$519.00

DMC-264 DIGITAL FILMMAKING, 4 CREDITS

In this course, students follow the process of translating a written script into a digital film via pre-production, lighting, shooting, and post-video production.

Recommended Prerequisites: WRD-090 or placement in WRD-098, WRD-098 or placement in WR-121Z, or Student Petition

OC NCT DMC-264-01 341580 MW 9-11:50 AM M. DEVENDORF \$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 NCT DMC-280-02 341584

> \$780.00 \$78.00 \$45.00 T. WASSON \$903.00V

Required: Student Petition

Economics

EC-200 CONTEMPORARY ECONOMIC ISSUES, 4 CREDITS

Introduction to economic approaches and issues in the current political and economic climate. This course is designed for non-majors. Topics include the history of economic thought, markets, the role of incentives, and the role of government. Additional topics vary depending upon the instructor but may include competition and market power; sustainable development and growth; poverty and inequality; international economic relationships; the economic approach to environmental protection; and

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

EC-200-01 345215 MW 10-11:50 AM OC LCT D. LOUGEE \$520.00 \$52.00 \$0.00 \$572 00

PRINCIPLES OF MICROECONOMICS, 4 CREDITS EC-201Z

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

EC-201Z-01 341399 MW 3-4:50 PM D LOUGEE \$520.00 \$52.00 \$0.00 \$572.00 ONL NCT EC-201Z-02 341403 M. PARTAPURWALA \$520.00 \$52.00 \$0.00 \$572.00

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

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 Total Instructor Tuition Fee Crs. Fee Total

ONL NCT EC-202Z-01 341405

M. PARTAPURWALA \$520.00 \$52.00 \$0.00 \$572.00

Education

ECE-MATEMÁTICAS Y CIENCIAS PARA NIÑOS PEQUEÑOS, 3 114ES **CREDITS**

Este curso se enfoca en el aprendizaje de matemáticas y ciencias para niños pequeños. Se explorarán los componentes de matemáticas y ciencias. Se hará hincapié en las estrategias de enseñanza apropiadas para para promover el conocimiento de las matemáticas y las ciencias en los niños. Se explorará el entorno físico del salón de clase para que éste fomente el aprendizaje de las matemáticas y las ciencias.

Prerequisites: ECE-240ES and HDF-247ES

REM ESPAÑOL	ECE-114ES-	345183	M		6-7:50	PM	
	01WMP						
	B. MARRON		\$390.00	\$39.00	\$0.00	\$429.00	
	La clase se reúne seis lunes (9/29, 10/13, 10/27, 11/10,						
	11/24. v 12/8) de 6:00PM a 7:50PM.						

INTRODUCTION TO EARLY CHILDHOOD EDUCATION & ECE-150 **FAMILY STUDIES, 4 CREDITS**

Focuses on the history of early childhood education and the prominent theorists that have significantly contributed to the field. The types of programs that serve young children, birth-age 8, and their families will be examined. State and national standards in early childhood education and family studies will be explored.

ONL LCT ECE-150-01 341423

> D. GLASCOCK \$520.00 \$52.00 \$0.00 \$572.00

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

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 LCT ECE-150ES-01341431 S 9-10:50 AM **ESPAÑOL**

\$520.00 \$52.00 \$0.00 \$572.00 La clase se reúne cinco sábados por Zoom (10/04, 10/18, 11/01, 11/15, & 12/06) de 9:00AM a 10:50AM.

DESARROLLO DEL LENGUAJE Y LA ALFABETIZACIÓN, ECE-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 LCT ECE-154ES-01341442 T 6-7:50 PM ESPAÑOL

M. GARCIA AVILEZ \$520.00 \$52.00 \$0.00 \$572.00 La clase se reúne seis martes por Zoom (9/30, 10/14, 10/28,

11/18, 11/25, y 12/9) de 6:00PM a 7:50PM.

ECE-EL PROFESIONAL EN EDUCACIÓN INFANTIL, 4 179ES **CREDITS**

Se enfoca en el rol del profesional en Educación Infantil (ECE) y se explorará los estándares y competencias profesionales de NAEYC para maestros de la primera infancia. Los estudiantes recibirán información sobre el Código de Conducta y Ética profesional de la Asociación Nacional para la Educación de Niños Pequeños así como también la información sobre lo que significa ser un Profesional de ECE y cómo abogar para los niños y las familias.

Prerequisites: ECE-121ES, ECE-240ES, ECE-246ES, and ECE-280ES

ONL LCT ECE-179ES-01341449 ESPAÑOL

A. ECHEVARRIA \$520.00 \$52.00 \$0.00

\$572.00

ECE-221 OBSERVATION & GUIDANCE II IN ECE SETTINGS, 4 CREDITS

Designed to help students explore in greater depth the observation and guidance of children from birth-3rd grade within the classroom environment. In this more advanced course, the student focuses on additional observation and guidance techniques for observing groups of children and addresses challenging behaviors and other issues within the early childhood environment. The practitioner's role in using observation to promote their own development and to assist in the development of the children is explored in depth.

Prerequisites: ECE-121

ONI ECE-221-01 341451

S. MYERS \$520.00 \$52.00 \$0.00 \$572.00 This section is an accelerated 5-week online course that runs between 9/29/25 - 11/02/25.

OBSERVACIÓN Y ORIENTACIÓN II EN EDUCACIÓN ECE-**TEMPRANA, 4 CREDITS** 221ES

Diseñado para ayudar a los estudiantes a explorar con mayor profundidad la observación y la orientación de los niños desde el nacimiento hasta el tercer grado dentro del entorno del aula. En este curso más avanzado, el estudiante se enfoca en técnicas adicionales de observación y orientación para observar grupos de niños y aborda comportamientos desafiantes y otros problemas dentro del entorno de la primera infancia. Se explora en profundidad el papel del profesional en el uso de la observación para promover su propio desarrollo y ayudar en el progresso de los niños.

Prerequisites: ECE-121ES and WR-124ES

REM LCT ECE-221ES-01341459 S 8-9:50 AM **ESPAÑOL** Y. SANCHEZ \$520.00 \$52.00 \$0.00 \$572.00

La clase se reúne cinco sábados por Zoom (10/4, 10/18, 11/1, 11/15, y 12/6) de 8:00AM a 9:50AM.

ECE-221ES-341462 TH 6-7:50 PM **ESPAÑOL** 02CM Y. SANCHEZ \$520.00 \$52.00 \$0.00 \$572 00

La clase se reúne cinco jueves por Zoom (10/2, 10/16 ,10/30, 11/13, y 12/4) de 6:00PM a 7:50PM.

AMBIENTES Y PLANIFICACIÓN CURRICULAR, 4 ECE-240ES **CREDITS**

Se enfoca en una introducción a la creación de entornos de aprendizaje y planes de estudio para niños de tres a cinco años de edad en programas basados en hogares o centros. El curso cubre las teorías y las relaciones entre el espacio físico y social, las actividades, las experiencias y los materiales. Se enseña a los estudiantes el uso de prácticas adecuadas para el desarrollo y la cultura en la planificación y la selección de entornos y planes de estudio para niños pequeños.

Prerequisites: ECE-150ES, ECE-235ES, FYE-101ES, HDF-247ES, and **WR-124ES**

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:

REMICT

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 Crs. Fee Total Instructor Tuition Fee Total

REM LCT ECE-240ES-01341467 S **ESPAÑOL**

10-11:50 AM

D TORRADO \$520.00 \$52.00 \$0.00 \$572 00 La clase se reúne cinco sábados por Zoom (10/4, 10/18, 11/1, 11/15, y 12/6) de 10:00AM a 11:50AM.

ENVIRONMENTS AND CURRICULUM PLANNING: ECE-241 **INFANTS AND TODDLERS, 3 CREDITS**

Builds upon knowledge and skills learned in ECE-240. Emphasis is on application of research-based strategies to implement and evaluate early childhood environments and curriculum for children from birth-three years old. Focus is on integrating content knowledge throughout all classroom activities.

ONL LCT ECE-241-01 341473

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

ECE-AMBIENTES Y PLANIFICACIÓN CURRICULAR PARA **BEBÉS Y NIÑOS PEQUEÑOS, 3 CREDITS** 241ES

Este curso se enfoca en la aplicación de estrategias basadas en la investigación para implementar y evaluar los entornos y el plan de estudios de la primera infancia para niños desde el nacimiento hasta los tres años de edad. El enfoque está en integrar el conocimiento del contenido en todas las rutinas y experiencias en el aula.

Prerequisites: ECE-240ES

REM LCT ESPAÑOL ECE-241ES-344872 M 6-7:50 PM 01CM \$390.00 \$39.00 \$0.00 \$429.00 R. TORRES La clase se reúne seis lunes por Zoom (9/29, 10/13, 10/27, 11/10, 11/24, y 12/8) de 6:00PM a 7:50PM. REM LCT ECE-241ES-02344873 T 6-7:50 PM ESPAÑOL **R TORRES** \$390.00 \$39.00 \$0.00 \$429 00 La clase se reúne seis martes por Zoom (9/30, 10/14, 10/28, 11/18, 11/25, y 12/9) de 6:00PM-7:50PM

ECE-RELACIONES ENTRE LA ESCUELA, LA FAMILIA Y LA 246ES **COMUNIDAD, 4 CREDITS**

Este curso se concentra en el conocimiento y las habilidades para trabajar eficazmente con las familias y la comunidad y con otros profesionales en educación infantil (6 semanas de edad hasta tercer grado). El énfasis está en construir y mantener relaciones positivas para fomentar la cooperación y el respeto mutuo entre los profesionales en la primera infancia y las familias de los niños con quienes trabajan.

ECE-246ES-01341476 TH REM LCT ESPAÑOL 6-7:50 PM \$520.00 \$52.00 \$0.00 \$572.00 B. MARRON La clase se reúne cinco jueves por Zoom (10/2, 10/16, 10/30, 11/13, y 12/4) de 6:00 PM to 7:50PM.

ECE-280 **EARLY CHILDHOOD EDUCATION/CWE, 3 CREDITS**

Cooperative work experience. Provides students with on-the-job experience in the field of early childhood education. Students will work in pre-approved educational settings that serve children from six weeks old through age eight. Required: Student Petition.

Corequisites: CWE-281

Prerequisites: ECE-121, ECE-150, and ECE-154

REM LCT ECE-280-01

> \$390.00 \$39.00 \$45.00 \$474.00 D. GLASCOCK Required: Student Petition. Corequisite: Take the following

CWE-281-06

ECE-**EXPERIENCIA LABORAL COOPERATIVA, 4 CREDITS**

280ES

Campus Locations: **Distance Education Notification:**

ONL: Online Only

REM: Remote (w/ scheduled meetings)

HYB: In-person plus online work

nacimiento hasta los 8 años de edad. Si no completan las horas requeridas, recibirá un curso incompleto o reprobará. Corequisites: CWE-281ES ECE-280ES-01347158 TH 6-7:50 PM **ESPAÑOL**

En este curso, los estudiantes completan 144 horas de trabajo en un

entorno de primera infancia, asistiendo a niños y familias desde el

A. ECHEVARRIA \$520.00 \$52.00 \$45.00 \$617.00 Requerido: petición del estudiante. La clase se reúne dos jueves por Zoom (10/2 y 10/30) de 6:00pm a 7:50pm.

ECE-**PRACTICUM III, 4 CREDITS** 292ES

Este curso se enfoca en la experiencia de trabajo de los estudiantes con varios entornos educacionales en salones de clases enfocadas directamente con la enseñanza y supervisión de niños desde el nacimiento hasta el kínder. Este curso permite a los estudiantes aplicar conocimientos y metodologías adquiridas en los cursos de educación infantil, y sean transferibles a las habilidades requeridas en un ambiente educacional entre 0 a 8 años de edad. Los seminarios obligatorios abarcan la revisión de los dominios del desarrollo, los ámbitos de aprendizaje, las experiencias reales en el salón de clases, resolución de problemas, desarrollo del plan de estudios, técnicas de evaluación y la orientación del aprendizaje y la conducta de los niños.

Prerequisites: ECE-291ES

REM ESPAÑOL ECE-292ES-01341496 F 6-8:50 PM D. TORRADO \$520.00 \$52.00 \$0.00 \$572.00 Requerido: petición del estudiante. La clase se reúne cinco viernes por Zoom (10/3, 10/17, 10/31, 11/14, y 12/5) de 6:00PM a 8:50PM.

ED-113 **INSTRUCTIONAL STRATEGIES FOR LITERACY, 3** CREDITS

This course develops an understanding of how to integrate literacy concepts and skills into all subjects. Curriculum design and assessment for Reading and Language Arts concepts and skills are explored. identified, and developed. Emphasis is placed on the role of literacy in the development of the whole student and on linking CTE curriculum to the literacy skills needed for students to be successful in their field. Designed for CTE instructors, but anyone interested in teaching literacy across the curriculum would benefit from this class.

ONL ED-113-01 341500

> L. SCOTT \$390.00 \$39.00 \$43.75 \$472.75 Online textbook included in section fees.

ED-114 **INSTRUCTIONAL STRATEGIES FOR MATH, 3 CREDITS**

This course develops an understanding of how to integrate math concepts and skills into Career and Technical Education (CTE) courses and programs. Curriculum design and assessment for math concepts and skills are explored, identified, and developed. Designed for CTE instructors, but anyone interested in bringing more math into their classrooms could benefit from this class. Emphasis is placed on the role of math in the development of the whole student and on linking the CTE curriculum to the mathematics needed for students to be successful in their field.

ONL LCT ED-114-01 341503

Other Coding Translations:

VAR: Variable credit class

department first class

\$390.00 \$39.00 \$0.00 K. SMUCKER \$429.00

COMPREHENSIVE CLASSROOM MANAGEMENT, 3 ED-130 **CREDITS**

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

TBA: To be arranged: contact 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) Instructor Fee Crs. Fee Instructor Tuition Fee Crs. Fee Total

This course focuses on creating positive classroom and school climates, organizing and managing classrooms, improving instruction, dealing with classroom discipline problems, developing individualized plans for students experiencing behavioral problems, and developing school-wide student management programs-characteristics of effective schools and teachers

ONL ED-130-01 341507

L. SCOTT \$390.00 \$39.00 \$43.75 \$472.75

Online textbook included in section fees.

ED-216 FOUNDATIONS OF TEACHING & EDUCATION, 4 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.

OC	ED-216-01	341509 I I H	341509 I I H		
	L. SCOTT	\$520.00	\$52.00	\$43.75	\$615.75
	Online textbo	ook included in sect	ion fees.		
ONL	ED-216-02	341512			
	L. SCOTT	\$520.00	\$52.00	\$43.75	\$615.75
	Online textbo	ook included in sect	ion fees.		

ED-220 INTRODUCTION TO CTE IN OREGON, 3 CREDITS

Provides an introduction to the field of Career and Technical Education (CTE) in Oregon. Examines the historical and legislative foundations of CTE in the United States. Discusses the role of special populations in CTE programs. Provides an overview of high quality CTE programs, CTE licensure preparation, and student organizations. Addresses current trends and issues in the field.

ONL LCT ED-220-01 341514

M. HELZERMAN \$390.00 \$39.00 \$0.00 \$429.00

ED-246 SCHOOL, FAMILY & COMMUNITY RELATIONS, 4 CREDITS

This course focuses on the knowledge and skills to work effectively with families and community professionals in early childhood education (6 weeks of age through 3rd grade). Emphasis is on building and maintaining positive relationships to foster cooperation and mutual respect between early childhood professionals and the families of the children with whom they are working.

ONL ED-246-01 341516

B. KING \$520.00 \$52.00 \$0.00 \$572.00

ED-258 CULTURALLY RESPONSIVE TEACHING & EDUCATION, 3 CREDITS

Explores historical and systemic inequities in U.S. society and how they impact students, schools, and communities. Provides an overview of the ways in which educators can select culturally appropriate pedagogy, materials, and curriculum in order to serve the needs of an increasingly diverse U.S. educational system. Applies this knowledge in creating classrooms and schools where all students, families, and communities are valued, belong, and thrive.

ONL ED-258-01 347157

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

Educational Focus Area

EFA-101J INTRODUCTION TO THE SOCIAL SCIENCES, HUMAN SERVICES AND CRIMINAL JUSTICE, 2 CREDITS

Introduces career options and educational pathways in the fields of the Social Sciences, Human Services and Criminal Justice. Explores the history of and current methods and issues in these three areas of learning and service. Students will gain an understanding of academic and career options and get a taste of what further study will look like in each of these three areas and how they relate to one another.

ONL NCT EFA-101J-01 340977

J. LOVELESS \$260.00 \$26.00 \$0.00 \$286.00

EFA-101S INTRODUCTION TO STEM, 2 CREDITS

This course will feature activities, demonstrations, and real world experiences in STEM fields, including environmental science, biology, chemistry, geology, physics, engineering, computer science, and mathematics. Students will gain an understanding of academic and career options and get a taste of what further study will look like in each STEM discipline.

EFA-101S-01 340978 TTH 2-2:50 PME. LEE \$260.00 \$26.00 \$0.00 \$286.00

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-112 ELECTRONIC EQUIPMENT AND ASSEMBLY I, 1 CREDIT

This is the first course in a three course sequence. Focus is on building and testing simple DC prototype circuits. Covers DC power supplies, DMMs, breadboarding, resistor codes, and capacitor codes. Spreadsheets will be used to organize and analyze data.

OC NCT EET-112-01 341587 MW 4:30 -5:20 PM
B. PALACIOS \$130.00 \$13.00 \$43.50 \$186.50

EET-127 SEMICONDUCTOR CIRCUITS I, 2 CREDITS

Introduction to the basic concepts of semiconductor devices. Various types of diodes and diode applications will be studied. Industry standard devices will be used.

Prerequisites: EET-142

Recommended Prerequisites: MTH-112Z

oc **EET-127-01 341591 MW 5:30 -7:20 PM**J. KUEBLER \$260.00 \$26.00 \$87.00 \$373.00

EET-137 ELECTRICAL FUNDAMENTALS I, 4 CREDITS

Introduction to the basic concepts of voltage, current, resistance and their relationships in DC circuits. Use SI units, engineering notation and prefixes. Analysis of series, parallel and series-parallel circuits will be made using Ohm's & Kirchhoff's laws.

Prerequisite or Corequisite: EET-112 and MTH-095

OC NCT EET-137-01 341594 MW 12-3:50 PM
M. FARRELL \$520.00 \$52.00 \$174.00 \$746.00

EET-139 PRINCIPLES OF TROUBLESHOOTING I, 2 CREDITS

Emphasizes theories and practices useful in troubleshooting failures in electrical applications. Focuses on the overall philosophy and strategy of troubleshooting, drawing applications from residential and varied industrial situations. Includes laboratory projects.

Recommended Prerequisite or Corequisite: EET-112, and EET-137 or MFG-130

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, Orealis						
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total	
OC NCT	EET-139-01	341598	TH		5-7:50 PM		
	M. TIZO		\$260.00	\$26.00	\$87.00	\$373.00	

EET-157 **DIGITAL LOGIC I, 3 CREDITS**

Course No. Course Title Credits

An introduction to digital logic principles, numbering systems & conversions and gate operations. Using principles, circuit analysis will be used to minimize logic networks. Industry standard devices will be used.

Prerequisite or Corequisite: EET-112 **Recommended Prerequisites: MTH-065**

ОС	EET-157-01	341600 MW		5:30 -8:20	PM
	B. PALACIOS	\$390.00	\$39.00	\$130.50	\$559.50

EET-215 TECHNICAL MECHANICS, 3 CREDITS

Introduction to mechanics. Covers theory of force, work, torque, energy, power, strength, and motion. Vectors and simple machines provide applications for these concepts.

Prerequisites: MTH-080 or MTH-112Z or EET-142

OC NCT EET-215-01		341604 MW		1-3:50 PM	
	J. TRAVER	\$390.00	\$39.00	\$130.50	\$559.50

EET-239 PRINCIPLES OF TROUBLESHOOTING II, 2 CREDITS

Covers advanced applications of diagnosis, maintenance and repair of systems. Includes preventative maintenance, applied statistical process, and AC/DC motor controls.

Prerequisites: EET-139; EET-141 or MFG-131 Recommended Prerequisites: IMT-223

OC NCT	EET-239-01	341606 T	1-3:50 PM		
	M FARRELL	\$260.00	\$26.00	\$87.00	\$373.00

SM-150 **SEMICONDUCTOR PROCESSING I, 2 CREDITS**

Provides general background knowledge on the processes required to manufacture integrated circuit devices, beginning with silicon material preparation and ending with final assembly and test of a completed device. Micro-contamination is also covered.

ос	SM-150-01	341910 TH	2-3:50 PM		
	M. FARRELL	\$260.00	\$26.00	\$87.00	\$373.00

SM-280 **ELECTRONICS & MICROELECTRONICS/CWE, 1-6 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 NCT 341911

> C. CONNORS \$780.00 \$78.00 \$255.00 \$1,113.00V Required: Student Petition. Corequisite: Take the following

CWE-281-06.

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: Student Petition.

Course No Course Title, Credits Section No

Instructor Tuition Required: Acceptance into the current 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

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

Time

Crs. Fee

Total

340770 MWF EMT-101-01 6-9:20 PM T. SAWZAK \$780.00 \$78.00 \$400.00 \$1,258.00 Contact healthsciences@clackamas.edu for enrollment information

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	340771
	T. SAWZAK	\$390.00 \$39.00 \$0.00 \$429.00
ONL	EMT-105-02	340772
	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	341608 N	ИW		1-2:20 PM	
	E. LEE	\$	390.00	\$39.00	\$10.00	\$439.00
ос	ENGR-111-02	341611 7	ГТН		3-4:20 PM	
	E. LEE	\$	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	341613 MW		11-12:	20 PM
	E. LEE	\$390.00	\$39.00	\$0.00	\$429.00

ENGR-211 STATICS, 4 CREDITS

First term of engineering mechanics sequence. This course focuses on the analysis of forces acting on structures and machines under equilibrium conditions.

Prerequisites: MTH-252Z

Prerequisite or Corequisite: PH-211

ос	ENGR-211-01	341617	MW	//W 3-4:50 PM		
	F I FF		\$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

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 Crs. Fee Total

ENGR-221 ELECTRICAL CIRCUIT ANALYSIS I, 4 CREDITS

Designed to give the student a thorough understanding of basic electrical circuit theory, this course covers voltage and current relationships and fundamental methods of circuit analysis. Electrical circuit parameters such as resistance, inductance, and capacitance will be examined through theory and laboratory experiments.

Corequisites: ENGR-221L Prerequisites: MTH-252Z

Recommended Prerequisite or Corequisite: ENGR-112

ENGR-221-01 341619 T 9-11:50 AM oc M. FARRELL \$520.00 \$52.00 \$52.00 \$624.00

ENGR-ELECTRICAL CIRCUIT ANALYSIS I LAB, 0 CREDIT

221L

Lab Course for ENGR-221 Corequisites: ENGR-221

Recommended Prerequisite or Corequisite: ENGR-112

ENGR-221L- 341621 TH 9-11:50 AM 01 M. FARRELL \$0.00 \$0.00 \$0.00 \$0.00

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 340984 TT	TH	9-11:50 AM	
	T. NIKOLOPOULOS \$0	0.00 \$0.00	\$60.00	\$60.00
	Required: Student Petition	n.		
HAR LCT	ESOL-012-06 340987 TT	TH	6-8:50 PM	
	K. STECKMEST \$0	0.00 \$0.00	\$60.00	\$60.00
	Required: Student Petition	n.		
HAR LCT	ESOL-012-07 340988 TT	TH	6-8:50 PM	
	M. SHORTINO \$0	0.00 \$0.00	\$60.00	\$60.00
	Required: Student Petition	n.		
HAR LCT	ESOL-012-08 340990 TT	TH	6-8:50 PM	
	K. HOLLOWAY \$0	0.00 \$0.00	\$60.00	\$60.00
	Required: Student Petition	n.		

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.

OC NCT	ESOL-015-01	340992 MW		9-11:50 AN	1
	J. RUEDA	\$0.00	\$0.00	\$65.00	\$65.00
	Required: Stude	ent Petition.			
HAR NCT	ESOL-015-06	340996 MW		6-8:50 PM	
	J. STENSETH	\$0.00	\$0.00	\$65.00	\$65.00
	Required: Stude	ent Petition.			
HAR NCT	ESOL-015-07	340998 MW		6-8:50 PM	
	TBA	\$0.00	\$0.00	\$65.00	\$65.00
	Required: Stude	ent Petition.			

ESOL-020 UPPER BEGINNING GRAMMAR, 0 CREDIT

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 Proficiency Standards, Level 1. Required: Student Petition.

OC NCT	ESOL-020-01 3	341000 TTH		10:30 -11:50) AM
	A. FRANZONI	\$0.00	\$0.00	\$35.00	\$35.00
	Required: Stude	ent Petition.			
HAR NCT	ESOL-020-06 3	341004 TTH		7:30 -8:50 P	M
	A. FRANZONI	\$0.00	\$0.00	\$35.00	\$35.00
	Required: Stude	ent Petition.			
HAR NCT	ESOL-020-07 3	341006 TTH		7:30 -8:50 P	M
	K. EMENS-HES	SLINK \$0.00	\$0.00	\$35.00	\$35.00
	Required: Stude	ent Petition.			

ESOL-022 UPPER BEGINNING CONVERSATION, 0 CREDIT

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 341007 TTH		6-7:20 PM	
	K. EMENS-HESSLINK \$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 341009	MW 6		9-11:50 AM	
	T. NIKOLOPOULOS	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Pet	ition.			
HAR LCT	ESOL-024-06 341011	l MW		6-8:50 PM	
	K. HOLLOWAY	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Pet	ition.			
HAR LCT	ESOL-024-07 341014	1 MW		6-8:50 PM	
	T. NIKOLOPOULOS	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Pet	ition.			

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.

OC LCT	ESOL-030-01	341016 TTH		10:30 -11	:50 AM
	J. RUEDA	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stu	dent Petition.			
HAR LCT	ESOL-030-06	341017 TTH		7:30 -8:50) PM
	S. MUNRO	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stu	dent 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, Level 2. 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 ESPAÑOL: Enseñado en español LCT: Low-Cost Text

NCT: No-Cost Text

Course No	Course Title, Cr	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
HAR LCT	ESOL-031-06	345230) TTH		7:30 -8:5	50 PM	OC LCT	ESOL-046-01	341040	MW		9-11:50 AM	
	I. FERGUSON	1	\$0.00	\$0.00	\$30.00	\$30.00		K. LONG		\$0.00	\$0.00	\$60.00	\$60.00
	Required: Stu	dent Pet	ition.					Required: Stud	dent Peti	tion.			
							HAR LCT	ESOL-046-06	341042	MW		6-8:50 PM	
ESOL-032	INTERMEDIA	TE CON	IVERSA1	ΓΙΟΝ 1, 0	CREDIT			TBA		\$0.00	\$0.00	\$60.00	\$60.00
English lar	nguage learners	study ai	nd practio	e speakir	ng and list	enina		Required: Stud	dent Petit	tion.			

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-032-01	341021 TTH		9-10:20 AN	1
	S. CAISSE	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stu	dent Petition.			
HAR LCT	ESOL-032-06	341025 TTH		6-7:20 PM	
	S. CAISSE	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stu	dent 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	341027 MW		9-11:50 AN	1
	S. CAISSE	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Stud	dent Petition.			
HAR LCT	ESOL-034-06	341030 MW		6-8:50 PM	
	L. NARDONE	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Stud	dent Petition.			

ESOL-042 UPPER INTERMEDIATE CONVERSATION 1, 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. Required: Student Petition.

OC LCT	ESOL-042-01 34	41032 TTH		9-10:20 AN	
	A. FRANZONI	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Studer	nt Petition.			
HAR LCT	ESOL-042-06 34	41035 TTH		6-7:20 PM	
	S. MUNRO	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Studer	nt Petition.			
HAR LCT	ESOL-042-07 34	41036 TTH		6-7:20 PM	
	A. FRANZONI	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Studer	nt Petition.			

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.

OC NCT	ESOL-044-01	341038 MW		9-11:50 AM		
	L. JOYCE	\$0.00	\$0.00	\$70.00	\$70.00	
	Required: Stu	dent 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.

ESOL-050 ADVANCED GRAMMAR A, 0 CREDIT

One of a three-part series. English language learners study and practice compound sentences, complex sentences with adverb clauses, transitions, and passive voice in written and spoken English. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 3 and 4. Required: Student Petition.

OC LCT	ESOL-050-01	ESOL-050-01 345232 TTH			:50 AM
	K. LONG	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stu	dent Petition.			
HAR LCT	ESOL-050-06	345231 TTH		7:30 -8:50) PM
	S. CAISSE	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stu	dent Petition.			

ESOL-052 ADVANCED COMMUNICATION SKILLS 1, 0 CREDIT

English language learners practice speaking and listening strategies for effective communication in discussions, presentations, lectures, notetaking, and group projects. The course builds vocabulary, critical thinking skills, and an awareness of non-verbal communication. The focus of this course is to prepare students for college success. Aligns with the Oregon Adult English Language Proficiency Standards, Level 4 & 5. Required: Student Petition.

OC LCT	ESOL-052-01	341043 TTH		9-10:20 AM	I
	J. RUEDA	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Stud	dent Petition.			
HAR LCT	ESOL-052-06	341046 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.

HAR NCT	ESOL-054-06 341	050 MW		6-8:50 PM	
	I. FERGUSON	\$0.00	\$0.00	\$70.00	\$70.00
	Required: Student	Petition.			

ESOL-060 VOCABULARY BUILDING 1, 0 CREDIT

One of a two-part series. English language learners develop their passive and active vocabularies through numerous exposures to selected words from the General Service List and the Academic Word List, and develop their vocabulary acquisition skills. Required: Student

OC LCT	ESOL-060-01	341055 MW		12:30 -1:50 PM				
	S. CAISSE	\$0.00	\$0.00	\$30.00	\$30.00			
	Required: Stu	dent Petition.						

ESOL-062 ESOL READING, 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 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

English language learners at all levels improve their reading fluency and expand and solidify their English vocabulary as needed for higher-level academics and everyday life. (Aligns with the Oregon Adult English Language Proficiency Standards, Levels 2-4; and Oregon Adult College and Career Readiness Reading Fundamentals) Required: Student Petition.

OC NCT ESOL-062-01 345335 TTH 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	341060			
	L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stu	dent Petition.			
ONL NCT	ESOL-082-06	341062			
	L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stu	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	341064			
	L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stud	dent Petition.			
ONL NCT	ESOL-083-06	341066			
	L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Stud	dent Petition			

PIE-020 **UPPER BEGINNING GRAMMAR, 0 CREDIT**

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 Proficiency Standards, Level 1. Required: Student Petition.

OC NCT	PIE-020-01	341069	41069 TTH			10:30 -11:50 AM		
	A. FRANZONI		\$390.00	\$39.00	\$240.00	\$669.00		
	Required: Stud							

PIE-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.

ОС	PIE-024-01 3		341070 MW			9-11:50 AM		
	T. NIKOLOPO	ULOS	\$780.00	\$78.00	\$480.00	\$1,338.00		
	Required: Student Petition							

PIE-030 **INTERMEDIATE GRAMMAR A, 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

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.

PIF-030-01 341072 TTH 10:30 -11:50 AM J. RUEDA \$390.00 \$39.00 \$240.00 \$669.00 Required: Student Petition.

PIE-032 INTERMEDIATE CONVERSATION 1, 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.

ос	PIE-032-01	341074 TTH	9-10:20 AM				
	S. CAISSE	\$390.00	\$39.00	\$240.00	\$669.00		
	Required: Stu	: Student Petition.					

PIF-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.

PIE-034-01 341076 MW 9-11:50 AM S. CAISSE \$780.00 \$78.00 \$480.00 \$1,338.00 Required: Student Petition.

PIE-042 **UPPER INTERMEDIATE CONVERSATION 1, 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. Required: Student Petition.

oc PIE-042-01 341077 TTH 9-10:20 AM A. FRANZONI \$390.00 \$39.00 \$240.00 \$669.00 Required: Student Petition.

PIE-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

OC NCT 341078 MW PIE-044-01 9-11:50 AM L. JOYCE \$780.00 \$78.00 \$480.00 \$1,338.00 Required: Student Petition.

PIE-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.

PIE-046-01 9-11:50 AM K. LONG \$780.00 \$78.00 \$480.00 \$1,338.00 Required: Student Petition.

PIE-050 **ADVANCED GRAMMAR A, 0 CREDIT**

VAR: Variable credit class

Other Coding Translations: ESPAÑOL: Enseñado en español TBA: To be arranged: contact LCT: Low-Cost Text department first class 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 Crs. Fee Total Instructor Tuition Fee Total

One of a three-part series. English language learners study and practice compound sentences, complex sentences with adverb clauses, transitions, and passive voice in written and spoken English. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 3 and 4. Required: Student Petition.

OC PIE-050-01 345233 TTH 10:30 -11:50 AM K LONG \$390.00 \$39.00 \$240.00 \$669 00 Required: Student Petition.

PIE-052 **ADVANCED COMMUNICATION SKILLS 1, 0 CREDIT**

English language learners practice speaking and listening strategies for effective communication in discussions, presentations, lectures, notetaking, and group projects. The course builds vocabulary, critical thinking skills, and an awareness of non-verbal communication. The focus of this course is to prepare students for college success. Aligns with the Oregon Adult English Language Proficiency Standards, Level 4 & 5. Required: Student Petition.

OC PIE-052-01 341082 TTH 9-10:20 AM J. RUEDA \$390.00 \$39.00 \$240.00 \$669.00 Required: Student Petition.

PIE-060 **VOCABULARY BUILDING 1, 0 CREDIT**

One of a two-part series. English language learners develop their passive and active vocabularies through numerous exposures to selected words from the General Service List and the Academic Word List, and develop their vocabulary acquisition skills. Required: Student Petition.

ос PIE-060-01 341088 MW 12:30 -1:50 PM S. CAISSE \$390.00 \$39.00 \$240.00 \$669.00 Required: Student Petition.

PIE-062 **ESOL READING, 0 CREDIT**

English language learners at all levels improve their reading fluency and expand and solidify their English vocabulary as needed for higher-level academics and everyday life. (Aligns with the Oregon Adult English Language Proficiency Standards, Levels 2-4; and Oregon Adult College and Career Readiness Reading Fundamentals) Required: Student Petition

OC NCT PIE-062-01 345336 TTH 12:30 -1:50 PM K. LONG \$390.00 \$39.00 \$240.00 \$669.00 Required: Student Petition.

English Literature

ENG-104Z INTRODUCTION TO FICTION, 4 CREDITS

The study of fiction invites us to enter imaginative narratives and confront the challenges of being human. ENG-104Z provides opportunities for the appreciation of fiction, including deeper awareness of craft and insight into how reading fiction can lead to self-enrichment. Students read a variety of types of fiction, from diverse perspectives and eras, and develop their skills in discussion, literary analysis, and critical thinking.

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

OC LCT ENG-104Z-01 341535 MW 10-11:50 AM A. COFFEY \$520.00 \$52.00 \$0.00 \$572.00

WORLD LITERATURE: ANCIENT THROUGH CLASSICAL ENG-107 **TIMES, 4 CREDITS**

Literature of the ancient through classical worlds: epic, lyric, and dramatic literature. 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

FNG-107-01 341543

> A. WARREN \$520.00 \$52.00 \$0.00 \$572.00

ENG-116 INTRODUCTION TO LITERATURE: COMICS, 4 CREDITS

Examines the intrinsic literary and artistic qualities of comics, as well as their connections to classic literature, and the literature and other art they have inspired.

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

ENG-116-01 341546

\$520.00 \$52.00 \$0.00 T DODGE \$572 00

ENG-121 MYSTERY FICTION, 4 CREDITS

An introduction to detective/mystery fiction. Students will read, discuss, and analyze short stories by writers such as Edgar Allan Poe, Agatha Christie, and Walter Mosley.

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

ENG-121-01 341548

> \$520.00 \$52.00 \$0.00 J. DAVIS \$572.00

ENG-194 INTRODUCTION TO FILM. 4 CREDITS

Viewing, discussion, and analysis of films from a variety of eras and cultures. Students will learn to analyze a film beyond its surface meaning, drawing on film aesthetics, technology, history, and theory The interpretive and critical thinking skills they develop can be applied to a variety of modern media.

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

ENG-194-01 341550 TTH 1-2:50 PM R DAVIS \$520.00 \$52.00 \$0.00 \$572.00

ENG-226 POPULAR LITERATURE. 4 CREDITS

Focuses on genre work within prose, film, comics and/or videogames that is specific in theme and targeted towards a more mass audience than traditional literary work. Genres might include but not necessarily be limited to horror, fantasy, science fiction, romance, and/or westerns. May be repeated for up to 8 credits.

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

oc ENG-226-01 345319 TTH 10-11:50 AM C BURNELL \$520.00 \$52.00 \$0.00 \$572 00 Focus area on fantasy fiction.

ENG-241 NORSE MYTHOLOGY, 4 CREDITS

Explores Norse mythology and its cultural, social, and literary significance; views Norse mythology in its historical and geographic positions and in the larger context of Western literary traditions; introduces theoretical approaches to mythology and basic literary elements and terminology; considers how studying myth affects and influences reading other works; connects Norse myth to medieval European and modern fantasy literature.

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

ENG-241-01 345322 MW 1-2:50 PM J. BRYANT-TRERISE \$520.00 \$52.00 \$0.00 \$572.00

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 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 ONL

WORLD LITERATURE: ANCIENT THROUGH CLASSICAL ENG-271 TIMES, 4 CREDITS

Literature of the ancient through classical worlds: epic, lyric, and dramatic literature. 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 FNG-271-01 345321

\$520.00 \$52.00 \$0.00 A. WARREN \$572.00

ENG-280 ENGLISH/CWE, 2-6 CREDITS

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

Corequisites: CWE-281

ONL LCT ENG-280-01 341558

> \$780.00 \$78.00 \$45.00 \$903 00V A. COFFEY Required: Student Petition. Corequisite: Take the following CWE-281-06.

ENG-297 A.S. DEGREE PORTFOLIO, 1 CREDIT

This course provides the opportunity for A.S. Degree students to revise. edit, reflect upon, and compile their best work from their various focus areas to meet the outcomes for the program and prepare for transfer to a university.

Required: Students must be in the second year of their course of study, and have the majority of their focus area and transfer requirements complete

ONL LCT ENG-297-01 341565

\$130.00 \$13.00 \$0.00 A. COFFEY \$143.00

Required: Student Petition.

Environmental Science

ESR-171 **INTRODUCTION TO ENVIRONMENTAL SCIENCE, 4 CREDITS**

Introduction to environmental science topics. Will focus on human impacts on land, air, water and ecology, climate change, sustainability, environmental impacts on human health and environmental justice. The laboratory assignments will focus on applied introductory environmental science topics.

Corequisites: ESR-171L

Recommended Prerequisites: MTH-060 or MTH-098 with a C or better,

or placement in MTH-065

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

ESR-171-01 341623 TTH E. CAVALIERE \$520.00 \$52.00 \$55.00 \$627.00

Corequisite: Take 1 of the following ESR-171L-01, ESR-

171L-03, ESR-171L-04, ESR-171L-02.

ONL ESR-171-02 341627

> E. CAVALIERE \$520.00 \$52.00 \$55.00 This section has an in-person lab requirement. Corequisite: Take 1 of the following ESR-171L-01, ESR-171L-03, ESR-171L-04, ESR-171L-02.

ONL ESR-171-03 345193

> \$520.00 \$52.00 \$55.00 E. CAVALIERE \$627.00 Corequisite: Take 1 of the following ESR-171L-01, ESR-171L-02, ESR-171L-03, ESR-171L-04.

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

ESR-171-15 341629

S. BALLEW \$520.00 \$52.00 \$55.00 \$627.00 This section has an in-person lab requirement. Corequisite: Take the following ESR-171L-15.

ESR-171L INTRODUCTION TO ENVIRONMENTAL SCIENCE LAB, 0 **CREDIT**

Lab course for ESR-171 Corequisites: ESR-171

> ESR-171L-01 341631 T 9-11:50 AM \$0.00 F CAVALIFRE \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following ESR-171-01, ESR-171-02, ESR-171-03.

oc ESR-171L-02 345194 W 9-11:50 AM D. HUFFORD \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following ESR-171-01, ESR-171-02, ESR-171-03.

OC ESR-171L-03 341633 W 1-3:50 PM E. CAVALIERE \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take 1 of the following ESR-171-01, ESR-171-02, ESR-171-03.

oc ESR-171L-04 341636 TH 2:30 -5:20 PM \$0.00 \$0.00 E. CAVALIERE \$0.00 \$0.00 Corequisite: Take 1 of the following ESR-171-01, ESR-171-02, ESR-171-03.

ESR-171L-15 341638 TH HAR 6-8:50 PM S. BALLEW \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following ESR-171-15.

Ethnic Studies

INTRODUCTION TO LATINO/A/X STUDIES, 4 CREDITS ES-211

An introductory course analyzing the historical context of Latinx in the United States (US). Beginning with pre-colonial societies on the American Continent, colonization, and moving to the modern Latinx diaspora. Special attention will be given to particular events that shaped and continue to influence the Latinx experience, such as the Mexican-American War, US expansionism, US immigration policy, the Chicano Movement, US foreign policy in Latin America, and the contemporary discourse regarding Latinx in the US.

Recommended Prerequisites: WR-121Z

ONL NCT ES-211-01 341570

> L. MARTINEZ \$520.00 \$52.00 \$0.00 \$572.00

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.

HDF-225-01 ONI 341719

D. GLASCOCK \$390.00 \$39.00 \$0.00 \$429.00 This section is an accelerated 5-week online course that runs between 11/3/25 - 12/07/25.

HDF-**DESARROLLO DE LAS ETAPAS PRENATAL, INFANTES** 225ES Y DE NIÑOS PEQUEÑOS, 4 CREDITS

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) Instructor Crs. Fee Total Instructor Tuition Fee Crs. Fee Total

Se enfoca en la exploración del desarrollo y factores que influyen áreas relacionadas con lo físico, cognitivo y socio-emocional en los niños desde la etapa prenatal hasta los tres años de edad. Se examinarán teorías relacionadas con estas etapas, así como la influencia del lenguaje y la cultura en el desarrollo y crianza.

REM LCT ESPAÑOL HDF-225ES-01341725 W 6-7:50 PM \$520.00 \$52.00 \$0.00 \$572.00 P. ALVARADO La clase se reúne seis miércoles por Zoom (10/1, 10/15, 10/29, 11/19, 12/3, y 12/10) de 6:00 PM to 7:50PM.

UNDERSTANDING CHILD ABUSE AND NEGLECT, 3 HDF-260 **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.

HDF-260-01

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

Fire Science (Wildland)

BASIC FOREST MANAGEMENT, 3 CREDITS FRP-101

An introduction to forestry and forest land management activities and practices related to forest stewardship. Students will gain an understanding of how social, economic and environmental values influence current forest policies and regulations.

Corequisites: FRP-102

oc FRP-101-01 341237 M 9-11:50 AM G. CLINE \$390.00 \$39.00 \$0.00 \$429.00

FRP-102 BASIC FOREST MANAGEMENT LAB, 1 CREDIT

Provides lab exercises in a forest setting experience using forest management field equipment discussed in FRP-101. The Lab includes the use of diameter tape, loggers tape, compass, clinometer, increment borer and wedge prism to measure tree height, diameter, tree age, diameter increment and basal area. Through the use of fixed plot and variable plot forest sampling methods the students will gain the skills to gather data necessary to calculate stocking, volume and growth.

Corequisites: FRP-101

OC LCT FRP-102-01 341240 W 9-11:50 AM G. CLINE \$130.00 \$13.00 \$110.00 \$253.00

BASIC WILDLAND FIRE INVESTIGATION (FI-110), 1 FRP-110

An introduction to the roles and responsibilities of wildland firefighters in determining a wildland fire origin. Students will identify the wildland fire categories, wildland fire behavior and the initial observations made by the firefighter responding to and arriving at a wildland fire. The primary emphasis of this course is to teach sound wildland fire observations and origin scene protection practices that enable first responders to a wildland fire scene to perform proper origin scene protection procedures.

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

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

OC: Oregon City Campus

OC FRP-110-01 345303 SU 8:30 -5:00 PM J. GULLEY \$130.00 \$13.00 \$25.00 \$168.00 Meets: 10/19.

Campus Locations: **Distance Education Notification:**

ONL: Online Only

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

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

This course provides an introduction to wildland fire behavior, wildland firefighting safety and wildland firefighting techniques. The course covers the basic skills necessary to fight wildland fires under close supervision. 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.

FRP-130-01 344982 T 10-4:00 PM J. GULLEY \$390.00 \$39.00 \$50.00 \$479.00

ADVANCED FIREFIGHTER TRAINING (S-131/S-133), 1 FRP-131

This course provides instruction that meets the training requirements for the Wildland Firefighter Type 1 position and/or Incident Commander Type 5 (ICT5).

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

FRP-131-01 345469 THF 8:30 -5:00 PM J. GULLEY \$130.00 \$13.00 \$20.00 \$163.00 Meets: 12/4-12/5.

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.

FRP-200-01 OC HYB 341243 W 11-12:50 PM J. GULLEY \$520.00 \$52.00 \$0.00 \$572.00

FRP-212 WILDFIRE POWER SAWS (S-212), 3 CREDITS

The course lessons provide introduction to the function, maintenance, and use of internal combustion engine-powered chainsaws, and their tactical wildland fire application. Field exercises support entry-level training for firefighters with little or no previous experience in operating a chainsaw, providing hands-on cutting experience in surroundings similar to fireline situations. Required: Student Petition.

Prerequisites: FRP-130 (S-130/S-190/L-180), FRP-250

Required: Students must be at least 18 years of age. Must have current first aid, CPR and AED certification

FRP-212-01 344985 MFSSU 8-5:00 PM J. GULLEY \$390.00 \$39.00 \$225.00 \$654 00 Required: Student Petition. Meets: 11/7-11/10.

FRP-243 WILDERNESS I: PSYCHOLOGY OF SURVIVAL, 3 CREDITS

Students will learn how to be mentally and physically prepared to survive in the wilderness, the psychology of surviving, and what to do when things go wrong. The course explores the science of survival. Other topics include disaster preparedness, ropes and knots, heat related injuries and increasing situation awareness.

FRP-243-01 12-3:00 PM M. ADAMS \$390.00 \$39.00 \$25.00 \$454.00 There is a field day, date TBD, that is mandatory to complete the class

FRP-245 WILDERNESS III: WEATHER OF THE NORTHWEST, 2 **CREDITS**

Other Coding Translations: ESPAÑOL: Enseñado en español

TBA: To be arranged: contact LCT: Low-Cost Text department first class NCT: No-Cost Text

VAR: Variable credit class

Course No	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,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
This cours	e covers the ba	sics of w	eather fo	recasting	especially	as it	OC NCT	FYE-101-07	341609	TTH		9-9:50 AN	
	he weather of t				,,			T. BOYLE-		\$260.00	\$26.00	\$12.00	\$298.00
								GALESTIANT	Z				
ОС	FRP-245-01	341250			10-12:00		OC NCT	FYE-101-08	341612	TTH		11-11:50	Δ Μ
			S		10-3:00 P			M. BAKER		\$260.00	\$26.00	\$12.00	\$298.00
	J. SALTENBERGER \$260.00 \$26.00 \$20.00 \$306.00		+	OC NCT	FYE-101-09	341615	TTH		3-3:50 PM				
	Meets: 10/11-		-hour cla	ss with a	1-hour lunc	h break		TBA		\$260.00	\$26.00	\$12.00	\$298.00
	on 10/25 & 12	2/6.					OC NCT	FYE-101-10	341618	TH		1-2:50 PM	
								C. SIMS		\$260.00	\$26.00	\$12.00	\$298.00
FRP-246	WILDERNES	S IV: BA	CKCOU	NTRY CP	R/FIRST A	ID/AED,	ONL NCT	FYE-101-11	341622				
	4 CREDITS							J. CORTES		\$260.00	\$26.00	\$12.00	\$298.00
Introductio	n to general me	edical co	ncepts ar	nd basic li	fe support s	skills. It is	ONL NCT	FYE-101-12	341625			•	·
targeted to	the outdoor en	thusiast	on day tr	ips or sho	rt adventur	es.		D. WOOD		\$260.00	\$26.00	\$12.00	\$298.00
Course res	sults in CPR, fire	st aid & /	AED certi	fication ar	nd Wilderne	ess First	ONL NCT	FYE-101-13	341628	+	+	*	4======
Aid certific	ation.							T. BOYLE-		\$260.00	\$26.00	\$12.00	\$298.00

OC FRP-246-01 345302 F 5-8:30 PM 8:30 -5:00 PM S POFT \$520.00 \$52.00 \$50.00 \$622.00 Meets: 11/7-11/16.

PHYSICAL FITNESS AND NUTRITION FOR FIRST FRP-255 **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

oc	FRP-255-01	341252 TTH	8-9:50 AM		
	J. GULLEY	\$260.00	\$26.00	\$0.00	\$286.00

First Year Experience (FYE)

FYE-101 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 NCT	FYE-101-01	341582	MW		9-9:50 AM	
	D. GREEN		\$260.00	\$26.00	\$12.00	\$298.00
OC NCT	FYE-101-02	341589	MW		10-10:50 A	M
	T. STAUFFER		\$260.00	\$26.00	\$12.00	\$298.00
	DEXTER					
OC NCT	FYE-101-03	341595	MW		11-11:50 A	M
	L. MARTINEZ		\$260.00	\$26.00	\$12.00	\$298.00
OC NCT	FYE-101-04	341599	M		1-2:50 PM	
	L. MARTINEZ		\$260.00	\$26.00	\$12.00	\$298.00
OC NCT	FYE-101-05	341602	Т		1-2:50 PM	
	C. SIMS		\$260.00	\$26.00	\$12.00	\$298.00
OC NCT	FYE-101-06	341605	W		1-2:50 PM	
	J. CORTES		\$260.00	\$26.00	\$12.00	\$298.00

EXPERIENCIA DE PRIMER AÑO (FIRST YEAR FYE-101ES **EXPERIENCE EN ESPAÑOL), 2 CREDITS**

GALESTIANTZ

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 NCT ESPAÑOL	FYE-101ES-01 341642	M		6-7:50 PM		
ESPANUL	S. DIAZ-ZAVALA	\$260.00	\$26.00	\$12.00	\$298.00	

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 3407	773
	T. SCOLLARD	\$390.00 \$39.00 \$92.16 \$521.16
	This course is not a	a prerequisite for the CCC Nursing
	Program. Online tex	xtbook included in section 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

ONL	FN-225-01 34	10774	
	T. SCOLLARD	\$520.00 \$52.00 \$130.00	\$702.00
	Online textbook is	ncluded in section fees.	
ONL	FN-225-02 34	10775	
	J. PAVLINAC	\$520.00 \$52.00 \$130.00	\$702.00
	Online textbook is	ncluded in section fees.	

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, Co	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
	ONL	FN-225-03	340776)				Desarrollo	de habilidades a	acadámic	ac hácic	as ofraci	da en ecnañ	ol con

J. PAVLINAC \$520.00 \$52.00 \$130.00 \$702.00 Online textbook included in section fees.

General 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.

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	341652	MW		5:30 -7:50 F	PM		
		tición de	\$0.00 \$0.00 \$50.00 \$ el estudiante. For registration					
	information co register at first	class.		tizabal a		16 or		
HAR LCT ESPAÑOL	GED-011-02	341657	TTH		6-8:50 PM			
ESPANOL	C. SANCHEZ Requerido: pe information co					\$50.00		

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 A. SMITH A. WICKERT Required: Stu	\$0.00	\$0.00	5:30 -7:50 I \$50.00	PM \$50.00
HAR HYB	GED-015-67	341665 MW		10-11:50 A	М
-0.	M. NICKAS Required: Stu	\$0.00 dent Petition.	\$0.00	\$55.00	\$55.00
ONL LCT	GED-015-68				
	S. HATSWELL Required: Stu	*	\$0.00	\$55.00	\$55.00
ONL LCT	GED-015-69				
	L. NIELSON	\$0.00	\$0.00	\$55.00	\$55.00
OC LCT	Required: Stu	aeni Pelilion. 341670 MTWTH		10-11:50 A	.,
OC LC1					
	J. NIELSON Required: Stu	\$0.00 dent Petition.	\$0.00	\$55.00	\$55.00
GED-049	LATINO GED	& LIFE SKILLS,	0 CRED	IT	

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.

HAR LCT ESPAÑOL	GED-049-03	341676 MW	9-11:50 AM				
	C. SANCHEZ	\$0.00	\$0.00	\$50.00	\$50.00		
HAR LCT	Requerido: petición del estudiante. For registration information contact Camilo Sanchez at 503-594-3029 or register at first class. GED-049-04 341679 S 9-11:50 AM						
ESPAÑOL	GLD-043-04	341079 3		9-11.50 A	IIVI		
	M. ROSAS DE	ELGADO \$0.00	\$0.00	\$30.00	\$30.00		
	C. SANCHEZ						
	Reguerido: pe	tición del estudia	ante.				

General Science

GS-104 EARTH SYSTEM SCIENCE, 4 CREDITS

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 341661 MW 10-11:20 AM B. WALKER \$520.00 \$52.00 \$50.00 \$622.00

GS-104L EARTH SYSTEM SCIENCE LAB, 0 CREDIT

Lab course for GS-104 Corequisites: GS-104

GS-104L-01 341662 M 1-3:50 PM B. WALKER \$0.00 \$0.00 \$0.00 \$0.00

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 GS-107-40 341664 C. SHARON \$520.00 \$52.00 \$25.00 \$597.00 Corequisite: Take the following GS-107L-40. ONI GS-107-41 \$520.00 \$52.00 \$25.00 \$597.00 C. SHARON Corequisite: Take the following GS-107L-41.

GS-107L ASTRONOMY LAB, 0 CREDIT

Lab course for GS-107 Corequisites: GS-107

ONI GS-107L-40 341669

C. SHARON \$0.00 \$0.00 \$0.00 \$0.00 Corequisite: Take the following GS-107-40.

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

	Section No Instructor	Crs Reg.	Days (M,T Tuition	,w,th.f,s,su) Fee	Time Crs. Fee	Total
ONL	GS-107L-41	341671				
	C. SHARON		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite:	Take the	following	GS-107-4	41.	

Geographic Information Systems

Course No Course Title, Credits

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.

GIS-101 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.

ONL LCT GIS-101-01 341257

> \$520.00 \$52.00 \$30.00 \$602.00 A. ARMEN

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.

ONL LCT GIS-201-01 341259

A. ARMEN \$520.00 \$52.00 \$40.00 \$612.00

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

GEO-100-01 ONL 341683

> 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 341684

> C. FELDMAN \$520.00 \$52.00 \$0.00 \$572.00

INTRODUCTION TO ENVIRONMENTAL GEOGRAPHY, 4 GEO-130 **CREDITS**

Explores the contemporary global environmental problems such as: overpopulation, over consumption, ozone layer depletion, pollution, acid rain, deforestation, desertification, and waste problems. Examines alternative sources of energy to fossil fuel and sustainable development strategies.

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

GEO-130-01 341685

Course No Course Title, Credits

Section No

Instructor

\$520.00 \$52.00 \$117.50 A. ARMEN \$689.50 Online textbook included in section fees.

Crs. Fee

Total

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

Tuition

GEOGRAPHY/CWE. 2-6 CREDITS (VAR) GEO-280

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

Corequisites: CWE-281

GEO-280-01 341687

C. FELDMAN \$780.00 \$78.00 \$45.00 \$903.00V

D LOUGEE

Required: Student Petition. Corequisite: Take the following

CWE-281-06.

Geology

G-101 **GENERAL GEOLOGY, 4 CREDITS**

For non-science majors. A lab course introducing geologic principles and concepts; Earth structure, igneous, sedimentary, and metamorphic rock environments, volcanic activity, and landforms. Lab requires students to identify ore minerals, rock forming minerals, igneous, metamorphic and sedimentary rocks.

Corequisites: G-101L

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

oc	G-101-01	341640	MW		10-11:20 A	M
	A. KOTASH		\$520.00	\$52.00	\$50.00	\$622.00
	Corequisite: Ta	ake 1 of t	the follow	ing G-10	1L-01, G-10	1L-02.
REM	G-101-02	341643	TTH		3-4:20 PM	
	A. KOTASH		\$520.00	\$52.00	\$50.00	\$622.00
	This class has	an in-pe	rson lab r	equireme	ent. Corequi	site:
	Take 1 of the fo	ollowing	G-101L-0)1, G-101	L-02.	
REM	G-101-15	341645	T		6-8:50 PM	
	I WOODCOCI	K	\$520 OO	\$52.00	\$50.00	\$622.00

This section has an in-person lab requirement. Corequisite: Take the following G-101L-15.

GENERAL GEOLOGY LAB, 0 CREDIT G-101L

Lab course for G-101 Corequisites: G-101

OC LCT	G-101L-01	341647	T		9-11:50 AM	
	A. KOTASH		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: T	ake 1 of	the follow	ving G-10	01-01, G-101-	02.
OC LCT	G-101L-02	341649	W		1-3:50 PM	
	A. KOTASH		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: T	ake 1 of	the follow	ving G-10	01-01, G-101-	02.
HAR LCT	G-101L-15	341651	TH		6-8:50 PM	
	J. WOODCOC	K	\$0.00	\$0.00	\$0.00	\$0.00

Corequisite: Take the following G-101-15.

G-201 **GENERAL GEOLOGY, 4 CREDITS**

For science majors. A lab course introducing geologic principles and concepts; weathering, soils, Earth structure, igneous, sedimentary, metamorphic rocks, volcanic activity, and landforms. Lab requires students to identify ore minerals, rock forming minerals, igneous, metamorphic and sedimentary rocks.

Corequisites: G-201L

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

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, Co	redits				
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total
ос	G-201-01	341653	MW		10-11:20 A	AM
	A. KOTASH		\$520.00	\$52.00	\$50.00	\$622.00
	Corequisite: T	ake 1 of	the follow	ving G-20	1L-01, G-20	01L-02.
REM	G-201-02	341654	TTH		3-4:20 PM	
	A. KOTASH		\$520.00	\$52.00	\$50.00	\$622.00
	This section h	as an in-	person la	b require	ment. Core	quisite:
	Take 1 of the	following	G-201L-	01, G-20	1L-02.	
REM	G-201-15	341655	Т		6-8:50 PM	
	J. WOODCOO	CK	\$520.00	\$52.00	\$50.00	\$622.00
	This section h	as an in-	person la	b require	ment. Core	quisite:
	Take the follo	wing G-2	01L-15.			

G-201L **GENERAL GEOLOGY LAB, 0 CREDIT**

Lab course for G-201 Corequisites: G-201

OC LCT	G-201L-01	341656 T		9-11:50 AM	
	A. KOTASH	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite:	Take 1 of the follo	wing G-20	01-01, G-201-	02.
OC LCT	G-201L-02	341658 W		1-3:50 PM	
	A. KOTASH	\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite:	Take 1 of the follo	wing G-20	01-01, G-201-	02.
HAR LCT	G-201L-15	341660 TH		6-8:50 PM	
	J. WOODCO	CK \$0.00	\$0.00	\$0.00	\$0.00
	Corequisite:	Take the following	G-201-1	5.	

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.

ONL LCT GRN-181-01 340752

> Y. SMITH \$390.00 \$39.00 \$0.00 \$429.00

GRN-280 GERONTOLOGY/CWE, 2-6 CREDITS

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 Petition.

Prerequisite or Corequisite: HS-170

Corequisites: HS-270

HAR HYB GRN-280-01 340753 LCT

J. LOVELESS \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

Health

BODY & DRUGS I: INTRODUCTION TO ABUSE & HE-163 **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 341675

OC: Oregon City Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

\$390.00 \$39.00 \$0.00 T PANTAGES \$429 00 ONL 341677 HE-163-02

T. PANTAGES \$390.00 \$39.00 \$0.00

Campus Locations: Distance Education Notification:

HAR: Harmony Community Campus ONL: Online Only

REM: Remote (w/ scheduled meetings)

\$429.00

HYB: In-person plus online work

HE-164 **BODY & DRUGS II: ALCOHOL, 3 CREDITS**

Crs Reg.

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

ONL HE-164-01 341678

Course No Course Title, Credits Section No

Instructor

T PANTAGES \$390.00 \$39.00 \$0.00 \$429.00

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

Fee

Tuition

Time

Crs. Fee

Total

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 HF-201-01 341680 T NFLSON \$390.00 \$39.00 \$0.00 \$429.00

HE-204 **NUTRITION & WEIGHT CONTROL, 3 CREDITS**

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 ONL 341682

\$390.00 \$39.00 \$0.00 J. BUEL \$429.00

INTRODUCTION TO PLANT BASED LIVING, 3 CREDITS

The course is designed to give students a basic understanding of a plant based diet/lifestyle and the benefits of this type of lifestyle. Students will learn about the physical benefits of a plant based diet, organic foods, current environmental impacts of the big agricultural companies, animal welfare, and workers' rights as well as the research that has been documented to support the information.

ONL NCT HE-207-01 341686

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

HE-223 **SPORTS NUTRITION, 3 CREDITS**

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 ONL 341688

department first class

VAR: Variable credit class

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 341689 MW 1-2:20 PM K. WOODS \$390.00 \$39.00 \$0.00 \$429.00

HE-250 PERSONAL HEALTH, 3 CREDITS

Other Coding Translations: ESPAÑOL: Enseñado en español TBA: To be arranged: contact LCT: Low-Cost Text

Course No	Course Title, C	redits					Course No	Course Title, C	credits				
	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
of information information in the second in	se is designed to ation basic to the ormation, and to s in regard to per	field of h promote	nealth, to positive	help then	n critically	evaluate	HAR HYB	HP-100-01 S. COOPER Additional cos Bloodborne P	sts associathogens	\$130.00 ated with Certifica	te, \$36 C	se include PR Card,	\$158.00 : \$22 \$16.50
ONL	HE-250-01 J. RHODEN HE-250-02 J. RHODEN	341693 341697	\$390.00 7	\$39.00 \$39.00		\$429.00 \$429.00		First Aid Certificate for a total of \$74.50 additional cost. To course will meet for four hours on 11/14/2025 on the Harmony Campus. More information will be given in the couple weeks of class.					Э
	Meets: 11/3-1	12/13.	7.20.00	7.0.00	7	÷ .=0.00	HP-110	MEDICAL TE	RMINOL	OGY. 4 (REDITS		

HE-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	341698
	K. ARIZO	\$390.00 \$39.00 \$35.00 \$464.00
ONL	HE-252-03	341700
	T. NELSON	\$390.00 \$39.00 \$35.00 \$464.00
ONL	HE-252-05	341701
	K WOODS	\$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

ONL	HPE-295-01	341752	
	T. NELSON	\$390.00 \$39.00 \$30.00	\$459.00
ONL	HPE-295-02	341757	
	J. BUEL	\$390.00 \$39.00 \$30.00	\$459.00
ONL	HPE-295-03	341758	
	J. RHODEN	\$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

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.

p ,						37.
ONL	HP-110-01	345267				
	W. HARTJE		\$520.00	\$52.00	\$156.75	\$728.75
	Online textboo	k include	ed in secti	ion fees.		
ONL	HP-110-02	345266				
	S. DAVENPOR	RT	\$520.00	\$52.00	\$156.75	\$728.75
	Online textboo	k include	ed in secti	ion fees.		
ONL	HP-110-03	345268				
	T. BOYD		\$520.00	\$52.00	\$156.75	\$728.75
	Online textboo	k include	ed in secti	ion fees.		
ONL	HP-110-04	345361				
	T. BOYD				\$156.75	\$728.75
	Online textboo	k include	ed in secti	ion fees.		

HP-120 **INTRODUCTION TO HEALTH SCIENCES, 3 CREDITS**

This course introduces students to Career Technical Education (CTE) Programs within Health Professions and prepares students for next steps in applying for competitive program entry.

Prerequisites: WRD-098 or placement in WR-101

0.0000000000000000000000000000000000000	
S. DAVENPORT \$390.00 \$39.00 \$0.00 \$429.0	00

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

OC HYB NCT	HST-101-01 34175	50 W		10-11:	50 AM
ONL NCT	P. MCFARLAND HST-101-02 34175	\$520.00	\$52.00	\$0.00	\$572.00
	P. MCFARLAND	\$520.00	\$52.00	\$0.00	\$572.00

HST-103 HISTORY OF WESTERN CIVILIZATION, 4 CREDITS

Development of Western Civilization with an emphasis on Europe from the 19th century to the present.

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

ONL NCT	HST-103-01	341754				
	P. MCFARLAN	ID S	\$520.00	\$52.00	\$0.00	\$572.00

HST-137 HISTORY OF SCIENCE, MEDICINE, & TECHNOLOGY IN **WESTERN CIVILIZATION, 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	se 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
Traces the major developments in western civilization in the fields of					ONL NCT	HOR-115-02	341709						

Traces the major developments in western civilization in the fields of science, medicine and technology from ancient Greece to the present. Includes an examination of the biographies of prominent scientists, doctors and engineers.

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

ONL LCT HST-137-01 341755

> P. MCFARLAND \$520.00 \$52.00 \$0.00 \$572.00

HISTORY OF THE UNITED STATES, 4 CREDITS HST-201

Covers the period in American history from first European contact through the Age of Jackson.

Prerequisite or Corequisite: WRD-098 or placement in WR-121Z Recommended: Sequence of HST-201, HST-202, and HST-203 is taken in order

oc	HST-201-01	341756 MW	1	1-2:50 PM	
	J. PARKER	\$520.00	\$52.00 \$	0.00	\$572.00
ONL	HST-201-02	341760			
	J. PARKER	\$520.00	\$52.00 \$	0.00	\$572.00

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

HST-280-01 341763

\$780.00 \$78.00 \$45.00 P. MCFARLAND \$903 00V Required: Student Petition. Corequisite: Take the following CWE-281-06.

Horticulture/Arboriculture/Landscape/Organic Farming

For more information call 503-594-3292 or email horticulture@clackamas.edu

HOR-111 HORTICULTURE PRACTICUM/FALL, 2 CREDITS

Practical experience with seasonal horticulture activities in the areas of container nurseries, greenhouses, landscape management, arboriculture, and organic food production.

HOR-111-01 341704 M 8-11:50 AM F. KILDERS \$260.00 \$26.00 \$45.00 \$331.00 G. LOEFFLER

HOR-113 ORGANIC FARMING PRACTICUM/FALL, 3 CREDITS

Essential organic farming practices, including seasonal activities such as crop rotation, cover cropping, four-season production strategies, soil testing, and calculating soil amendment needs. Class lecture, field trips, and lab are all included components of this course. This format has been selected to create a hands-on experience for each student in seasonal crop production.

OC HYB LCT HOR-113-01 341706 T 8-11:50 AM C. KONIECZKA \$390.00 \$39.00 \$75.00 \$504 00

HOR-115 HORTICULTURE SAFETY, 1 CREDIT

Introduction to situational awareness and safe practices in the horticulture workplace to reduce the risk or chance for accidents and injuries.

ONL NCT HOR-115-01 341707

E. ROBERTS \$130.00 \$13.00 \$15.00 \$158.00 Meets: Online 9/29-10/31.

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

E. ROBERTS

This course introduces basic vocabulary and structures of the Spanish language for students to be able to communicate in the Horticultural environment. The class introduces students to the culture of the Spanish speaking people, especially those that reside in their own area and within the United States. The course emphasizes oral communication, but all four skills of language are introduced: listening, speaking, reading and writing.

\$130.00 \$13.00 \$15.00

\$158.00

HOR-118 SPANISH FOR HORTICULTURE, 4 CREDITS

Meets: Online 9/29-10/31.

OC NCT HOR-118-01 341710 MW 3-4:50 PM \$587.00 G LOFFFLER \$520.00 \$52.00 \$15.00

HOR-124 FOOD HARVEST, 3 CREDITS

This course provides a basic knowledge of aspects of harvesting, handling, storing, and marketing of produce from small-scale, organic operations. Topics include: food safety laws and practices, harvest and storage requirements for a variety of crops, factors that impact quality and storage ability, post-harvest biology, Organic certification standards, and regulations for selling value added products. Students in this class will be actively harvesting, washing, packing, and selling produce from the Student Organic Farm.

OC NCT HOR-124-01 341712 W 8-11:50 AM D. ROSTAD \$390.00 \$39.00 \$75.00 \$504.00

HOR-130 PLANT PROPAGATION TECHNIQUES, 3 CREDITS

Covers plant anatomy and reproduction techniques of plants from seed, cuttings, grafting, division, and micro-propagation (tissue culture). Offers an in-depth overview of plant propagation practices.

HOR-130-01 341715 TH 8-11:50 AM F. KILDERS \$390.00 \$39.00 \$35.00 \$464.00

HOR-212 FLOWER ARRANGER'S GARDEN, 2 CREDITS

Learn essential fall flower farming techniques including planting, season extension, harvest, and conditioning of cut-flowers. Includes basic floral design and installation techniques. Instruction includes production of bouquets, dried arrangements, wreaths, and small installations. Ideal for garden designers, home flower gardeners, and growers of commercial cutting gardens.

ос нув LCT **HOR-212-01** 341718 F 8-11:50 AM D. ROSTAD \$260.00 \$26.00 \$65.00 \$351.00 Meets: 10/3-10/31.

HOR-213 COMPUTER-AIDED LANDSCAPE DESIGN, 3 CREDITS

Develop skills with Computer-aided design (CAD) software for creating landscape designs. Practice techniques utilized in common CAD programs used in the landscape industry.

Prerequisites: HOR-229

Recommended Prerequisites: CS-120 or comparable computer skills

HOR-213-01 347174

\$390.00 \$39.00 \$60.00 \$489.00 The course will utilize Vectorworks, a free design software available to students.

HOR-223 APPLIED PLANT SCIENCE, 4 CREDITS

An overview of the practical aspects of plant growth and development, classification systems, plant breeding and environmental factors in managing plant growth.

> 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) Time Total Instructor Tuition Crs. Fee Total OC LCT HOR-223-01 341720 MW 1-2:50 PM

\$602.00

HOR-224 LANDSCAPE INSTALLATION, 3 CREDITS

Materials and practices in landscape installation, including plan reading, materials take-off, estimating, bidding, scheduling, grading, construction materials, and plant installation. Provides an overview of Oregon state landscape contracting and licensing requirements.

\$520.00 \$52.00

\$30.00

Recommended Prerequisites: MTH-050

C. KONIECZKA

oc HOR-224-01 341722 TH 1-4:50 PM A. CHASTAIN \$390.00 \$39.00 \$60.00 \$489.00

HOR-225 ARBORICULTURE I, 3 CREDITS

Management of trees in residential, commercial, and urban landscapes. Follows course materials prepared by the International Society of Arboriculture (ISA). Topics covered include tree anatomy, selection, installation, response to damage, soil characteristics, pruning techniques and diagnosis of pest problems. Prepares student for HOR-260.

 OC HYB
 HOR-225-01
 341726 T
 2-4:50 PM

 E. ROBERTS
 \$390.00
 \$39.00
 \$25.00
 \$454.00

HOR-226 PLANT IDENTIFICATION/FALL, 4 CREDITS

Identification of deciduous trees, shrubs, and groundcovers, including their cultural requirements in the landscape. Oregon State University transfer course.

OC NCT	HOR-226-01	341727 T			8-11:50 AM			
	F. KILDERS		\$520.00	\$52.00	\$45.00	\$617.00		
OC HYB	HOR-226-02	341729	W		6-8:30 PM			
NCT	M. PHILLIPS		\$520.00	\$52.00	\$15.00	\$587.00		

HOR-235 WEED IDENTIFICATION, 2 CREDITS

Identification and life cycles of weeds commonly found in landscapes, nurseries, and farms.

REM NCT	HOR-235-01	341730 T		6-7:50 PM				
	F. KILDERS	\$260.00	\$26.00	\$20.00	\$306.00			
	Meets: Remote 9/30-10/28 on day and time listed, plus							
	additional onlin	ne hours.						

HOR-236 INSECT IDENTIFICATION, 2 CREDITS

Develop skills to identify common pest and insect life stages that damage or benefit plants in the landscape, farm, and greenhouse.

OC HYB LCT HOR-236-01 341733 T 6-7:50 PM
E. ROBERTS \$260.00 \$26.00 \$40.00 \$326.00
Meets: In-person 11/4-12/2, plus additional online hours.

HOR-252 KITCHEN HERBS, 1 CREDIT

Instruction will focus on how to grow and use common culinary herbs. This includes how to incorporate common herbs on market farms and how to plan for production, drying, and sales of herbs.

 OC NCT
 HOR-252-01
 341735 F
 8-11:50 AM

 D. ROSTAD
 \$130.00
 \$13.00
 \$50.00
 \$193.00

Meets: 11/7-12/5.

HOR-262 TREEWORK PRACTICUM I, 2 CREDITS

Experience with the implementation of basic requirements, equipment and techniques employed by arborists who work aloft. Covers personal protective equipment, safe operation, and common cutting techniques in accordance with current industry standards. Students operate chainsaws in a variety of field exercises, and will gain exposure to other pieces of industry equipment, such as chipper, truck and trailer, and aerial lift. Students will participate as members of a crew, gaining introductory experience in tree pruning, rigging, hardware installation, electrical hazard awareness, aerial rescue, ground work, and work site management.

Prerequisites: HOR-115, HOR-131, and HOR-239

OC NCT

HOR-262-01 341737 F 10-12:30 PM
F 1-4:30 PM
E. ROBERTS \$260.00 \$26.00 \$95.00 \$381.00
If you have arboriculture industry experience and wish to take this class, contact april.chastain@clackamas.edu.

HOR-264 TREEWORK PRACTICUM II (AERIAL), 2 CREDITS

Experience with the implementation of intermediate requirements, using equipment and techniques employed by arborists who work aloft. Reinforces personal protective equipment, safe operation, and common cutting techniques in accordance with current industry standards. Students operate chainsaws in a variety of field exercises, and will gain exposure to other pieces of industry equipment, such as chipper, truck and trailer, and aerial lift. Students will participate as members of a crew, gaining additional experience in tree pruning, rigging, hardware installation, electrical hazard awareness, aerial rescue, ground work, and work site management.

Prerequisites: HOR-262

OC NCT

HOR-264-01 341739 F 10-12:30 PM
F 1-4:30 PM
E. ROBERTS \$260.00 \$26.00 \$95.00 \$381.00
If you have arboriculture industry experience and wish to take this class, contact april.chastain@clackamas.edu.

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 Petition

Corequisites: CWE-281

OC NCT HOR-280-01 341741

C. KONIECZKA \$390.00 \$39.00 \$45.00 \$474.00 Required: Student Petition. Contact: chrisk@clackamas.edu. 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 NCT HOR-281-01 341745

C. KONIECZKA \$780.00 \$78.00 \$45.00 \$903.00 Required: Student Petition. Contact: chrisk@clackamas.edu. 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.

Campus Locations:

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 Crs. Fee Total Instructor Tuition Fee Crs. Fee Total Corequisites: CWE-281 XHOR-C06A- 342074 F oc 8-11:50 AM

Required: Students are expected to work a minimum of 90 job site hours

HOR-282-01 341748

> C. KONIECZKA \$390.00 \$39.00 \$45.00 Required: Student Petition. Contact: chrisk@clackamas.edu. 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

OC NCT

HOR-285-01 341751

C. KONIECZKA \$390.00 \$39.00 \$45.00 \$474.00 Required: Student Petition. Contact: chrisk@clackamas.edu. Corequisite: Take the following CWE-281-06.

XHOR-APPRENTICE APPLICATOR LICENSE C001 RECERTIFICATION, SPANISH, 0.80 CEUS

Class fulfills the Oregon Department of Agriculture training continuing education requirements for renewing the Apprentice Applicator License certification. Clase cumple con los requisitos de capacitatción de Oregon Department of Argriculture para la recertificación de licencia de aprendiz aplicador.

XHOR-C001- 342057 F 8-4:50 PM OC ESPAÑOL 01

> L. CERVANTES \$0.00 \$0.00 \$0.00 \$0.00 Requerido: petición del estudiante. Meets: 12/5. Fee: \$80. Eventbrite registration at https://bit.ly/horteventbrite Contact horticulture@clackamas.edu with questions.

XHOR-**FOUNDATIONS OF IRRIGATION DESIGN, 1.60 CEUS** C032

Take your landscape designs to the next level by learning fundamentals of irrigation design. Developed by Irrigation Association instructors with years of teaching experience, this beginner reference focuses on designing a simple residential or small commercial system. Participants complete two designs from start to finish during this fast-paced, two-day class. Organized to follow the typical design process, topics include gathering site information, calculating system capacity, soil-water-plant relationships, pipe sizing, hydraulics, head layout, uniformity, zoning and plan presentation. Qualifies for 16 Irrigation Association CEU's.

XHOR-C032- 342067 FS 8-4:50 PM 01

> K. MCCALEB \$0.00 \$0.00 \$0.00 \$0.00 Required: Student Petition. Two-day workshop on 11/7 & 11/8. Fee: \$160. Eventbrite registration at https://bit.ly/horteventbrite Contact Loretta Mills at lorettam@clackamas.edu with questions.

XHOR-PESTICIDE CORE TRAINING-FALL, 0.40 CEUS C06A

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.

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

Other Coding Translations:

VAR: Variable credit class

Human Services

01 G. COOKE

HS-100 **INTRODUCTION TO HUMAN SERVICES, 3 CREDITS**

horticulture@clackamas.edu with questions.

This course provides an overview of the human services field. The course includes the history of human services with a focus on the diverse roots of the field. Students will get an overview of the various careers and educational options available in human services, as well as an opportunity to discuss the student's own abilities and goals.

\$0.00

Required: Student Petition. Meets: Nov 21. Fee \$40.

Eventbrite registration at https://bit.ly/horteventbrite Contact

\$0.00

\$0.00

\$0.00

OC HYB LCT HS-100-01 341734 TH 10-11:50 AM \$390.00 \$39.00 \$0.00 \$429.00 C. BAKER This class meets every other Thursday (10/9, 10/23, 11/6, 11/20, 12/4) from 10:00AM to 11:50AM.

ONL LCT HS-100-02 341736

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

HS-170 PREPARATION FOR FIELD EXPERIENCE IN HUMAN SERVICES, 1 CREDIT

This course prepares students to complete fieldwork in Human Services. Covers developing learning objectives and creating successful field placements as well as the specific steps required to complete a Cooperative Work Experience at Clackamas Community College. Required: Student Petition.

Prerequisites: HS-100 or HS-154

Recommended Prerequisites: At least 30 credits of the Human Services program, including 6 credits from HS-100, HS-103, HS-154, HS-156, and HS-206

ONL HS-170-01 341738

> J. LOVELESS \$130.00 \$13.00 \$0.00 \$143.00 Required: Student Petition.

HS-206 TRAUMA INFORMED PRACTICES, 3 CREDITS

In this course, students will learn how to recognize and respond to the impact of traumatic stress. Students will gain knowledge and skills they can infuse into their practices and act in a way that maximizes physical and psychological safety for clients and themselves. Students will understand how trauma impacts the brain, body, as well as development. Topics such as vicarious trauma, cultural trauma, and secondary trauma will be examined and discussed.

Recommended Prerequisites: CJA-101 or HS-100 or any other 100level course that discusses human behavior, development, or social interactions

ONL HS-206-01 341740

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

MOTIVATIONAL INTERVIEWING, 3 CREDITS

Students taking this course will learn a client-centered approach to working with a variety of populations that are ambivalent towards change or are even mandated to make a change (court-ordered populations). Motivational Interviewing is recognized as a core component of various interventions service providers use, including those in substance abuse/addiction services, mental health, primary healthcare, education, and criminal justice. These skills include interviewing and listening, identifying ambivalence and change talk, strengthening resolve to change, and internal motivation of populations served.

Recommended Prerequisites: HS-156

ESPAÑOL: Enseñado en español

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 Total Instructor Tuition Fee Total

OC HYB HS-210-01 341742 T 1-2:50 PM C. BAKER \$390.00 \$39.00 \$0.00 \$429.00

This class meets every other Tuesday (10/7, 10/21, 11/4, 11/18, 12/2) from 1:00PM to 2:50PM.

HUMAN SERVICES PRACTICUM SEMINAR, 2 CREDITS HS-270

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 341744 T 10-11:50 AM C. BAKER \$260.00 \$26.00 \$0.00 \$286.00 This class meets every other Tuesday (10/7, 10/21, 11/4,

11/18, 12/2) from 10:00AM to 11:50AM.

HUMAN SERVICES GENERALIST I: CWE/PRACTICUM, 2-HS-280

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 HYB LCT HS-280-01

J. LOVELESS \$903.00V \$780.00 \$78.00 \$45.00

Required: Student Petition.

HUMAN SERVICES GENERALIST II: CWE/PRACTICUM, 2-HS-281 6 CREDITS

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 HYB LCT HS-281-01

J. LOVELESS \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

HUMAN SERVICES GENERALIST III: CWE/PRACTICUM, 2 HS-282 -6 CREDITS

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 HYB LCT HS-282-01 341749

J. LOVELESS \$780.00 \$78.00 \$45.00 \$903.00V

Required: Student Petition.

Industrial Maintenance Technology

IMT-104 READING SCHEMATICS AND SYMBOLS, 2 CREDITS

A basic course of study that will develop the student's understanding of reading schematics and symbols through lectures and hands-on examples.

IMT-104-01 341759 T 6:30 -8:20 PM C. CONNORS \$260.00 \$26.00 \$102.50 \$388 50

INTRODUCTION TO RENEWABLE ENERGY AND IMT-111 **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.

IMT-111-01 341764 MW 9-11:50 AM C. CONNORS \$390.00 \$39.00 \$153.75 \$582.75

Journalism

J-211 **MASS MEDIA & SOCIETY, 4 CREDITS**

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

340980 MW 10-11:50 AM J-211-01 M. JONES \$520.00 \$52.00 \$10.00 \$582.00

J-215 **COLLEGE NEWS: WRITING & PHOTOGRAPHY, 4**

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 340981 MW 1-2:50 PM M. JONES \$520.00 \$52.00 \$10.00 \$582.00

PODCASTING AND VIDEO JOURNALISM, 4 CREDITS

Students will learn to produce and publish audio and video news stories for a variety of media, including podcasting platforms, YouTube and social media.

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

10-11:50 AM J-220-01 340983 T J. SONNENMAIR \$520.00 \$52.00 \$10.00 \$582.00 Additional hours online

J-221 INTERMEDIATE PODCASTING AND VIDEO **JOURNALISM, 4 CREDITS**

Students will learn intermediate skills to produce and publish audio and video news stories for a variety of media, including podcasting platforms, YouTube and social media.

Prerequisites: J-220 with a C or better

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

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	ourse Title, Credits					Course 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,) Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
REM NCT	J-221-01	340985	T		10-11:50	AM	ос	J-235-01	341001	MW		1-2:50 PM	
	J. SONNENMA	4IR	\$520.00	\$52.00	\$10.00	\$582.00		M. JONES		\$520.00	\$52.00	\$0.00	\$572.00
	Additional hou	re online											

J-280

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

ос	J-225-01	340991 MW	1-2:50 PM		
	M. JONES	\$520.00	\$52.00	\$0.00	\$572.00

J-226 INTRODUCTION TO COLLEGE NEWS: DESIGN & **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

ос	J-226-01	340993 T	1-4:50 PM			
	M. JONES	\$520.00	\$52.00	\$10.00	\$582.00	

INTERMEDIATE COLLEGE NEWS: DESIGN & J-227 **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

ос	J-227-01	340995 T	1-4:50 PM			
	M. JONES	\$520.00	\$52.00	\$0.00	\$572.00	

ADVANCED COLLEGE NEWS: DESIGN & PRODUCTION, J-228 4 CREDITS

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

ос	J-228-01	340997 T	1-4:50	PM
	M. JONES	\$520.00	\$52.00 \$0.00	\$572.00

J-235 **ADVANCED COLLEGE NEWS: WRITING &** 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

OC: Oregon City Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Recommended Prerequisites: Placement in WR-121Z

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 NCT	J-280-01	341002			
	M. JONES	\$780.00	\$78.00	\$45.00	\$903.00V
	Required: Stu	dent 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

ONL NCT	J-280A-01	341012			
	M. JONES	\$780.00	\$78.00	\$45.00	\$903.00V
	Required: Stu	dent Petition.			

Library

LIB-101 INTRODUCTION TO LIBRARY RESEARCH, 1 CREDIT

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.

ONL NCT	LIB-101-01 TBA Meets: 9/29-1	341767 1/29.	\$0.00	\$0.00	\$0.00	\$0.00
ONL NCT	LIB-101-02 TBA Meets: 9/29-1	341768 1/29.	\$0.00	\$0.00	\$0.00	\$0.00
ONL NCT	LIB-101-03 TBA Meets: 9/29-1	341770 1/29.	\$0.00	\$0.00	\$0.00	\$0.00

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	341809 MW		8-11:50 A	AM.
	J. CARLSTON J. TRAVER	\$520.00	\$52.00	\$205.00	\$777.00

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 34181	3 TTH		8-11:50 A	М
	J. CARLSTON	\$520.00	\$52.00	\$205.00	\$777.00
ОС	MTT-121-02 34181	8 TTH		5-8:50 PM	
	J. CARLSTON	\$520.00	\$52.00	\$205.00	\$777.00

MTT-241 **CAD/CAM II, 4 CREDITS**

Campus Locations: Distance Education Notification: HAR: Harmony Community Campus 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	euits					Course No	Course Title, C	Cuito				
	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
This cours	e is the second	in the Co	omputer-	Aided Ma	chinina (CA	M)	ОС	MFG-106-01	341775	M		4:30 -7:20	PM
	will greatly exp							M. BABCOCK		\$390.00	\$39.00	\$153.75	\$582.75

series and will greatly expand the student's existing CAD/CAM skills by exploring more advanced software features and programming techniques. There will be a strong emphasis placed on the entire CAD/CAM/CNC part machining process. An introduction to 4-axis mill programming will be included.

Prerequisites: MTT-122 and MTT-141

auros No. Couros Titlo Credito

OC NCT MTT-241-01 341820 TTH 12-3:50 PM C. LETTENMAIER \$520.00 \$52.00 \$205.00 \$777.00

MACRO PROGRAMMING AND MACHINE PROBING, 3 MTT-252

This course is an introduction to Fanuc-based, custom macro programming for individuals with some previous G&M-code programming experience. Students will learn to define and apply macro variables, program branching, macro functions and operators and implement repetitive looping. Additional topics will include custom alarms and assignment of G & M codes to macros. Students will write and prove out programs on HAAS CNC controls utilizing all basic functions of the language using Renishaw touch probes.

Recommended Prerequisites: MTT-122 or competence with basic G&M-code mill programming (FANUC/Haas-style)

MTT-252-01 341821 MW 1-3:50 PM C. LETTENMAIER \$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

MFG-103-01 341772 TTH 12:30 -3:20 PM OC NCT 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.

ററ MFG-104-01 341773 TTH 3:30 -4:50 PM M. BABCOCK \$390.00 \$39.00 \$153.75 \$582.75

ADVANCED APPLIED GEOMETRIC DIMENSIONING AND MFG-106 **TOLERANCING FOR MANUFACTURING, 3 CREDITS**

Introduces participants to the application of gauging and inspection using Geometric Dimensioning and Tolerancing (GDT). Students will identify inspection equipment and inspect GDT characteristics while experiencing their manufacturing implications.

Prerequisites: MFG-104

MFG-107 INDUSTRIAL SAFETY & FIRST AID, 3 CREDITS

Course No. Course Title Credite

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 341778 F 1-3:50 PM L. HILLYARD \$390.00 \$39.00 \$153.75 \$582.75

MFG-109 COMPUTER LITERACY FOR TECHNICIANS, 3 CREDITS

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.

MFG-109-01 341781 F 8-10:50 AM A. ARISTIZABAL \$390.00 \$39.00 \$153.75 \$582.75

MFG-110 MANUFACTURING SPECIAL PROJECTS, 1 CREDIT

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 NCT 8-9:20 AM MFG-110-01 341785 MW C. LETTENMAIER \$130.00 \$13.00 \$51.25 \$194.25 Required: Student Petition.

MFG-130 BASIC ELECTRICITY I, 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.

OC MFG-130-01 341793 F 5-7:50 PM B. KARM \$390.00 \$39.00 \$153.75 \$582.75

LEAN MANUFACTURING AND QUALITY SYSTEMS, 3 MFG-218 CREDITS

This survey course provides students with literacy in the elements of quality systems including Lean Manufacturing/Six Sigma and related statistical methods. Participants will learn about the philosophy and tools that make up a lean manufacturing system. Students will become familiar with the concepts and tools of quality management which include kaizen, visual management, 5S, value stream mapping, A3 problem solving, SPC, Six Sigma, and the Toyota Production System.

MFG-218-01 341795 TTH 5-6:20 PM C. CONNORS \$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 oc 341798 TTH 9-11:50 AM M. BABCOCK \$390.00 \$39.00 \$153.75 \$582.75

MFG-271 MASTERCAM MILL 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

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, 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	V,TH.F,S,SU) Fee	Time Crs. Fee	Total
Covers the	creation and m	naninulat	ion of two	and thre	e dimension	nal wire	Prerequisit	es: MTH-010 v	vith a C o	r better, o	or placem	ent in MTH-0	20

OC NCT

frame models as well as the creating, editing, and verification of 2-1/2 axis toolpaths. A fundamental understanding of the CAD/CAM process will be gained.

REM NCT MFG-271-01 341802 TTH 4:30 -8:20 PM C. LETTENMAIER \$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 NCT MFG-280-01

C. CONNORS \$780.00 \$78.00 \$75.00 \$933.00V Required: Student Petition. Corequisite: Take the following CWE-281-06.

XMFG-**WORK SESSIONS: MAKERSPACE, 0 CREDIT** 8000

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-	342076	F		5-8:50 PM	
	01	0-12070			0 0.00 I W	
	C. CONNORS		\$0.00	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-	342078	F		5-8:50 PM	
	02					
	C. CONNORS			\$0.00	*	\$0.00
ОС	XMFG-0008-	342080	F		5-8:50 PM	
	03 C. CONNORS		¢Ω ΩΩ	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-				5-8:50 PM	φυ.υυ
	04	J-12002	•		3-0.30 T W	
	C. CONNORS		\$0.00	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-	342083	F		5-8:50 PM	
	05					
	C. CONNORS			\$0.00	\$0.00	\$0.00
ос	XMFG-0008-	342084	F		5-8:50 PM	
	06 C. CONNORS		ድር ርር	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-				5-8:50 PM	\$0.00
	07	0-12000			0 0.00 1 111	
	C. CONNORS		\$0.00	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-	342087	F		5-8:50 PM	
	08					
	C. CONNORS			\$0.00	*	\$0.00
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	09 C. CONNORS		00.02	\$0.00	\$0.00	\$0.00
ос	XMFG-0008-			ψ0.00	5-8:50 PM	ψ0.00
_	10	042031			0.00 i W	
	C. CONNORS		\$0.00	\$0.00	\$0.00	\$0.00

Mathematics

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.

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

\$520.00 \$52.00 \$592.00 M. NICKAS ONL NCT MTH-020-02 341783

341777 TTH

M. NICKAS \$520.00 \$52.00 \$20.00 \$592.00

10-11:50 AM

\$20.00

Meets: 10/13-12/13.

MTH-020-01

МТН-**FUNDAMENTOS DE ARITMÉTICA II, 4 CREDITS** 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

HAR NCT ESPAÑOL	MTH-020ES- 341786	S TTH	10-11:50 AM
	A. ARISTIZABAL	\$520.00 \$52.00	\$20.00 \$592.00
HAR NCT	MTH-020ES- 341787	7 TTH	10-11:50 AM
ESPAÑOL	01ASE		
	A. ARISTIZABAL	\$0.00 \$0.00	\$0.00 \$0.00
	Requerido: petición de	el estudiante.	

MTH-050 TECHNICAL MATHEMATICS I, 4 CREDITS

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.

Prerequisites: MTH-020 with a C or better, or placement in MTH-050 or higher

OC LCT	MTH-050-01	341788	TTH		10-11:50 A	ΑM
	M. PRICE		\$520.00	\$52.00	\$20.00	\$592.00
OC LCT	MTH-050-02	341791	MW		3-4:50 PM	
	A. ARISTIZAB	AL	\$520.00	\$52.00	\$20.00	\$592.00
OC LCT	MTH-050-04	341796	MW		10-11:50 A	ΑM
	M. PRICE		\$520.00	\$52.00	\$20.00	\$592.00

МТН-MATEMÁTICAS TÉCNICAS I, 4 CREDITS 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 mejor, o ubicación en MTH-050 o superior

REM NCT ESPAÑOL	MTH-050ES- 01	341799	F		5-8:50 PM	
	A. ARISTIZABA	۱L	\$520.00	\$52.00	\$20.00	\$592.00
REM NCT ESPAÑOL	MTH-050ES- 02	345338	S		8-11:50 AN	И
	A. ARISTIZABA	۱L	\$520.00	\$52.00	\$20.00	\$592.00

MTH-060 ALGEBRA I, 4 CREDITS

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

OC NCT	MTH-060-01	341801 TTH		1-2:50 P	M
	E. MEUSER	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-060-02	345198 TTH		10-11:50) AM
	E. KELLY	\$520.00	\$52.00	\$20.00	\$592.00

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 Credite

K. PHILLIPS

MTH-095-06

MTH-095-15

M. HUNTER

M CHASE

Course No	Course Title, Ci	redits					Course No	Course Title, C	reaits				
	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 NCT	MTH-060-15	341811	MW		9-10:50 A	М	OC NCT	MTH-095-01	341832	MW		10-11:50 A	M
	A. ARISTIZAE	BAL	\$520.00	\$52.00	\$20.00	\$592.00		S. PRUYN		\$520.00	\$52.00	\$20.00	\$592.00
HAR NCT	MTH-060-16	341815	TTH		6-7:50 PM	VI	OC NCT	MTH-095-02	341836	MW		1-2:50 PM	
	B. WEBBER		\$520.00	\$52.00	\$20.00	\$592.00		S. PRUYN		\$520.00	\$52.00	\$20.00	\$592.00
							OC NCT	MTH-095-03	341837	TTH		10-11:50 A	M
MTH-065	ALGEBRA II,	4 CRED	ITS					J. HEVEL		\$520.00	\$52.00	\$20.00	\$592.00
A second t	term in an algeb	ra seque	ence, this	course b	ridges four	ndational	OC NCT	MTH-095-04	341838	TTH		1-2:50 PM	
	ills to formal and							M. CHASE		\$520.00	\$52.00	\$20.00	\$592.00
linear appl	ications, includi	na radica	al. absolut	e value.	squaring, a	and	OC NCT	MTH-095-05	341840	MW		3-4:50 PM	

OC NCT

HAR NCT

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

OC NCT	MTH-065-01	341819	MW		1-2:50 PM	
	A. HALL		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-065-02	341824	MW		3-4:50 PM	
	J. KUOHA		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-065-03	341827	TTH		10-11:50 A	M
	J. KUOHA		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-065-04	345201	TTH		1-2:50 PM	
	A. HALL		\$520.00	\$52.00	\$20.00	\$592.00
HAR NCT	MTH-065-15	341830	MW		9-10:50 AN	Л
	A. ARISTIZAB	AL	\$520.00	\$52.00	\$20.00	\$592.00
HAR NCT	MTH-065-16	341831	TTH		6-7:50 PM	
	B. WEBBER		\$520.00	\$52.00	\$20.00	\$592.00

MTH-082A WASTEWATER MATH I, 1 CREDIT

Quantitative component to understanding wastewater operations. Simple unit and flow rate conversions, fraction to decimal conversions and more complicated problem solving as applied to wastewater preliminary & primary treatment.

Corequisites: WET-110

00	MTH-082A-01	341804 M	5-5:50 PM				
	M. LAFORCE	\$130.00	\$13.00	\$10.00	\$153.00		

MTH-082B WATERWORKS MATH I, 1 CREDIT

Problem solving for waterworks applications. Introduction to basic algebra and mathematical concepts, conversions, and calculations encountered in the waterworks industry.

Corequisites: WET-111

ОС	MTH-082B-01	341805 T		5-5:50 F	PM
	J. NURMI	\$130.00	\$13.00	\$10.00	\$153.00

MTH-082E MATH FOR HIGH PURITY WATER, 1 CREDIT

Basic math for high purity water concepts. Measurement accuracy, rounding rules & errors, significant figures, scientific notation, metric prefixes, simple statistics, average & standard deviation of a population.

Corequisites: WET-125

REM	MTH-082E-01	341807 W		2-2:50 F	PM
	G. CARR	\$130.00	\$13.00	\$10.00	\$153.00

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

MTH-098 **COLLEGE MATH FOUNDATIONS, 4 CREDITS**

345207 TTH

341844 TTH

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.

\$520.00 \$52.00 \$20.00

\$520.00 \$52.00 \$20.00

\$520.00 \$52.00 \$20.00

8-9:50 AM

6-7:50 PM

\$592.00

\$592.00

\$592.00

Prerequisites: MTH-020 with a C or better, or placement in MTH-050, MTH-060, or MTH-098

OC HYB NCT MTH-098-02 341851 MW 10-11:20 AM M. YANNOTTA \$520.00 \$52.00 \$20.00 \$592.00 OC HYB NCT MTH-098-03 345210 MW 1-2:20 PM 1-2:20 PM ONL NCT MTH-098-10 \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-11 341854 \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-11 341856							
OC HYB NCT MTH-098-02 341851 MW 10-11:20 AM M. YANNOTTA \$520.00 \$52.00 \$20.00 \$592.00 OC HYB NCT MTH-098-03 345210 MW 1-2:20 PM 1-2:20 PM ONL NCT MTH-098-10 \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-11 341854 \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-11 341856		MTH-098-01	341847	TTH		10-11:20	AM
NCT M. YANNOTTA \$520.00 \$52.00 \$520.00<		K. MERCER		\$520.00	\$52.00	\$20.00	\$592.00
OC HYB NCT MTH-098-03 345210 MW 1-2:20 PM S. VALDES \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-10 M. JOSI 341854 \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-11 341856 \$341856 \$52.00 \$20.00 \$592.00		MTH-098-02	341851	MW		10-11:20	AM
NCT S. VALDES \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-10 MTH-098-11 \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-11 341856		M. YANNOTT	Α	\$520.00	\$52.00	\$20.00	\$592.00
ONL NCT MTH-098-10 341854 M. JOSI \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-11 341856 \$341856 \$520.00 \$52.00 \$5		MTH-098-03	345210	MW		1-2:20 PM	Л
M. JOSI \$520.00 \$52.00 \$20.00 \$592.00 ONL NCT MTH-098-11 341856		S. VALDES		\$520.00	\$52.00	\$20.00	\$592.00
ONL NCT MTH-098-11 341856	ONL NCT	MTH-098-10	341854				
11111 000 11 041000		M. JOSI		\$520.00	\$52.00	\$20.00	\$592.00
M. JOSI \$520.00 \$52.00 \$20.00 \$592.00	ONL NCT	MTH-098-11	341856				
		M. JOSI		\$520.00	\$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

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	MTH-105Z-01	341858	TTH		10-11:20 A	М
OC HYB	E. MEUSER MTH-105Z-02	341862	\$520.00 TTH	\$52.00	\$20.00 3-4:20 PM	\$592.00
OC HYB	S. VALDES MTH-105Z-03	341864	\$520.00 TTH	\$52.00	\$20.00 1-2:20 PM	\$592.00
OC HYB	S. VALDES MTH-105Z-04	341865	\$520.00 MW	\$52.00	\$20.00 1-2:20 PM	\$592.00
ONL NCT	J. KUOHA MTH-105Z-10	341866	\$520.00	\$52.00	\$20.00	\$592.00
	M. YANNOTTA		\$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

Course No	Course Title, Credits					
	Section No Crs Instructor	s Reg.	Days (M,T,W Tuition	V,TH.F,S,SU) Fee	Time Crs. Fee	Total
ONL NCT	MTH-105Z-11 34	41867				
	M. YANNOTTA		\$520.00	\$52.00	\$20.00	\$592.00
ONL NCT	MTH-105Z-12 34	41868				
	J. KUOHA		\$520.00	\$52.00	\$20.00	\$592.00

MTH-111Z PRECALCULUS I: FUNCTIONS, 4 CREDITS

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

OC NCT	MTH-111Z-01	341870	TTH		10-11:50 A	λM
	F. CARTER		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-111Z-02	341875	MW		10-11:50 A	١M
	F. CARTER		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-111Z-03	341876	TTH		1-2:50 PM	
	B. WEBBER		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-111Z-04	341878	MW		1-2:50 PM	
	K. PHILLIPS		\$520.00	\$52.00	\$20.00	\$592.00
OC HYB NCT	MTH-111Z-10	341880	TBA			
	F. CARTER		\$520.00	\$52.00	\$20.00	\$592.00
	This is an onling and testing da			ets for in	ı-person orie	entation
HAR NCT	MTH-111Z-15	341884	TTH		6-7:50 PM	
	C. WARNER		\$520.00	\$52.00	\$20.00	\$592.00

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	341885	TTH		10-11:50 A	M
	K. AMREIN		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-112Z-02	341890	TTH		1-2:50 PM	
	K. AMREIN		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-112Z-03	345209	MW		10-11:50 A	M
	M. HAUGEN		\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-112Z-04	345212	MW		3-4:50 PM	
	B. WEBBER		\$520.00	\$52.00	\$20.00	\$592.00

MTH-211 FUNDAMENTALS OF ELEMENTARY MATH I, 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 math anxiety and mindset, problem-solving, numeration systems, arithmetic, and number theory.

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

OC NCT	MTH-211-01	341896 TTH	1-2:50 PN	l
	E. KELLY	\$520.00	\$52.00 \$20.00	\$592.00

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.

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

Fee

Tuition

Time Crs. Fee

Total

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	341906 MW	10-11:50 AM		
	K. PHILLIPS	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-251Z-02	341912 TTH		1-2:50 PM	
	M. PRICE	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-251Z-03	345213 MW		3-4:50 PM	
	M. PRICE	\$520.00	\$52.00	\$20.00	\$592.00

MTH-252Z INTEGRAL CALCULUS, 4 CREDITS

Course No Course Title, Credits Section No

Instructor

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	341914 TTH	10-11:50 AM		
	M. PARTNOF	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	MTH-252Z-02	341918 MW		3-4:50 PM	
	M. PARTNOF	\$520.00	\$52.00	\$20.00	\$592.00

MTH-254 VECTOR CALCULUS, 5 CREDITS

This course is an introduction to the study of vectors and analytic geometry in three-space, the calculus of vector-valued functions, and the calculus of several variables.

Prerequisites: MTH-252Z with a C or better

OC NCT	MTH-254-01	341921 MW		10-11:5	0 AM
	A HALL	\$650.00	\$65.00	\$20.00	\$735.00

Medical Assistant

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

MEDICAL OFFICE PRACTICES, 4 CREDITS MA-150

Focuses on administrative skills performed by the Medical Assistant in the ambulatory care setting. The course examines medical law and ethics, bioethics, communication, principles of confidentiality, critical thinking, diversity, and medical office function.

Prerequisites: BI-120, or BI-231 & BI-232 & BI-233

Prerequisites: HP-110. MTH-050 or placement in MTH-060 or higher.

WRD-098 or placement in WR-121Z

Corequisites: MA-152, MA-152L, MA-154, and MA-158

Required: Student must be enrolled in current Medical Assistant cohort

HAR HYB MA-150-01 340777 TH 1-2:50 PM S. DAVENPORT \$520.00 \$52.00 \$152.00 \$724.00

EXAMINATION ROOM TECHNIQUES I, 3 CREDITS MA-152

This course is designed to introduce students to the fundamental skills required for medical assisting in an exam room setting. The course will focus on the basic skills needed for patient interactions, documentation, and vital signs.

MTH-251Z DIFFERENTIAL CALCULUS, 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 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

Prerequisites: BI-120, or BI-231 & BI-232 & BI-233

Prerequisites: HP-110. MTH-050 or placement in MTH-060 or higher.

WRD-098 or placement in WR-121Z

Corequisites: MA-150, MA-152L, MA-154, and MA-158

Required: Student must be enrolled in current Medical Assistant cohort

ONL MA-152-01 340778

S. PARKER \$390.00 \$39.00 \$25.00 \$454.00

MA-152L EXAMINATION ROOM TECHNIQUES 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 will cover hands-on skills required for medical assisting in an exam room setting. The lab will focus on the basic skills needed for patient interactions, documentation, and vital signs.

Prerequisites: BI-120, or BI-231 & BI-232 & BI-233

Prerequisites: HP-110. MTH-050 or placement in MTH-060 or higher.

WRD-098 or placement in WR-121Z

Corequisites: MA-150, MA-152, MA-154, and MA-158

Required: Student must be enrolled in current Medical Assistant cohort

 HAR
 MA-152L-01
 340779 T
 9-11:50 AM

 S. DAVENPORT
 \$130.00
 \$100.00
 \$243.00

 S. PARKER

 HAR
 MA-152L-02
 340780 TH
 9-11:50 AM

 S. DAVENPORT
 \$130.00
 \$100.00
 \$243.00

S. PARKER

MA-154 BODY SYSTEMS AND PHARMACOLOGY, 4 CREDITS

Introduces the medical assistant student to the foundational concepts and principles of pharmacology; including the classifications of common medications including indications for use, desired effect, side effect, adverse effects, and patient education. Related pathophysiology and body systems will be discussed and reviewed.

Prerequisites: BI-120, or BI-231 & BI-232 & BI-233

Prerequisites: HP-110. MTH-050 or placement in MTH-060 or higher.

WRD-098 or placement in WR-121Z

Corequisites: MA-150, MA-152, MA-152L, and MA-158

Required: Student must be enrolled in current Medical Assistant cohort

HAR HYB MA-154-01 340781 T 1-2:50 PM S. DAVENPORT \$520.00 \$52.00 \$40.00 \$612.00

MA-158 SEMINAR I, 2 CREDITS

This course introduces professionalism in the healthcare setting and explores clinical placement opportunities. Students will demonstrate compliance with Oregon Health Authorities rules for students in clinical training and obtain volunteer experience with a community partner.

Prerequisites: BI-120, or BI-231 & BI-232 & BI-233

Prerequisites: HP-110. MTH-050 or placement in MTH-060 or higher.

WRD-098 or placement in WR-121Z

Corequisites: MA-150, MA-152, MA-152L, and MA-154

Required: Student must be enrolled in current Medical Assistant cohort

 HAR
 MA-158-01
 340782 W
 9-10:50 AM

 S. PARKER
 \$260.00
 \$26.00
 \$0.00
 \$286.00

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

OC NCT MUP-102-01 340817 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

OC NCT MUP-104-01 340818 M 12-12:50 PM
C. DOGGETT \$130.00 \$13.00 \$0.00 \$143.00
Required: 1 additional hour per week TBA.

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 340819 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

oc Lct MUP-122-01 340820 TTH 3-4:50 PM
K. HOLLINGSWORTH \$260.00 \$26.00 \$52.00 \$338.00
Vocal placement required for private lessons and vocal ensembles. Attend in Room N114 on 9/29 or 9/30 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.

MUP-125 ADVANCED VOCAL ENSEMBLE, 2 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 LCT MUP-125-01 340821 MW

3-4:50 PM

K. HOLLINGSWORTH \$260.00 \$26.00 \$52.00 \$338.00 Vocal placement required for private lessons and vocal ensembles. Attend in Room N114 on 9/29 or 9/30 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.

NCT: No-Cost Text

MUP-141 COLLEGE ORCHESTRA, 1 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

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) Instructor Crs. Fee Total Instructor Tuition Crs. Fee Total

OC NCT

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 340822 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

MUP-150-01 OC NCT 340823 MW 1-2:50 PM

K DFITZ \$260.00 \$26.00 \$50.00 \$336 00

K. HOLLINGSWORTH

Vocal placement required for private lessons and vocal ensembles. Attend in Room N114 on 9/29 or 9/30 from 3-5 pm to demonstrate vocal range. Contact

kathleen.hollingsworth@clackamas.edu with questions.

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 D. TUTMARK	340824	TH \$130.00	\$13.00	1-2:50 PM \$85.00	\$228.00
	Guitar Ensem	ble.	ψ.σσ.σσ	ψ.σ.σσ	400.00	Ψ==0.00
OC NCT	MUP-158-02	340825	TBA			
	G. HARRIS		\$130.00	\$13.00	\$85.00	\$228.00
	Saxophone Q	uartet.				
OC NCT	MUP-158-03	340826	TBA			
	TBA		\$130.00	\$13.00	\$85.00	\$228.00
	Brass Quintet					
OC NCT	MUP-158-04	340827	TBA			
	TBA		\$130.00	\$13.00	\$85.00	\$228.00
	Woodwind Qu	intet.				

MUP-202 WIND ENSEMBLE, 1 CREDIT

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.

Required: Completion of high school or high school performance level. Ability to read music and play a band instrument

Prerequisites: MUP-102 (3 credits)

OC NCT MUP-202-01 340886 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

MUP-205 JAZZ ENSEMBLE, 1 CREDIT

MUP-204-01

C. DOGGETT

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.

340888 M

Required: 1 additional hour per week TBA.

12-12:50 PM

\$143.00

\$130.00 \$13.00 \$0.00

Prerequisites: MUP-105 (3 credits)

OC NCT MUP-205-01 340892 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)

MUP-222-01 340894 TTH OC LCT 3-4:50 PM K. HOLLINGSWORTH \$260.00 \$26.00 \$52.00

\$338.00 Vocal placement required for private lessons and vocal ensembles. Attend in Room N114 on 9/29 or 9/30 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)

OC LCT MUP-225-01 340896 MW 3-4:50 PM

K. HOLLINGSWORTH \$260.00 \$26.00 \$52.00 \$338.00 Vocal placement required for private lessons and vocal ensembles. Attend in Room N114 on 9/29 or 9/30 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 340897 TBA

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.

MUS-101-01 340971

> J. HEDBERG \$390.00 \$39.00 \$10.00 \$439.00

MUS-102 APPLIED MUSIC FUNDAMENTALS, 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

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

The first of a 3 course introduction to the fundamentals of music theory. Designed for MPT/MT or AS Transfer students who need substantial preparation for MUS-111 and non-majors.

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

ONL NCT MUS-105-01 340976

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 NCT MUS-106-01 340979 F 6:30 -8:50 PM S 9-5:50 PM
B. ROSE \$130.00 \$13.00 \$99.00 \$242.00 Meets: 10/24 & 10/25.

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 LCT	MUS-107-01 340982	2 M		6:30 -9:20 PM		
	D. BADSTUBNER	\$390.00 \$	39.00	\$99.00	\$528.00	
OC LCT	MUS-107-02 340986	6 M		1-3:50 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.

Prerequisites: MUS-107

OC LCT	MUS-108-01	340989	T		6:30 -9:20	PM
	D BADSTUBI	NFR	\$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

OC LCT	MUS-109-01	340994	T		6:30 -9:2	0 PM
	D. BADSTUBI	NER	\$390.00	\$39.00	\$99.00	\$528.00

MUS-111 MUSIC THEORY I, 3 CREDITS

For non-majors and music majors. Presents an introduction to the diatonic and chromatic structure of tonal music from the common practice period through written exercises, listening, and analysis. This is the first term of a three-term sequence, which includes concepts of pitch and rhythm, intervals, keys, scales, triads, dominant seventh chord, and standard cadences. Provides a thorough groundwork in the melodic, harmonic, and rhythmic elements of music.

Corequisites: MUS-111L, MUS-114, and MUS-127 for AS in music degree seekers. This requirement does not affect non-music majors or MPT Majors

Recommended Prerequisites: MTH-095 or placement in MTH-111Z; WRD-098 or placement in WR-121Z

OC NCT	MUS-111-01	340999 TTH		10-11:	20 AM
	R. OLASON	\$390.00	\$39.00	\$0.00	\$429.00

MUS-111L MUSIC NOTATION SOFTWARE I, 1 CREDIT

Introduces students to Finale (music notation software) on Macintosh computers.

OC NCT	MUS-111L-01 3410	003 M	Л 10-11:50 л			
	D. FLESCHNER	\$130.00	\$13.00	\$44.00	\$187.00	

MUS-114 AURAL SKILLS I, 2 CREDITS

First course in a year-long sequence. Diatonic sight singing in major keys using solfège syllables and moveable 'do'. Melodic dictation and aural recognition of intervals and triads.

Corequisites: MUS-111

OC NCT	MUS-114-01	341005 TTH		1-1:50 PM	
	R OLASON	\$260.00	\$26.00	\$0.00	\$286 00

MUS-127 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-111, MUS-111L, MUS-114

Recommended: Some experience in reading treble and bass clef, or MUS-131, MUS-132, or MUS-133 with a C or better

OC NCT	MUS-127-01	341008 TTH		2-2:50 PM	
	R. OLASON	\$260.00	\$26.00	\$10.00	\$296.00

MUS-131 GROUP PIANO: PIANO FOR PLEASURE, 1 CREDIT

First 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-131-01	341010	TTH		9-9:50 AM	
	T. STOJANOV	/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.

OC NCT	MUS-137-01	341015 TH		10-11:5	0 AM
	D. TUTMARK	\$130.00	\$13.00	\$85.00	\$228.00

MUS-141 INTRODUCTION TO THE MUSIC BUSINESS, 3 CREDITS

Explores business basics, songwriting, demos, agents, managers, copyrights, gig and concert promotion, publishing, licensing, and music business structures.

ONL NCT	MUS-141-01	341022				
	D. FLESCHNE	₽R	\$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

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 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

INTRODUCTION TO ELECTRONIC MUSIC I: MIDI, 3 MUS-142 **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 NCT MUS-142-01 341023 T 1-3:50 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 NCT MUS-147-01 340737 F 6:30 -8:50 PM S 9-5:50 PM B. ROSE \$130.00 \$13.00 \$99.00 \$242.00 Meets: 10/17 & 10/18.

MUS-148 LIVE SOUND ENGINEERING, 3 CREDITS

Introduction to the basic techniques and tools used in live sound engineering and mixing. Areas of study include set up, signal path, microphone applications, hardware, and outboard gear.

OC NCT MUS-148-01 341034 W 6:30 -9:20 PM D. BADSTUBNER \$390.00 \$39.00 \$99.00 \$528.00

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.

OC NCT MUS-188-01 341037 TH 12-1:00 PM L. CAMPBELL \$0.00 \$0.00 \$0.00 \$0.00 Required: Music major meeting 10/2 room N119 12-1 pm.

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 NCT MUS-189-01 341039 W 12-12:50 PM J. ISBAFLS \$130.00 \$13.00 \$0.00 \$143.00 B. MICHAEL

MUS-206 MUSIC LITERATURE: HISTORY OF ROCK, 4 CREDITS

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 NCT MUS-206-01 341049 MW 10-11:50 AM \$520.00 \$52.00 \$0.00 K. DEITZ \$572.00 Required: Attendance at three concert field trips TBA.

MUS-206-02 341054 ONL NCT J. HEDBERG \$520.00 \$52.00 \$0.00

ADVANCED AUDIO RECORDING & MIXING I: MUS-207 **RECORDING TECHNIQUES, 3 CREDITS**

Distance Education Notification:

ONL: Online Only

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

\$572.00

This course will address advanced recording techniques and topics with a focus on working with live talent in the recording studio. Topics covered include vocal production, drum recording, instrument production, ensemble dynamics, multi microphone and stereo microphone techniques, utilizing outboard processors, increased fluency in Pro Tools etc. Students will also be participating in client outreach, securing talent for the class recording sessions.

Prerequisites: MUS-109

OC NCT MUS-207-01 345179 TH 6:30 -9:20 PM D. BADSTUBNER \$390.00 \$39.00 \$0.00 \$429.00

MUS-211 MUSIC THEORY II, 3 CREDITS

For non-majors and music majors. Continuation of the study of functional harmony through written exercises, compositions, listening, and analysis and introduction to polyphony. This is the first term of a three-term sequence, which includes late Renaissance polyphony, baroque counterpoint, and chromatic harmony.

Prerequisites: MUS-113

Corequisites: MUS-214 and MUS-224

MUS-211-01 341057 MW 10-11:20 AM R. OLASON \$390.00 \$39.00 \$269.00 \$698.00

MUS-214 KEYBOARD SKILLS II, 2 CREDITS

Advanced keyboard applications of the materials of diatonic and chromatic music.

Prerequisites: MUS-129 Corequisites: MUS-211

OC NCT MUS-214-01 341059 MW 2-2:50 PM R. OLASON \$260.00 \$26.00 \$85.00 \$371.00

MUS-218 MPT SEMINAR I, 1 CREDIT

First of 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-103, MUS-109, MUS-113L, and MUP-150

OC NCT MUS-218-01 341063 M 12-12:50 PM K. HOLLINGSWORTH \$130.00 \$13.00 \$0.00 \$143.00

MUS-224 AURAL SKILLS II, 2 CREDITS

First of three courses in a year-long sequence. Diatonic and chromatic sight singing with solfège syllables and moveable 'do'. Four-part dictation including all chromatic devices studied in Theory II.

Prerequisites: MUS-116 Corequisites: MUS-211

OC NCT MUS-224-01 341065 MW 1-1:50 PM R. OLASON \$260.00 \$26.00 \$85.00 \$371.00

MUS-242 **ADVANCED ELECTRONIC MUSIC I: SYNTHESIS AND INSTRUMENT DESIGN. 3 CREDITS**

This course will feature an advanced survey of the major forms of synthesis: Additive, Subtractive, Sample Based, Wavetable, FM, etc. and exploring their corresponding instruments in Ableton Live. Students will focus on creating instruments, patches, and packs in Ableton Live. Exploration of Drum Racks, Instrument Racks, and Audio Effects Racks for sound design and implementation in electronic music. Max for Live will be introduced and integrated.

Prerequisites: MUS-144

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

Campus Locations:

OC: Oregon City Campus

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Course Listing 2025/FA 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 OC NCT OC NCT MUP-100-04 MUS-242-01 345180 T 6:30 -9:20 PM 340786 TBA M. BAIRD \$390.00 \$39.00 \$0.00 \$429.00 J. ISRAELS \$130.00 \$13.00 \$225.00 \$368.00 Required: Student Petition. Voice Lessons. Vocal placement MUS-247 SOUND FOR MEDIA, 3 CREDITS required for private lessons and vocal ensembles. Attend in Room N114 on 9/29 or 9/30 from 3-5 pm to demonstrate Introduction to sound as related to film making, animation, and video vocal range. Contact games. Students will have the opportunity to create and assemble sound kathleen.hollingsworth@clackamas.edu with questions. for media into a finished product. Explores the basic components of OC NCT MUP-100-05 340787 TBA commercial film/video, animation, and game production as they relate to B. MICHAEL \$130.00 \$13.00 \$225.00 Required: Student Petition. Voice Lessons. Vocal placement Recommended: Experience using a DAW (Digital Audio Workstation) or required for private lessons and vocal ensembles. Attend in video editing software Room N114 on 9/29 or 9/30 from 3-5 pm to demonstrate OC NCT MUS-247-01 3-5:50 PM 340738 W vocal range. Contact B. ROSE \$390.00 \$39.00 \$0.00 \$429.00 kathleen.hollingsworth@clackamas.edu with questions. OC NCT MUP-100-06 340788 TBA MUS-280 MUSIC/CWE, 2-6 CREDITS C. AVERILL \$130.00 \$13.00 \$225.00 \$368.00 Cooperative work experience. Provides students with on-the-job work Required: Student Petition. Cello Lessons. experience in the field of music. Required: Student Petition. MUP-100-07 340789 TBA OC NCT Corequisites: CWE-281 K. DEITZ \$130.00 \$13.00 \$225.00 \$368.00 Prerequisites: MUS-107, MUS-140, and MUS-142 Required: Student Petition. Bass Lessons. MUP-100-08 340790 TBA OC NCT ONL NCT MUS-280-01 341068 \$368.00 D. TUTMARK \$130.00 \$13.00 \$225.00 C. DOGGETT \$780.00 \$78.00 \$144.00 \$1,002.00V Required: Student Petition. Guitar Lessons. Required: Student Petition. Corequisite: Take the following OC NCT MUP-100-09 340791 TBA CWE-281-06. A. CSIKOS \$130.00 \$13.00 \$225.00 \$368.00 MUS-280-02 ONL NCT 341071 Required: Student Petition. Guitar Lessons. \$780.00 \$78.00 \$144.00 \$1,002.00V G. HARRIS OC NCT MUP-100-10 340792 TBA Required: Student Petition. Corequisite: Take the following G. HARRIS \$130.00 \$13.00 \$225.00 \$368.00 CWE-281-06. Required: Student Petition. Saxophone Lessons. XMUP-**UNISTUS CHOIR, 0 CREDIT** OC NCT MUP-100-11 340793 TBA J. KLAUSE \$130.00 \$13.00 \$225.00 \$368.00 0001 Required: Student Petition. Trumpet Lessons. Select vocal ensemble which rehearses and performs choral music from MUP-100-12 340794 TBA OC NCT the Renaissance to the 20th century, including the music of Estonia. C. DOGGETT \$130.00 \$13.00 \$225.00 \$368.00 Provides preparation for entering professional fields of music and Required: Student Petition. Percussion & Drum Set Lessons. performance. Emphasis on a cappella singing applied to appropriate chamber music. Provides an environment whereby individual students. OC NCT MUP-100-13 340795 TBA S. TIEDEMANN \$130.00 \$13.00 \$225.00 selected according to their talents and attitudes, may assist the group at \$368.00 large in achieving its full potential which is that of excellence in choral Required: Student Petition. Flute Lessons. expression. The achievement of this potential is our goal. By audition. MUP-100-14 340796 TBA OC NCT T. STOJANOVIC \$130.00 \$13.00 \$225.00 \$368.00 XMUP-0001- 341105 M 6:30 -9:20 PM Required: Student Petition. Piano Lessons. OC NCT MUP-100-15 340797 TBA L. CLINE \$0.00 \$0.00 \$0.00 \$0.00 \$130.00 \$13.00 \$225.00 C. LEE \$368.00 Required: Student Petition. Oboe Lessons. Music: Individual Lessons - Non-Music Majors OC NCT MUP-100-16 340798 TBA **B. GARDINER** \$130.00 \$13.00 \$225.00 \$368.00 MUP-100 INDIVIDUAL LESSONS: NON-MUSIC MAJORS, 1 CREDIT Required: Student Petition. Percussion Lessons. Private lessons for beginners, non-music majors, and students who OC NCT MUP-100-17 340799 TBA receive a low rating in MUP-171 through MUP-191 auditions. Brass, L. CAMPBELL \$130.00 \$13.00 \$225.00 \$368.00 woodwind, percussion, string and keyboard instruments, and voice. May Required: Student Petition. be repeated for up to 12 credits. Required: Student Petition. OC NCT MUP-100-21 340800 TBA K. POLITZER \$260.00 \$26.00 \$450.00 \$736.00 OC NCT MUP-100-01 340783 TBA Required: Student Petition. Jazz Piano Lessons. K. POLITZER \$130.00 \$13.00 \$225.00 \$368.00 Required: Student Petition. Jazz Piano Lessons. OC NCT MUP-100-22 340801 TBA \$260.00 \$26.00 \$450.00 OC NCT MUP-100-02 340784 TBA Y. MIYAMA \$736.00 Required: Student Petition. Piano Lessons. \$130.00 \$13.00 \$225.00 Y MIYAMA \$368 00 MUP-100-23 340802 TBA Required: Student Petition. Piano Lessons. OC NCT D. FLESCHNER \$260.00 \$26.00 \$450.00 \$736.00 OC NCT MUP-100-03 340785 TBA \$130.00 \$13.00 \$225.00 D. FLESCHNER \$368.00 Required: Student Petition. Rock, Blues, and Pop Piano Lessons. Required: Student Petition. Rock, Blues, and Pop Piano MUP-100-24 OC NCT 340803 TBA Lessons. J. ISRAELS \$260.00 \$26.00 \$450.00 \$736.00

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, Credits				Course No	o Course Title, Ci	redits				
	Section No Crs Reg Instructor	g. 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
	Required: Student Per required for private le Room N114 on 9/29 vocal range. Contact	essons and vocal e or 9/30 from 3-5 pi	nsembles.	Attend in	OC NCT	MUP-171-02 T. STOJANOV Required: Stud	'IC	\$260.00	\$26.00	\$450.00	\$736.00
	kathleen.hollingswort		ı with quest	ions.	MUP-171	J INDIVIDUAL L	ESSON	S: JAZZ	PIANO,	2 CREDITS	6
OC NCT		04 TBA		# 700.00	Required:	: College-level pe	erforman	ce ability			
	B. MICHAEL Required: Student Perequired for private leads to more support to the support of the	essons and vocal e or 9/30 from 3-5 pi	ons. Vocal p ensembles.	Attend in	OC NCT	MUP-171J-01 K. POLITZER Required: Stud	dent Peti	\$260.00 tion.		\$450.00	\$736.00
	kathleen.hollingswort		ı with quest	ions.	MUP-1711	R INDIVIDUAL L CREDITS	ESSON	S: ROCK	K, BLUES	S, POP PIA	NO, 2
OC NCT	MUP-100-26 34080				Required:	: College-level pe	rforman	ce ability			
	C. AVERILL	\$260.00 \$26.00		\$736.00							
OC NOT	Required: Student Pe		ns.		OC NCT	MUP-171R-01 D. FLESCHNE			¢26.00	\$450.00	\$736.00
OC NCT	MUP-100-27 34080 K. DEITZ	D6 TBA \$260.00 \$26.00	\$450.00	\$736.00		Required: Stud			φ20.00	φ430.00	φ/30.00
	Required: Student Pe			Ψ730.00		rioquirou. Otac	20111 1 011				
OC NCT	· ·	7 TBA	110.		MUP-172	INDIVIDUAL L	ESSON	S: ORGA	N, 2 CR	EDITS	
	D. TUTMARK	\$260.00 \$26.00	\$450.00	\$736.00	Required:	: College-level pe	erforman	ce ability			
	Required: Student Pe			********		ites: MUS-189					
OC NCT	MUP-100-29 34080	OS TBA			OC NCT	MUP-172-01	340833	TRΔ			
	A. CSIKOS	\$260.00 \$26.00	\$450.00	\$736.00		J. HOLLAND	0-10000		\$26.00	\$450.00	\$736.00
	Required: Student Pe	etition. Guitar Less	ons.			Required: Stud	dent Peti		Ψ=0.00	ψσσ.σσ	ψ. σσ.σσ
OC NCT	MUP-100-30 34080	O9 TBA									
	G. HARRIS	\$260.00 \$26.00		\$736.00	MUP-174	INDIVIDUAL L	ESSON	S: VOICI	E, 2 CRE	DITS	
	Required: Student Pe	•	Lessons.		Required:	: College-level pe	erforman	ce ability			
OC NCT		10 TBA		#700.00	Corequisi	ites: MUS-189					
	J. KLAUSE Required: Student Pe	\$260.00 \$26.00		\$736.00	OC NCT	MUP-174-01	340834	TBA			
OC NCT	MUP-100-32 34081		550115.			J. ISRAELS		\$260.00	\$26.00	\$450.00	\$736.00
00 1101	C. DOGGETT	\$260.00 \$26.00	\$450.00	\$736.00		Required: Stud					
	Required: Student Pe					private lessons					
OC NCT	MUP-100-33 34081					on 9/29 or 9/30					
	S. TIEDEMANN	\$260.00 \$26.00	\$450.00	\$736.00		Contact kathle questions.	en.nomn	gswortne	g Clackan	ias.edu wii	T1
	Required: Student Pe	etition. Flute Lesso	ns.		OC NCT	MUP-174-02	340835	TRΔ			
OC NCT	MUP-100-34 34081	13 TBA				B. MICHAEL	040000		\$26.00	\$450.00	\$736.00
	T. STOJANOVIC	\$260.00 \$26.00		\$736.00		Required: Stud	dent Peti				
	Required: Student Pe		ons.			private lessons					
OC NCT	MUP-100-35 34081			#700.00		on 9/29 or 9/30					
	C. LEE	\$260.00 \$26.00		\$736.00		Contact kathle	en.hollin	gsworth@	[®] clackan	nas.edu wit	h
OC NCT	Required: Student Pe		ons.			questions.					
OC NC	MUP-100-36 3408 1 B. GARDINER	15 TBA \$260.00 \$26.00	\$450.00	\$736.00	MHD_17/	J INDIVIDUAL L	ESSON	C: 1477	VOICE '	CREDITO	2
	Required: Student Pe			Ψ730.00		: College-level pe			VOICE,	CHEDIT	,
OC NCT	MUP-100-37 34081		_5555110.		-	i tes: MUS-189	, ioiiiali	oo abiiity			
	L. CAMPBELL	\$260.00 \$26.00	\$450.00	\$736.00			040000	TDA			
	Required: Student Pe		. ,	Ţ -	OC NCT	MUP-174J-01	340836		ቀባር በሳ	¢450.00	ቀማባር ባር
Music:	Individual Less	ons - Year 1				J. ISRAELS Required: Stud private lessons		tion. Voc		ent require	
						on 9/29 or 9/30					
	evel private lessons			and		Contact kathle					
avallanie	to qualified non-mai	ore End-Ot-term	uiried			augetions					

College-level private lessons required for music majors and available to qualified non-majors. End-of-term juried performance mandatory. May be repeated for up to 10 credits. Required: Student Petition.

MUP-171 INDIVIDUAL LESSONS: PIANO, 2 CREDITS

Required: College-level performance ability

Corequisites: MUS-189

Campus Locations:

OC: Oregon City Campus

OC NCT MUP-171-01 340829 TBA

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Y. MIYAMA \$260.00 \$26.00 \$450.00 \$736.00

Required: Student Petition.

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

OC NCT

questions.

questions.

CREDITS

B. MICHAEL

MUP-174J-02 340837 TBA

department first class
VAR: Variable credit class

\$260.00 \$26.00 \$450.00

Required: Student Petition. Vocal placement required for private lessons and vocal ensembles. Attend in Room N114

on 9/29 or 9/30 from 3-5 pm to demonstrate vocal range.

Contact kathleen.hollingsworth@clackamas.edu with

MUP-174R INDIVIDUAL LESSONS: ROCK, BLUES, POP VOICE, 2

Course No.	Course Title, Credits				Course No	Course Title, (Credite				2025/FA
Course No	•	eg. Days (M,T,W,TH.F,S Tuition Fee	S,SU) Time Crs. Fee	Total	Course No	Section No Instructor		Days (M,T,V	V,TH.F,S,SU) Fee	Time Crs. Fee	Total
Required:	College-level perform	ance ability			Required:	College-level p	erforman	ce ability			
OC NCT	MUP-174R-01 3408	338 TBA			Corequisi	tes: MUS-189					
	J. ISRAELS Required: Student F private lessons and on 9/29 or 9/30 from	vocal ensembles	cement require . Attend in Ro	om N114	OC NCT	MUP-179-01 TBA Required: Stu	340847 udent Peti	\$260.00	\$26.00	\$450.00	\$736.0
	Contact kathleen.ho	•		0	MUP-180	INDIVIDUAL	LESSON	S: GUITA	R, 2 CR	EDITS	
OC NCT	questions. MUP-174R-02 3408	230 TRA			•	College-level p	erforman	ce ability			
	B. MICHAEL	\$260.00 \$26	.00 \$450.00	\$736.00		tes: MUS-189	040040	TDA			
	Required: Student F private lessons and on 9/29 or 9/30 from Contact kathleen.ho	vocal ensembles 3-5 pm to demo	. Attend in Roo nstrate vocal r	om N114 ange.	OC NCT	MUP-180-01 D. TUTMARK Required: Stu		\$260.00	\$26.00	\$450.00	\$736.0
	questions.	iningoworth colde	mamao.odd m			J INDIVIDUAL			GUITAR	, 2 CREDI	TS
MUP-175	INDIVIDITAL LESS	ONS: VIOLIN 2	CDEDITO			College-level p		-			
Required: Corequisit	INDIVIDUAL LESS College-level perform es: MUS-189	nance ability	CHEDITS		OC NCT	MUP-180J-01 J. RADSLIFF Required: Stu		\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-175-01 3408 TBA Required: Student F	340 TBA \$260.00 \$26 Petition.	.00 \$450.00	\$736.00		R INDIVIDUAL CREDITS			, BLUES	S, POP GU	ITAR, 2
MIID 176	INDIVIDUAL LESS	ONE-VIOLA 20	PEDITE		OC NCT	College-level p					
Required:	College-level perform ces: MUS-189		, NEDITS		OC NC1	MUP-180R-01 A. CSIKOS Required: Stu		\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-176-01 3408 H. OSEAS Required: Student F	8 41 TBA \$260.00 \$26 Petition.	.00 \$450.00	\$736.00	Required:	INDIVIDUAL College-level p tes: MUS-189			E, 2 CRE	DITS	
-	INDIVIDUAL LESS College-level perform es: MUS-189	•	CREDITS		OC NCT	MUP-181-01 S. TIEDEMAN Required: Stu		\$260.00	\$26.00	\$450.00	\$736.0
OC NCT	MUP-177-01 3408 C. AVERILL Required: Student F	342 TBA \$260.00 \$26 Petition.	.00 \$450.00	\$736.00		J INDIVIDUAL College-level p			FLUTE,	2 CREDITS	S
Required:	INDIVIDUAL LESS College-level performes: MUS-189	ONS: BASS, 2 C	REDITS		OC NCT	MUP-181J-01 G. HARRIS Required: Stu		\$260.00	\$26.00	\$450.00	\$736.0
OC NCT	MUP-178-01 3408 K. DEITZ Required: Student F	\$260.00 \$26	.00 \$450.00	\$736.00		INDIVIDUAL College-level p tes: MUS-189			, 2 CRE	DITS	
	INDIVIDUAL LESS	ONS: JAZZ BAS	S, 2 CREDITS	S	OC NCT	MUP-182-01 C. LEE	340855	\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	College-level perform MUP-178J-01 3408	•				Required: Stu	ideni Feli	uon.			
OC NCT	K. DEITZ Required: Student F MUP-178J-02 3408	\$260.00 \$26 Petition.	.00 \$450.00	\$736.00	Required:	INDIVIDUAL College-level p tes: MUS-189			INET, 2	CREDITS	
OC NCT	T. WAKELING Required: Student F	\$260.00 \$26	.00 \$450.00	\$736.00	OC NCT	MUP-183-01 L. DE MARTII Required: Stu		\$260.00	\$26.00	\$450.00	\$736.00
	R INDIVIDUAL LESS CREDITS College-level perform		UES, POP BA	SS, 2		J INDIVIDUAL	LESSON	S: JAZZ	CLARIN	ET, 2 CRE	DITS
OC NCT	MUP-178R-01 3408				OC NCT	College-level p		-			
oo nor	K. DEITZ Required: Student F	\$260.00 \$26	.00 \$450.00	\$736.00	OC NC1	TBA Required: Stu		\$260.00	\$26.00	\$450.00	\$736.00
MUP-179	INDIVIDUAL LESS	ONS: HARP, 2 C	REDITS		MUP-184	INDIVIDUAL	LESSON	S: SAXO	PHONE,	2 CREDIT	rs
OC: Orego WILS: Wils	cations: nony Community Campu n City Campus sonville Training Center r Off-Campus Location	s ONL: Onlir REM: Rem	ducation Notific ne Only ote (w/ schedule rrson plus online	ed meetings)	TBA: To be department f	g Translations: arranged: contact first class ble credit class	:	ESPAÑO LCT: Low NCT: No-	-Cost Te		ñol

Course No	Course Title, C	redits					Course No	Course Title, Cr	edits				
	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	,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
Corequisit	College-level p		,				OC NCT	MUP-189-01 TBA Required: Stud		\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-184-01 G. HARRIS Required: Stu	340858 Ident Pet	\$260.00	\$26.00	\$450.00	\$736.00	•	INDIVIDUAL L College-level pe	.ESSON	S: TUBA	, 2 CREI	DITS	
	INDIVIDUAL			SAXOPI	HONE, 2 C	REDITS		es: MUS-189					
•	College-level p						OC NCT	MUP-190-01 TBA	340873		\$26.00	\$450.00	\$736.00
OC NCT	MUP-184J-01 G. HARRIS Required: Stu		\$260.00	\$26.00	\$450.00	\$736.00	MUD 404	Required: Stud	lent Peti	tion.	,	,	·
	INDIVIDUAL College-level p			OON, 2	CREDITS		-	INDIVIDUAL L College-level pe es: MUS-189			USSION	, 2 CREDIT	5
•	tes: MUS-189	criorinar	ice ability				OC NCT	MUP-191-01	340875	ТВА			
OC NCT	MUP-185-01 N. BUETTI	340861	\$260.00	\$26.00	\$450.00	\$736.00		B. GARDINER Required: Stud			\$26.00	\$450.00	\$736.00
MUP-186	Required: Stu			PET, 2 (CREDITS			INDIVIDUAL L College-level pe			PERCUS	SSION, 2 C	REDITS
Corequisit	College-level p		,				OC NCT	MUP-191J-01 C. DOGGETT Required: Stud		\$260.00	\$26.00	\$450.00	\$736.00
OC NCT	MUP-186-01 J. KLAUSE Required: Stu	340863 Ident Pet	\$260.00	\$26.00	\$450.00	\$736.00	MUP-191R	INDIVIDUAL L			K, BLUES	s, POP DRI	JMSET, 2
MUP-186J	INDIVIDUAL	LESSON	IS: JAZZ	TRUMPI	ET, 2 CREI	DITS	Required:	College-level pe	rforman	ce ability			
Required:	College-level p	erforman	ce ability				OC NCT	MUP-191R-01 C. DOGGETT			\$26.00	\$450.00	\$736.00
OC NCT	MUP-186J-01 Q. WALKER Required: Stu		\$260.00	\$26.00	\$450.00	\$736.00	MUD 400T	Required: Stud	lent Peti	tion.			
								' INDIVIDUAL L College-level pe			J IECH,	2 CREDITS	5
•	INDIVIDUAL College-level p tes: MUS-189			СН НОН	IN, 2 CRED	OITS	OC NCT	MUP-192T-01 M. BAIRD	340882	ТВА	\$26.00	\$450.00	\$736.00
OC NCT	MUP-187-01 R. OLASON	340866	\$260.00	\$26.00	\$450.00	\$736.00	OC NCT	Required: Stud MUP-192T-02 D. BADSTUBN	340884	TBA		sic Lesson \$450.00	s. \$736.00
MUD 400	Required: Stu			DONE (0 ODEDITO		OC NCT	Required: Stud	lent Peti	tion. Aud			ıs.
	INDIVIDUAL College-level p tes: MUS-189			IBUNE, 7	2 CREDITS	•		R. SOMMERS Required: Stud				\$450.00 essons.	\$736.00
•			7 TRA		#450.00	\$736.00	Music:	Individual l	_esso	ns - Y	ear 2		
•	MUP-188-01 L. CAMPBELI	340867 ∟	\$260.00	\$26.00	\$450.00	Ψ100.00							nd
Corequisit		L ident Pet 340868	\$260.00 ition. 3 TBA \$260.00		\$450.00	\$736.00	available	ear private les to qualified no nce mandatory	n-major	s. End-d	of-term j	uried	
Corequisit OC NCT OC NCT MUP-188J	L. CAMPBELI Required: Stu MUP-188-02 C. RENEAU Required: Stu	L udent Pet 340868 udent Pet LESSON	\$260.00 ition. 3 TBA \$260.00 ition.	\$26.00	\$450.00	\$736.00	available performar MUP-271 Prerequisi	to qualified no nce mandatory INDIVIDUAL L tes: MUP-171 (6	n-major r. May b .ESSON	s. End-cope repea	of-term j ted for u	uried up to 10 cr	
Corequisit OC NCT OC NCT MUP-188J	L. CAMPBELI Required: Stu MUP-188-02 C. RENEAU Required: Stu	Ludent Pet 340868 udent Pet LESSON erforman	\$260.00 ition. B TBA \$260.00 ition. IS: JAZZ nce ability	\$26.00	\$450.00	\$736.00	available performar MUP-271 Prerequisit Corequisit	to qualified no. nce mandatory INDIVIDUAL L tes: MUP-171 (6 es: MUS-189	n-major r. May b .ESSON 6 credits)	s. End-operate repeated S: PIANO	of-term jo ted for u	uried up to 10 cr	
Corequisit OC NCT OC NCT MUP-188J Required:	L. CAMPBELI Required: Stu MUP-188-02 C. RENEAU Required: Stu INDIVIDUAL College-level p	Ludent Pet 340868 udent Pet LESSON performan 340869	\$260.00 ition. 3 TBA \$260.00 ition. IS: JAZZ nce ability 7 TBA \$260.00	\$26.00 TROMB	\$450.00	\$736.00	available performar MUP-271 Prerequisit Corequisit	to qualified no nce mandatory INDIVIDUAL L tes: MUP-171 (6	n-major r. May b ESSON 6 credits el perforr 340899	s. End-control of the repeated S: PIANO mance about TBA	of-term justed for u	uried up to 10 cr	

Corequisites: MUS-189

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

MUP-271J INDIVIDUAL LESSONS: JAZZ PIANO, 2 CREDITS

Course Listing 2025/F 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 Tuition Instructor Crs. Fee Total Instructor Fee Crs. Fee Total Prerequisites: MUP-171J (6 credits) MUP-277 **INDIVIDUAL LESSONS: CELLO, 2 CREDITS** Required: Sophomore-level performance ability Prerequisites: MUP-177 (6 credits) OC NCT MUP-271J-01 340904 TBA Corequisites: MUS-189 K. POLITZER \$260.00 \$26.00 \$450.00 \$736.00 Required: Sophomore-level performance ability OC NCT MUP-277-01 340919 TBA MUP-271R INDIVIDUAL LESSONS: ROCK, BLUES, POP PIANO, 2 C. AVERILL \$260.00 \$26.00 \$450.00 \$736.00 **CREDITS** Prerequisites: MUP-171R (6 credits) MUP-278 INDIVIDUAL LESSONS: BASS, 2 CREDITS Required: Sophomore-level performance ability Prerequisites: MUP-178 (6 credits) MUP-271R-01 340905 TBA Corequisites: MUS-189 D. FLESCHNER \$260.00 \$26.00 \$450.00 \$736.00 Required: Sophomore-level performance ability OC NCT MUP-278-01 340920 TBA MUP-272 INDIVIDUAL LESSONS: ORGAN, 2 CREDITS K. DEITZ \$260.00 \$26.00 \$450.00 \$736.00 Prerequisites: MUP-172 (6 credits) Corequisites: MUS-189 MUP-278J INDIVIDUAL LESSONS: JAZZ BASS, 2 CREDITS Required: Sophomore-level performance ability Prerequisites: MUP-178J (6 credits) OC NCT MUP-272-01 340907 TBA Required: Sophomore-level performance ability \$260.00 \$26.00 \$450.00 \$736.00 J. HOLLAND OC NCT MUP-278J-01 340921 TBA K. DEITZ \$260.00 \$26.00 \$450.00 \$736.00 MUP-274 INDIVIDUAL LESSONS: VOICE, 2 CREDITS OC NCT MUP-278J-02 340923 TBA Prerequisites: MUP-174 (6 credits) T. WAKELING \$260.00 \$26.00 \$450.00 \$736.00 Corequisites: MUS-189 **Required:** Sophomore-level performance ability MUP-278R INDIVIDUAL LESSONS: ROCK, BLUES, POP BASS, 2 OC NCT MUP-274-01 340909 TBA **CREDITS** Prerequisites: MUP-178R (6 credits) J. ISRAELS \$260.00 \$26.00 \$450.00 \$736.00 OC NCT MUP-274-02 340910 TBA Required: Sophomore-level performance ability B. MICHAEL \$260.00 \$26.00 \$450.00 \$736.00 OC NCT MUP-278R-01 340924 TBA K. DEITZ \$260.00 \$26.00 \$450.00 \$736.00 MUP-274J INDIVIDUAL LESSONS: JAZZ VOICE, 2 CREDITS Prerequisites: MUP-174J (6 credits) MUP-279 INDIVIDUAL LESSONS: HARP, 2 CREDITS Corequisites: MUS-189 Prerequisites: MUP-179 (6 credits) **Required:** Sophomore-level performance ability Corequisites: MUS-189 MUP-274J-01 340911 TBA OC NCT Required: Sophomore-level performance ability J. ISRAELS \$260.00 \$26.00 \$450.00 \$736.00 OC NCT MUP-279-01 340925 TBA MUP-274J-02 340912 TBA OC NCT \$260.00 \$26.00 \$450.00 \$736.00 B. MICHAEL \$260.00 \$26.00 \$450.00 \$736.00 MUP-280 INDIVIDUAL LESSONS: GUITAR, 2 CREDITS MUP-274R INDIVIDUAL LESSONS: ROCK, BLUES, POP VOICE, 2 Prerequisites: MUP-180 (6 credits) **CREDITS** Corequisites: MUS-189 Prerequisites: MUP-174R (6 credits) Required: Sophomore-level performance ability Required: Sophomore-level performance ability MUP-280-01 340926 TBA OC NCT MUP-274R-01 340914 TBA D. TUTMARK \$260.00 \$26.00 \$450.00 \$736.00 J. ISRAELS \$260.00 \$26.00 \$450.00 \$736.00 MUP-274R-02 340915 TBA OC NCT MUP-280J INDIVIDUAL LESSONS: JAZZ GUITAR, 2 CREDITS B. MICHAEL \$260.00 \$26.00 \$450.00 \$736.00 Prerequisites: MUP-180J (6 credits) Required: Sophomore-level performance ability MUP-275 INDIVIDUAL LESSONS: VIOLIN, 2 CREDITS Prerequisites: MUP-175 (6 credits) MUP-280J-01 340927 TBA J. RADSLIFF \$260.00 \$26.00 \$450.00 \$736.00 Corequisites: MUS-189 Required: Sophomore-level performance ability MUP-280R INDIVIDUAL LESSONS: ROCK, BLUES, POP GUITAR, 2 OC NCT MUP-275-01 340917 TBA **CREDITS** \$260.00 \$26.00 \$450.00 \$736.00 Prerequisites: MUP-180R (6 credits) Required: Sophomore-level performance ability MUP-276 INDIVIDUAL LESSONS: VIOLA, 2 CREDITS OC NCT MUP-280R-01 340930 TBA Prerequisites: MUP-176 (6 credits) A. CSIKOS \$260.00 \$26.00 \$450.00 \$736.00 Corequisites: MUS-189 Required: Sophomore-level performance ability MUP-281 INDIVIDUAL LESSONS: FLUTE, 2 CREDITS 340918 TBA OC NCT MUP-276-01 Prerequisites: MUP-181 (6 credits) H. OSEAS \$260.00 \$26.00 \$450.00 \$736.00 Corequisites: MUS-189 Required: Sophomore-level performance ability ESPAÑOL: Enseñado en español Campus Locations: Distance Education Notification: Other Coding Translations: HAR: Harmony Community Campus ONL: Online Only TBA: To be arranged: contact LCT: Low-Cost Text

REM: Remote (w/ scheduled meetings)

HYB: In-person plus online work

department first class

VAR: Variable credit class

OC: Oregon City Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Course No	Course Title, Cr	redits					Course No	Course Title, C	redits				
	Section No Instructor		Days (M,T,W Tuition	,TH.F,S,SU) Fee	Time Crs. Fee	Total		Section No Instructor		Days (M,T,	,w,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC NCT	MUP-281-01 S. TIEDEMAN			\$26.00	\$450.00	\$736.00	OC NCT	MUP-286J-01 Q. WALKER	340949		\$26.00	\$450.00	\$736.00
Prerequisi	INDIVIDUAL I tes: MUP-181J Sophomore-lev	(6 credi	ts)	·	2 CREDITS	3	Prerequisi Corequisit	INDIVIDUAL I ites: MUP-187 (tes: MUS-189	6 credits	s)		N, 2 CRED	DITS
OC NCT	MUP-281J-01	340934	I TBA					Sophomore-lev	•		oility		
MUD 000	G. HARRIS	. 50001			\$450.00	\$736.00	OC NCT	MUP-287-01 R. OLASON	340952		\$26.00	\$450.00	\$736.00
Prerequisi Corequisit	INDIVIDUAL I tes: MUP-182 (es: MUS-189 Sophomore-lev	(6 credits	s)		DITS		Corequisit	INDIVIDUAL I ites: MUP-188 (tes: MUS-189	6 credits	s)	ŕ	2 CREDITS	3
OC NCT	MUP-282-01	34093					Required:	Sophomore-lev	el perfor	mance at	oility		
	C. LEE		\$260.00		\$450.00	\$736.00	OC NCT	MUP-288-01 L. CAMPBELL			\$26.00	\$450.00	\$736.00
Prerequisi Corequisit	INDIVIDUAL I tes: MUP-183 (es: MUS-189 Sophomore-lev	(6 credits	s)	,	CREDITS		Prerequisi	I INDIVIDUAL I ites: MUP-188J Sophomore-lev	(6 credit	ts)		ONE, 2 CR	EDITS
OC NCT	MUP-283-01	340938		,			OC NCT	MUP-288J-01	340956	ТВА			
00 1101	L. DE MARTIN			\$26.00	\$450.00	\$736.00		L. CAMPBELL	-	\$260.00	\$26.00	\$450.00	\$736.00
Prerequisi	INDIVIDUAL I tes: MUP-183J Sophomore-lev	(6 credi	ts)		ET, 2 CRE	DITS	Prerequisi Corequisit	INDIVIDUAL I ites: MUP-189 (tes: MUS-189 Sophomore-lev	6 credits	s)	,	2 CREDITS	S
OC NCT	MUP-283J-01 TBA	340940		\$26.00	\$450.00	\$736.00	OC NCT	MUP-289-01 TBA	340958	ТВА		\$450.00	\$736.00
Prerequisi Corequisit Required:	INDIVIDUAL I tes: MUP-184 (es: MUS-189 Sophomore-lev	(6 credits rel perfor	s) mance ab		, 2 CREDIT	rs .	Corequisit	INDIVIDUAL I ites: MUP-190 (tes: MUS-189 Sophomore-lev	6 credits	s)		DITS	
OC NCT	MUP-284-01 G. HARRIS	34094		\$26.00	\$450.00	\$736.00	OC NCT	MUP-290-01 TBA	340961	ТВА		\$450.00	\$736.00
Prerequisi Required:	INDIVIDUAL I tes: MUP-184J Sophomore-lev	(6 credi el perfor	ts) mance ab		HONE, 2 C	REDITS	•	INDIVIDUAL I ites: MUP-191 (tes: MUS-189			USSION	, 2 CREDIT	гѕ
OC NCT	MUP-284J-01 G. HARRIS	34094		\$26.00	\$450.00	\$736.00	Required:	Sophomore-lev	el perfor	mance ab	oility		
	INDIVIDUAL		IS: BASS		·	ψ. σσ.σσ	OC NCT	MUP-291-01 B. GARDINEF	340962 }		\$26.00	\$450.00	\$736.00
Corequisit	tes: MUP-185 (es: MUS-189 Sophomore-lev	`	,	ility			Prerequisi	I INDIVIDUAL I ites: MUP-191J Sophomore-lev	(6 credit	ts)		SSION, 2 C	REDITS
OC NCT	MUP-285-01 N. BUETTI	34094		\$26.00	\$450.00	\$736.00	oc nct	MUP-291J-01 C. DOGGETT	340964	ТВА		\$450.00	\$736.00
Prerequisi	INDIVIDUAL I tes: MUP-186 (es: MUS-189			PET, 2 (CREDITS		MUP-291F	R INDIVIDUAL I				·	·
•	Sophomore-lev	el perfor	mance ab	ility			•	ites: MUP-191F	•	,	.::::		
OC NCT	MUP-286-01 J. KLAUSE	340948		\$26.00	\$450.00	\$736.00	OC NCT	MUP-291R-01	340966	ТВА		\$450.00	\$736.00
Prerequisi	INDIVIDUAL I tes: MUP-186J Sophomore-lev	(6 credi	ts)		ET, 2 CREI	DITS	Prerequisi	C. DOGGETT INDIVIDUAL I ites: MUP-192T Sophomore-lev	LESSON (6 credi	IS: AUDIo	О ТЕСН,	\$450.00 2 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 LCT: Low-Cost Text

Course No	Course Title, Cre	edits								
	Section No	Crs Reg.	Days (M,T,V	V,TH.F,S,SU)	Time					
	Instructor		Tuition	Fee	Crs. Fee	Total				
OC NCT	MUP-292T-01	340967	TBA							
	M. BAIRD		\$260.00	\$26.00	\$450.00	\$736.00				
	Electronic Music Lessons.									
OC NCT	MUP-292T-02	340968	TBA							
	D. BADSTUBN	IER	\$260.00	\$26.00	\$450.00	\$736.00				
	Audio Recordii	ng Less	ons.							
OC NCT	MUP-292T-03	340970	TBA							
	R. SOMMERS		\$260.00	\$26.00	\$450.00	\$736.00				
	Live Sound Le	ssons.								

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-110 **FOUNDATIONS OF NURSING - HEALTH PROMOTION, 6 CREDITS**

This course introduces the learner to framework of the OCNE curriculum. The emphasis on health promotion across the life span includes learning about self-health as well as patient health practices. To support self and patient health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview patients in a culturally sensitive manner, work as members of a multidisciplinary team giving and receiving feedback about performance, and use reflective thinking about their practice as nursing students. Populations studied in the course include children, adults, older adults and the family experiencing a normal pregnancy. Includes classroom and clinical learning experiences. The clinical portion of the course includes practice with therapeutic communication skills and selected core nursing skills identified in the OCNE Core Nursing Skills document.

Required: Acceptance into the CCC nursing program Corequisites: NRS-110C and NRS-230

CLINICAL, 3 CREDITS

HAR NRS-110-01 341073 WTH 9-3:00 PM 9-2:00 PM C. BURT \$780.00 \$78.00 \$500.00 \$1,358.00

T. VANDERWERF NRS-110C FOUNDATIONS OF NURSING - HEALTH PROMOTION This course introduces the learner to framework of the OCNE curriculum. The emphasis on health promotion across the life span includes learning about self-health as well as client health practices. To support self and client health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview clients in a culturally sensitive manner, work as members of a multidisciplinary team giving and receiving feedback about performance, and use reflective thinking about their practice as nursing students. Populations studied in the course include children, adults, older adults and the family experiencing a normal pregnancy. Includes classroom and clinical learning experiences.

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

Tuition

Time

Crs. Fee

Required: Acceptance into the CCC nursing program

Corequisites: NRS-110 and NRS-230

Course No Course Title, Credits Section No

Instructor

HAR	NRS-110C-01 34107	'5 T		9-10:50 A	M
	C. BURT	\$390.00	\$39.00	\$360.00	\$789.00
	T. VANDERWERF				
HAR	NRS-110C-02 34107	'9 T		11-12:50	PM
	C. BURT	\$390.00	\$39.00	\$360.00	\$789.00
	T. VANDERWERF				
HAR	NRS-110C-03 34108	1 T		1:30 -3:20) PM
	C. BURT	\$390.00	\$39.00	\$360.00	\$789.00
	T VANDERWERE				

NRS-222 NURSING IN ACUTE CARE II & END OF LIFE, 4 CREDITS

This course builds on NRS-112, focusing on more complex and/or unstable patient care conditions, some of which may result in death. These patient care conditions require strong noticing and rapid decision making skills. Evidence base is used to support appropriate focused assessments, and effective, efficient nursing interventions. Life span and developmental factors, cultural variables, and legal aspects of care frame the ethical decision-making employed in patient choices for treatment or palliative care for disorders with an acute trajectory. Case scenarios incorporate prioritizing care needs, delegation and supervision, and family and patient teaching for either discharge planning or end-of-life care. Exemplars include acute conditions affecting multiple body systems. Includes classroom and clinical learning experiences.

Required: Acceptance into the CCC nursing program Prerequisites: NRS-112, NRS-112C, and NRS-233

Corequisites: NRS-222C

NRS-222-01 341087 M 8:30 -10:50 AM 12-3:00 PM K. RICHARDS \$520.00 \$52.00 \$198.00 \$770.00

NRS-222C NURSING IN ACUTE CARE II & END OF LIFE CLINICAL, 5 CREDITS

This course builds on NRS-112, and focuses on more complex and/or unstable patient care conditions, some of which may result in death. These patient care conditions require strong noticing and rapid decision making skills. Evidence base is used to support appropriate focused assessments, and effective, efficient nursing interventions. Life span and developmental factors, cultural variables, and legal aspects of care frame the ethical decision-making employed in patient choices for treatment or palliative care within the acute care setting. Case scenarios incorporate prioritizing care needs, delegation and supervision, and family and patient teaching for either discharge planning or end-of-life care. Exemplars include acute conditions affecting multiple body systems. Includes classroom and clinical learning experiences.

Required: Acceptance into the CCC nursing program Prerequisites: NRS-112, NRS-112C, and NRS-233

Corequisites: NRS-222

HAR NRS-222C-01 341089 T 7-7:20 PM K. RICHARDS \$650.00 \$65.00 \$378.00 \$1,093.00

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	e No Course Title, Credits						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,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
HAR	NRS-222C-02	341091	W		7-7:20 P	M	HAR HYB	NUR-100-01	341096	TW		8-12:30	PM
	K. RICHARDS	3	\$650.00	\$65.00	\$378.00	\$1,093.00		M. BAKER		\$845.00	\$84.50	\$350.00	\$1,279.50
HAR	NRS-222C-03	341092	2 F		7-7:20 P	M		S. ELLSBERG	à				
	K. RICHARDS	3	\$650.00	\$65.00	\$378.00	\$1,093.00		Required: Stu	dent Peti	tion. Appl	lication re	equired to	enter the
HAR	NRS-222C-04	341093	3 TH		7-7:20 P	M		course. Applic	cation det	ails can b	e found	on the we	bpage.
	K. RICHARDS	3	\$650.00	\$65.00	\$378.00	\$1,093.00		Mandatory Or	ientation	will be he	eld in pers	son on the	Harmony
HAR	NRS-222C-05	341094	I TH		7-7:20 P	M		Campus for th					
	K. RICHARDS	3	\$650.00	\$65.00	\$378.00	\$1,093.00		Please see th details.	e Nursing) Assistar	nt webpa	ge for date	es and
NRS-230	CLINICAL PH	IARMAC	OLOGY	I, 3 CRE	DITS		HAR HYB	NUR-100-02	341097	TW		1-5:30 P	M
This course introduces the theoretical background that enables students to provide safe and effective care related to drugs and natural products to persons throughout the lifespan. It includes the foundational concents						oroducts		S. ELLSBERG J. LAFRANCE Required: Stu		\$845.00 tion.	\$84.50	\$350.00	\$1,279.50

to persons throughout the lifespan. It includes the foundational concepts of principles of pharmacology, nonopioid analgesics, and antibiotics, as well as additional classes of drugs. Students will learn to make selected clinical decisions in the context of nursing regarding using current, reliable sources of information, understanding of pharmacokinetics and pharmacodynamics, developmental physiologic considerations, 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. Drugs are studied by therapeutic or pharmacological class using an organized framework.

Required: Acceptance into the CCC nursing program

Corequisites: NRS-110 and NRS-110C

HAR NRS-230-01 341095 F 8:30 -10:20 AM K. RICHARDS \$390.00 \$39.00 \$210.00 \$639.00

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

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-01 341	098 TBA			
	J. LAFRANCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Student	Petition.			
HAR	NUR-100C-02 341	099 TBA			
	J. LAFRANCE	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Student	Petition.			
HAR	NUR-100C-03 341	100 TBA			
	M. BAKER	\$0.00	\$0.00	\$0.00	\$0.00
	Required: Student	Petition.			

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 HYB	PHL-101-01 34	41927 TH	1-2:50 PM	1							
NOT		ng Center on the	\$52.00 \$0.00 Oregon City camp	\$572.00 us to							
	inquire about the PHL-101 full-term library loan.										

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	PHL-102-01	341934	W		1-2:50 PM			
ONL NCT	M. BAILEY PHL-102-02	341931	\$520.00	\$52.00	\$0.00	\$572.00		
0.1.2.1.0.1	M. BAILEY	041301	\$520.00	\$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

PHL-103-01 ONL LCT 341936 K HADDIX \$520.00 \$52.00 \$0.00 \$572 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

Course No Course Title, Credits							Course No	Course Title, C	redits				
	ection No estructor	Crs Reg.	Days (M,T,\ 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

OC NCT

Phlebotomy

PHB-110 FUNDAMENTALS OF PHLEBOTOMY, 5 CREDITS

Introduces students to the practice of phlebotomy and the role of the phlebotomist as part of the healthcare team. Students will become familiar with phlebotomy equipment and learn about basic blood collection procedures. Students will identify medical terminology, anatomy, and physiology related to phlebotomy. Students will learn about specimen collection procedures, safety protocols, quality control, and regulatory compliance related to the role of a phlebotomist. This is an online course with embedded skills demonstrations to help prepare students for the in-person skills lab.

Corequisites: PHB-112 and PHB-115

Recommended Prerequisites: BI-120, or BI-101 & BI-102, or BI-231 &

BI-232 & BI-233. HP-110, and WR-101 or WR-121Z

ONI PHB-110-01 341101

E. ZUNIGA \$650.00 \$65.00 \$0.00 \$715.00

PHB-112 PHLEBOTOMY TECHNIQUES, 2 CREDITS

Perform venipuncture, capillary puncture, and specimen processing. This course is designed to provide students with active-learning experiences and hands-on training necessary to develop the skills of an entry--level phlebotomist. The student will learn the procedures performed by a phlebotomist and will become familiar with different types of equipment and techniques applied. Instruction on laboratory safety and standards will be emphasized.

Corequisites: PHB-110 and PHB-115

Recommended Prerequisites: BI-120, or BI-101 & BI-102, or BI-231 &

BI-232 & BI-233. HP-110, and WR-101 or WR-121Z

341102 WF HAR PHB-112-01 9-12:00 PM \$260.00 \$26.00 \$150.00 T. BOYD \$436 00 E. ZUNIGA HAR PHB-112-02 341103 WF 1-4:00 PM J. ALLISON \$260.00 \$26.00 \$150.00 \$436.00 E. ZUNIGA

PHB-115 PROFESSIONALISM FOR PHLEBOTOMISTS, 1 CREDIT

Introduces professionalism in the healthcare setting and prepares students for clinical placement.

Required: 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

Corequisites: PHB-110 and PHB-112

ONI PHB-115-01

> \$130.00 \$13.00 \$100.00 E. ZUNIGA \$243.00

Physical Education

PHYSICAL ACTIVITY CLASSES, 1 CREDIT PF-185

Recommended: Current physical examination before enrolling

BASEBALL TECHNIQUES I, 1 CREDIT

OC NCT PE-185-006 345249 MTWTH 3-4:50 PM

J. HOPPEL \$130.00 \$13.00 \$30.00 \$173.00

Meets: 9/8-10/6. Required: Student Petition.

BASKETBALL, MEN'S CNDTNG I, 1 CREDIT

345250 MWF PE-185-004 12-12:50 PM

C. WEGNER \$130.00 \$13.00 \$30.00 \$173.00

Required: Student Petition.

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

BASKETBALL, WOMEN'S CNDTNG I, 1 CREDIT												
PE-185-005 345241	MWF		3-3:50 PM									
K. GUELSDORF	\$130.00	\$13.00	\$30.00	\$173.00								
J. MARTINEAU												
Required: Student Pet	ition.											

CROSS TRAINING I, 1 CREDIT

ONL NCT PE-185-031 345247

> B. STAMME \$130.00 \$13.00 \$30.00 \$173.00

CROSS TRAINING I, 1 CREDIT ONL NCT PE-185-028 345248

B. STAMME \$130.00 \$13.00 \$30.00 \$173.00

CROSS TRAINING I, 1 CREDIT

ONL NCT PE-185-034 345325

> B. STAMME \$130.00 \$13.00 \$30.00 \$173.00

SOFTBALL TECHNIQUES I, 1 CREDIT

OC NCT PE-185-064 345245 MTWTH 1-2:50 PM

> J. BUEL \$130.00 \$13.00 \$30.00 \$173.00

Meets: 9/8-10/10. Required: Student Petition.

TRACK FUNDAMENTALS I, 1 CREDIT PE-185-082

OC NCT 345244 MWF 1:30 -2:20 PM K. MCHONE \$130.00 \$13.00 \$30.00 \$173.00

Required: Student Petition.

WALK, JOG, FITNESS I, 1 CREDIT

ONL NCT PE-185-025 341839

> K. MCHONE \$130.00 \$13.00 \$30.00 \$173.00

WEIGHT TRAINING I, 1 CREDIT

PE-185-018 ONL NCT 341835

C. WEGNER \$130.00 \$13.00 \$30.00 \$173.00

WEIGHT TRAINING I, 1 CREDIT

OC NCT PE-185-039 341848 TTH 10-11:20 AM

> C. WEGNER \$130.00 \$13.00 \$30.00 \$173.00

WRESTLING CONDITIONING I. 1 CREDIT

OC NCT PE-185-076 345246 MTWTHF 6:30 -7:50 AM

R. SANCHEZ \$130.00 \$13.00 \$30.00 \$173.00

Meets: 9/2-10/3. Required: Student Petition.

YOGA I, 1 CREDIT

ONL NCT PE-185-008 341833

> \$130.00 \$13.00 \$30.00 E. HANCOCK \$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.

SOCCER SKILLS & STRATEGIES. 1 CREDIT OC NCT PE-194-03 345243 MW 11-12:20 PM \$130.00 \$13.00 \$30.00 T. LEWIS

\$173.00 Required: Student Petition.

VOLLEYBALL SKILLS & STRATEGIES, 1 CREDIT OC NCT PE-194-04 345242 TTH 6-7:20 PM

A. ITAMI \$130.00 \$13.00 \$30.00 \$173.00 Required: Student Petition.

oc

Course No	Course No Course Title, Credits							lo 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	
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							ONL	PH-122L-40 C. SHARON	341886	\$0.00	\$0.00	\$0.00	\$0.00	

implement physical training programs and exercise for clients and athletes.

OC HYB PE-240-01 341860 W 11-11:50 AM NCT 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 341861

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

ONL NCT PE-280-01

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

CWE-281-06.

Physics

PH-121 **ASTRONOMY, 4 CREDITS**

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

MTH-095

Corequisites: PH-121L

Prerequisites: WRD-090 or placement in WRD-098

PH-121-40 341877

C SHARON \$520.00 \$52.00 \$25.00 \$597.00

PH-121L ASTRONOMY LAB, 0 CREDIT

Lab course for PH-121L Corequisites: PH-121

PH-121L-40 341881 \$0.00 C. SHARON \$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

PH-122-40 ONL 341883

> C SHARON \$520.00 \$52.00 \$20.00 \$592.00

PH-122L GENERAL ASTRONOMY LAB, 0 CREDIT

Lab course for PH-122 Corequisites: PH-122

PH-201 **GENERAL PHYSICS, 5 CREDITS**

A lab course covering vectors, motion, kinematics, forces and Newton's laws, gravity, the conservation laws for momentum and energy, rotational motion, and oscillations.

Prerequisites: MTH-112Z or placement in MTH-251Z

Corequisites: PH-201L and PH-201S

Prerequisites: WRD-090 with a C or better or placement in WRD-098 Recommended Prerequisites: A year of high-school physics or PH-150

341887 MW PH-201-01 11-12:20 PM E. ALHATMI \$650.00 \$65.00 \$50.00 \$765.00

PH-201L GENERAL PHYSICS LAB, 0 CREDIT

Lab course for PH-201

Corequisites: PH-201 and PH-201S

ОС	PH-201L-01	341888	T		9-11:50 AM	
	E. ALHATMI		\$0.00	\$0.00	\$0.00	\$0.00
ос	PH-201L-02	341889	T		1-3:50 PM	
	G. BOSTROM		\$0.00	\$0.00	\$0.00	\$0.00
ос	PH-201L-03	341891	TH		1-3:50 PM	
	G. BOSTROM		\$0.00	\$0.00	\$0.00	\$0.00
ОС	PH-201L-04	341894	F		11-1:50 PM	
	G. BOSTROM		\$0.00	\$0.00	\$0.00	\$0.00

PH-201S GENERAL PHYSICS SEMINAR, 0 CREDIT

Seminar course for PH-201

Corequisites: PH-201 and PH-201L

PH-201S-01 341895 MW 12:25 -12:50 PM E. ALHATMI \$0.00 \$0.00 \$0.00 \$0.00

PH-211 **GENERAL PHYSICS WITH CALCULUS, 5 CREDITS**

A lab course covering vectors, motion, kinematics, forces and Newton's laws, gravity, conservation laws for momentum and energy, rotational motion, and oscillations.

Prerequisite or Corequisite: MTH-252Z Corequisites: PH-211L and PH-211S

Prerequisite or Corequisite: WRD-090 with a C or better or placement

in WRD-098

Recommended Prerequisites: MTH-254. A year of high-school physics

or PH-150

OC LCT	PH-211-01	341897	MW	11-12:20 PM			
	G. BOSTROM		\$650.00	\$65.00	\$50.00	\$765.00	
OC LCT	PH-211-02	341899	MW		1-2:20 PM		
	G. BOSTROM		\$650.00	\$65.00	\$50.00	\$765.00	

PH-211L GENERAL PHYSICS WITH CALCULUS LAB, 0 CREDIT

Lab course for PH-211

Corequisites: PH-211 and PH-211S

ос	PH-211L-01	341901	T		9-11:50 AM	
	E. ALHATMI		\$0.00	\$0.00	\$0.00	\$0.00
ос	PH-211L-02	341902	T		1-3:50 PM	
	G. BOSTROM		\$0.00	\$0.00	\$0.00	\$0.00
ос	PH-211L-03	341903	TH		1-3:50 PM	
	G. BOSTROM		\$0.00	\$0.00	\$0.00	\$0.00
ос	PH-211L-04	341904	F		11-1:50 PM	
	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 ESPAÑOL: Enseñado en español

Course No	o 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,	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
PH-211S	GENERAL PI	4VSICS	WITH C	VI CIII IIS	SEMINAR	0	ONL NCT	PSY-101-02	341950				
111-2113	CREDIT	110100	***********	LUULUU	JEWINAN,	U		M. MALLATT		\$390.00	\$39.00	\$0.00	\$429.00
0							ONL NCT	PSY-101-03	341952				
	ourse for PH-21							M. MALLATT		\$390.00	\$39.00	\$0.00	\$429.00
Corequisit	tes: PH-211 and	d PH-21	1L				HAR	PSY-101-04	341953	MW		10-11:20	AΜ
OC	DH_211C_01	3/1005	TH		1-1-50 DM			.I VFI F7		\$390.00	\$39.00	\$0.00	\$429.00

\$0.00

\$0.00

\$0.00

PH-211S-03 341908 F 2-2:50 PM G. BOSTROM \$0.00 \$0.00 \$0.00

G. BOSTROM

G. BOSTROM

PH-211S-02

Political Science

OC

oc

PS-200

Introduction to the science and application of psychology. Emphasis will Research Methods, Behavioral Neuroscience, Consciousness,

341907 F

A general introduction to the field of political science. Introduces and expands on basic political concepts and themes, explores political theory and ideology, and considers the dynamics of political institutions and government and how both are integrated into political life.

INTRODUCTION TO POLITICAL SCIENCE, 4 CREDITS

\$0.00

\$0.00

\$0.00

\$0.00

\$0.00

10-10:50 AM

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

ONL	PS-200-01	341939		
	J. HITE	\$520.00	\$52.00 \$0.00	\$572.00

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	PS-201-01	341940	
	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

ОС	PS-280-01	341944									
	J. HITE	\$780.00	\$78.00	\$45.00	\$903.00V						
	D. LOUGEE										
	Required: Stu	Required: Student Petition. Corequisite: Take the following									
	CWE-281-06		•		Ū						

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	341945 MW		1-2:20	PM
	E. SAUBER	\$390.00	\$39.00	\$0.00	\$429.00

PSY-201Z INTRODUCTION TO PSYCHOLOGY I, 4 CREDITS

be placed on psychological concepts, theories, and principles related to: Sensation/Perception, Learning, Memory, Thinking and Intelligence, and

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

OC NCT	PSY-201Z-01	341956 TTH	8-9:50 AM		
	J. KISSLER	\$520.00	\$52.00	\$0.00	\$572.00
OC NCT	PSY-201Z-02	341958 TTH) AM		
	J. KISSLER	\$520.00	\$52.00	\$0.00	\$572.00
ONL	PSY-201Z-03	341959			
	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 topics.

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

OC NCT	PSY-202Z-01	341961	MW		1-2:50 PM	
	J. KISSLER		\$520.00	\$52.00	\$0.00	\$572.00
ONL NCT	PSY-202Z-02	341964				
	I. MANCINELL	.l-	\$520.00	\$52.00	\$0.00	\$572.00
	FRANCONI					

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

OC HYB	PSY-215-01	341965	T		1-2:50 PM	
	S. KISER		\$520.00	\$52.00	\$0.00	\$572.00
ONL NCT	PSY-215-02	341968				
	T. THOMAS		\$520.00	\$52.00	\$0.00	\$572.00
ONL	PSY-215-03	341969				
	K. KRASKA		\$520.00	\$52.00	\$87.25	\$659.25
	Online textboo	k include	ed in secti	ion fees.		
HAR	PSY-215-04	341970	MW		1-2:50 PM	
	J. VELEZ		\$520.00	\$52.00	\$0.00	\$572.00
ONL NCT	PSY-215-05	347182				
	I. MANCINELL	.l-	\$520.00	\$52.00	\$0.00	\$572.00
	FRANCONI					

INTRODUCTION TO PSYCHOLOGICAL DISORDERS, 4 PSY-219 **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	341972 MW	10-11:	10-11:50 AM		
	E. SAUBER	\$520.00	\$52.00	\$0.00	\$572.00	

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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department first class VAR: Variable credit class 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,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 NCT	PSY-219-02	341975	5				ос	R-280-01	341995				
	E. SAUBER		\$520.00	\$52.00	\$0.00	\$572.00		D. LOUGEE		\$780.00	\$78.00	\$45.00	\$903.00V
ONL	PSY-219-03	341977	7					J. SHELTON					
	S. KISER		\$520.00	\$52.00	\$0.00	\$572.00		Required: Stud CWE-281-06.	dent Peti	tion. Core	equisite:	Take the	following

PSY-231 INTRODUCTION TO HUMAN SEXUALITY, 4 CREDITS

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.

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

OC NCT	PSY-231-01	341980 TTH	1-2:50 PM				
	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 341983

> J. KISSLER \$780.00 \$78.00 \$45.00 Required: Student Petition. Corequisite: Take the following CWE-281-06.

Religion

R-102 **CHRISTIANITY AND ISLAM, 4 CREDITS**

An introduction to Christianity and Islam, New Testament and Quran, the nature of Trinity and Tawhid, and includes the history and philosophy of other Western religious developments.

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

ONI R-102-01 341987

J. SHELTON \$520.00 \$52.00 \$0.00 \$572.00

HISTORY OF CHRISTIANITY, 4 CREDITS R-204

An introduction to early Christianity, the Apostles, and formulation of the New Testament canon. Developments of post-apostolic Christianity and theology into the Modern Age. Contemporary topics include: Christianity in conflict, ethical and social religious issues, and the face of contemporary Christianity.

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

ONI R-204-01 341989 J. SHELTON \$520.00 \$52.00 \$0.00 \$572.00

R-210 **WORLD RELIGIONS, 4 CREDITS**

Examines religions and philosophies from around the world through film, text, and/or online presentations. Introduces Hinduism, Buddhism, Chinese/Japanese religions, Christianity, Judaism, Islam, and many other religious systems.

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

ONI R-210-01 341991 J. SHELTON \$520.00 \$52.00 \$0.00 \$572.00

RELIGION/CWE, 2-6 CREDITS (VAR) R-280

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

Corequisites: CWE-281

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.

RET-280 RENEWABLE ENERGY/CWE, 1-6 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 NCT **RET-280-01** 341909

\$780.00 \$78.00 \$307.50 \$1,165.50V S. PAVEY Required: Student Petition. Corequisite: Take the following CWE-281-06.

Small Business Development Center

Registration for these workshops does not require college admission. E-mail bizcenter@clackamas.edu 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-	345373 TH	6-9:00 PM	
	01FA	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		345374 T	6-8:00 PM
	01FA		
	TBA		

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.

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							
	Section No Instructor	Crs Reg.	Days (M,T,W,TH	,-,,	Time Crs. Fee	Total		
REM	SBM-020- 05FA J. SELBY	345375	Т		6:30 -9:30 I	PM		
REM	SBM-020- 06FA J. SELBY	345376	Т		6:30 -9:30	PM		
REM	SBM-020- 07FA J. SELBY	345377	Т		6:30 -9:30	PM		
REM	SBM-020- 08FA J. SELBY	345378	Т		6:30 -9:30	PM		

SBM-021 SMALL BUSINESS MANAGEMENT I GROWTH WHEEL. 0

Part 1 of a multi-year program to help owners and managers of established businesses manage more effectively and achieve success. Course consists of class meetings, individual business counseling, peer networking, and work in/on the business. Class topics emphasize financial analysis, goals, and communication.

HAR HYB	SBM-021-	345394 TH	1-4:00 PM
	01FA		
	R. CAMPBELI	L	

SBM-024 **EXIT SMART: RETIRING WITH SELLING & SUCCESSION** STRATEGIES, 0 CREDIT

Learn how to transition your small business by understanding the options. Succession planning in small business ownership is critical and complex. It is a 3-10 year process that, when done properly, helps owners maximize their return on their investment so they can reach their long-term goals in retirement. This hands-on, 9 month course is designed to teach owners and individuals 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-024- 01FA	345395 TH	1-4:00 PM
HAR HYB	D. TOURNEY SBM-024- 02FA	345507 TH	1-4:00 PM
HAR HYB	D. TOURNEY SBM-024- 03FA D. TOURNEY	345508 TH	1-4:00 PM

SBM-028 **CONTRACTOR ESSENTIALS MANAGEMENT SBM 1, 0** CREDIT

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-028-	345396
	01FA	
	D. TOURNE	Υ

NEXT LEVEL CONTRACTING: ADVANCED BUSINESS SBM-029 STRATEGIES FOR CONTRACTORS SBM II, 0 CREDIT

Provides information on continuing to grow a successful construction business. Teaches students technology, marketing, construction math, risk management, financial reporting, safety, payroll and government contracting.

REM	SBM-029-	345399	W	6:30 -8:00 PM
	01FA			
	D. TOURNEY			

Campus Locations:

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Distance Education Notification:

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

SCOREBOARDS IN BUSINESS, 0 CREDIT SBM-031

Crs Reg.

Course No Course Title, Credits Section No

Instructor

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.

Tuition

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

Crs. Fee

Total

REM	SBM-031-	345410 T	6:30 -8:00 PM
	01FA		
	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- 01FA	345219 TH	6:30 -9:30 PM
REM	J. SELBY XSBM-0003-	345220 TH	6:30 -9:30 PM
	02FA J. SELBY		0.00 0.00 1
REM	XSBM-0003-	345222 TH	6:30 -9:30 PM
	03FA J. SELBY		

XSRM-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- 30FA O. FERRER	345223 THF	8-5:00 PM
HAR	XSBM-0010- 31FA O. FERRER	345224 THF	8-5:00 PM
REM	XSBM-0010- 32FA O. FERRER	345225 MTH	5:30 -7:00 PM
HAR	XSBM-0010- 33FA O. FERRER	345226 THF	8-5:00 PM
HAR	XSBM-0010- 34FA TBA	345254 THF	8-5:00 PM
HAR	XSBM-0010- 35FA TBA	345255 THF	8-5:00 PM
HAR	XSBM-0010- 36FA TBA	345256 THF	8-5:00 PM
HAR	XSBM-0010- 37FA TBA	345257 THF	8-5:00 PM

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 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 HYB

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-	345258 W	6-9:00 PM
	22FA		
	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-	345259 S	9-5:00 PM
	22FA		

C. WEESNER

XSBM-**CONSTRUCTION BUSINESS FUNDAMENTALS:** 0024 **ACCURATE ESTIMATING & FINANCIAL RECORDS, 0 CREDIT**

This class is designed to help those students who have successfully completed the Preparing for the CCB Exam class gain a basic understanding of recordkeeping and entry level estimating practices.

ONL XSBM-0024- 345260

> 40FA D. TOURNEY

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	341997 W		10-11:50 A	ΑM
	E. PFEIFER	\$520.00	\$52.00	\$0.00	\$572.00
OC HYB	SOC-204Z-02	341999 TH		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 342004 J. LOVELESS \$520.00 \$52.00 \$0.00 \$572.00

SOC-206Z SOCIAL PROBLEMS, 4 CREDITS

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

OC: Oregon City Campus

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.

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

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

SOC-206Z-01 342011 TH 10-11:50 AM E. PFEIFER \$520.00 \$52.00 \$0.00 \$572.00 OC HYB SOC-206Z-02 345253 W 1-2:50 PM

E. PFEIFER \$520.00 \$52.00 \$572.00 \$0.00

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 345342 J. LOVELESS \$520.00 \$52.00 \$0.00 \$572.00

SOC-210 MARRIAGE, FAMILY, & INTIMATE RELATIONS, 4

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 342009 \$520.00 \$52.00 \$0.00 J. LOVELESS \$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

oc SOC-280-01 342013

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

CWE-281-06.

Statistics

STAT-**ELEMENTARY STATISTICS I, 4 CREDITS** 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 appropriate.

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 HYB NCT	STAT-243Z-01 342025	S W		10-11:50 A	AM
	K. AMREIN	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	STAT-243Z-02 342027	MW		3-4:50 PM	
	T. BIEBER	\$520.00	\$52.00	\$20.00	\$592.00
OC NCT	STAT-243Z-03 342028	TTH		10-11:50 A	AM.
	M. YANNOTTA	\$520.00	\$52.00	\$20.00	\$592.00

Course No	Course Title, Cr					
	Section No Instructor	Crs Reg.	Days (M,T,W Tuition	/,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC NCT	STAT-243Z-04	342029	TTH		1-2:50 F	PM
	T. BIEBER		\$520.00	\$52.00	\$20.00	\$592.00
ONL NCT	STAT-243Z-10	345214				
	K. MERCER		\$520.00	\$52.00	\$20.00	\$592.00
	_					

Theatre Arts

APPRECIATION OF THEATRE, 4 CREDITS TA-101

Students will be introduced to the many aspects of theatre arts by attending multiple area productions. Plays will be reviewed and evaluated through writing assignments and discussions.

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

ONL NCT TA-101-01 341018

\$520.00 \$52.00 \$110.00 A. MOON \$682.00

TA-111 **FUNDAMENTALS OF TECHNICAL THEATRE, 4 CREDITS**

First class of a three part series. Basic study and practice in the collaborative 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/or observations of Technical Theatre applications.

OC NCT TA-111-01 341020 TTH 1-3:50 PM C. WHITTEN \$520.00 \$52.00 \$35.00 \$607.00

TA-121 **COSTUMING I, 3 CREDITS**

First 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.

OC NCT TA-121-01 341026 MW 10-12:50 PM TRA \$390.00 \$39.00 \$0.00 \$429.00

TA-141 **ACTING I. 4 CREDITS**

Studies the methods, techniques, and theories of acting as an art form. Students perform acting exercises and monologues/scenes from dramatic literature, attend lectures, and participate in work-shopping and discussion. Written work is assigned that includes response and analysis papers. Introduces vocal, physical, and script analysis skills. First in a

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

OC NCT TA-141-01 341029 MW 10-11:50 AM A. MOON \$520.00 \$52.00 \$35.00 \$607.00

THEATRE REHEARSAL & PERFORMANCE, 1-3 CREDITS TA-153

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 NCT TA-153-01 341033 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)

Tuition

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

Fee

Time

Crs. Fee

Total

Crs Reg.

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 NCT TA-195-01 341041 MWF 12-2:50 PM C. WHITTEN \$390.00 \$39.00 \$35.00 \$464.00V Meets: Improv 12-12:50pm, One-Acts 1-1:50pm, Stand-Up 2 -2:50pm.

TA-211 **TECHNICAL THEATRE STUDY, 4 CREDITS**

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.

Prerequisites: TA-111, TA-112, and TA-113

Course No Course Title, Credits

Section No

Instructor

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

TA-211-01 341047 TTH 1-3:50 PM C. WHITTEN \$520.00 \$52.00 \$35.00 \$607.00

TA-253 THEATRE REHEARSAL & PERFORMANCE, 1-3 CREDITS (VAR)

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

341051 MWF OC NCT TA-253-01 3-5:50 PM A. MOON \$390.00 \$39.00 \$25.00 \$454.00V Required: Student Petition.

TA-280 THEATRE/CWE, 2-6 CREDITS

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

ONL NCT TA-280-01 341056

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.

OC NCT TA-295-01 341061 MWF 12-2:50 PM C. WHITTEN \$390.00 \$39.00 \$35.00 \$464.00V Meets: Improv 12-12:50pm, One-Acts 1-1:50pm, Stand-Up 2 -2:50pm.

Water & Environmental Technology

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

WET-010 **WASTEWATER OPERATIONS I, 3 CREDITS**

For professional upgrade only. Does not meet the requirements for the certificate or degree. Introduction to the fundamentals of wastewater operations. Includes collections systems, preliminary and primary treatment, waste characteristics including organic removals, and solids profiles.

oc WET-010-01 341915 M 6-8:50 PM \$390.00 \$39.00 \$15.00 M. LAFORCE \$444.00 For professional upgrade only

WET-011 WATERWORKS OPERATIONS I, 3 CREDITS

For professional upgrade only. Does not meet the requirements for the certificate or degree. Introduction to municipal drinking water treatment and distribution systems. Basic waterworks hydraulics, drinking water regulations, waterworks math, waterworks microbiology, and introduction to water disinfection.

oc	WET-011-01	341916 T		6-8:50 PM	
	J. NURMI	\$390.00	\$39.00	\$15.00	\$444.00
	For profession	nal upgrade only			

WET-108 **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.

ос	WET-108-01	341917 TWTHF	8-3	3:50 PM
	J. NURMI	\$390.00	\$39.00 \$0.	.00 \$429.00
	Meets: 12/9-1	2/12. This is a four	r-day worksh	op. Must attend
	all four days f	or full credit and ce	ertification.	

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.

OC.	WEI-109-01 3	341919 MIWIHF	8-5:00 PN	1
	M. LAFORCE	\$520.00 \$52	2.00 \$4.00	\$576.00
	Required: Stude	ent Petition. Meets: 1	2/8-12/12.	
ос	WET-109-02	341922 MTWTHF	8-5:00 PN	1
	M. LAFORCE	\$520.00 \$52	2.00 \$4.00	\$576.00
	Meets: 9/15-9/1	9		

OA4O4O MITWITHE

0 F-00 DM

WET-110 WASTEWATER OPERATIONS I, 3 CREDITS

Introduction to the fundamentals of wastewater character and operations. Includes collections systems, preliminary and primary treatment, waste characteristics including organic removals, and solids profiles

Corequisites: MTH-082A

WET 400 04

ОС	WET-110-01	341924 M		6-8:50 PM		
	M. LAFORCE	\$390.00	\$39.00	\$15.00	\$444.00	

WET-111 WATERWORKS OPERATIONS I, 3 CREDITS

Introduction to municipal drinking water treatment and distribution systems. Basic waterworks hydraulics, drinking water regulations, waterworks math, waterworks microbiology, and introduction to water disinfection.

Corequisites: MTH-082B

OC: Oregon City Campus

HAR: Harmony Community Campus

WILS: Wilsonville Training Center

OFF: Other Off-Campus Location

Campus Locations:

ОС	WET-111-01	341925 T		6-8:50 PN	1
	J. NURMI	\$390.00	\$39.00	\$15.00	\$444.00

Distance Education Notification: Other Coding Translations: 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

COMPUTER APPLICATIONS FOR WATER AND WET-112 **WASTEWATER OPERATIONS, 4 CREDITS**

Focuses on direct application of Microsoft Word, PowerPoint, and Excel for producing compliance reports, professional presentations, and data analysis. Emphasis will be put on the use of Excel for statistical analysis of water and wastewater plant data for state and federal compliance. Supervisory control and Data Acquisition (SCADA) will also be covered. Wastewater simulators will be explored and used to design and manipulate unit processes.

Corequisites: WET-110 and WET-111

WET-112-01 341926 M 2-4:50 PM M. LAFORCE \$520.00 \$52.00 \$0.00 \$572.00

WET-125 HIGH PURITY WATER PRODUCTION I, 3 CREDITS

Fundamentals of high purity water chemistry, reverse osmosis treatment, ion exchange treatment, electrode ionization treatment, UV, ozonation, degasification and microfiltration as applied to the production of high purity water for the semiconductor, pharmaceutical and electric power generating industries.

Corequisites: MTH-082E

REM	WET-125-01	341928 T		9-12:50	PM
	G. CARR	\$390.00	\$39.00	\$15.00	\$444.00

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

WET-180-01 341929 M. LAFORCE \$650.00 \$65.00 \$45.00 \$760.00 Required: Student Petition. Corequisite: Take the following

CWE-281-03.

WET-241 AQUATIC MICROBIOLOGY, 4 CREDITS

A lecture and lab course with topics in applied microbiology. Methods to detect coliform group in water and wastewater. Identification of filamentous bacteria in activated sludge, and identification of indicator protozoa in activated sludge. A bacteriological stream survey project is included.

Prerequisites: BI-204

341932 TBA oc WET-241-01 9-11:50 AM J NURMI \$520.00 \$52.00 \$40.00 \$612.00

WET-242 HYDRAULICS FOR WATER & WASTEWATER, 3 CREDITS

Introduction to closed conduit and open channel flow. Includes hydrostatics and dynamics, head-loss, pump characteristics, Bernoulli's and the energy equations, and basic characteristics of water.

Prerequisites: WET-122

WET-242-01 341933 MW 12:30 -1:50 PM \$390.00 \$39.00 \$15.00 M LAFORCE \$444 00

WET-245 INSTRUMENTATION & CONTROL, 4 CREDITS

A lab course introducing methods used to monitor and control treatment processes in wastewater, water and high purity water facilities. Advanced water analysis to include typical monitoring of high purity water treatment. Fundamentals of control loops, control systems and data management.

	Course No Course Title, Credits				Course 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,\ Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
	OC HYB	WET-245-01 G. CARR	341935	W \$520.00	\$52.00	4-5:50 PM \$40.00	\$612.00	ос	XWET-C003- 22	342105	THF		8-3:50 PM	
									M. LAFORCE		\$0.00	+	\$0.00	\$0.00
WET-280 WATER & ENVIRONMENTAL PROJECTS II, 5 CREDITS							Meets: 11/13-1			00. Go to	CCC-			
	Cooperativ	work experience. Practical work experience in a municipal					wet.eventbrite.	.com to s	ıgn up.					

XWET-

C004

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 WET-280-01 341937

> M. LAFORCE \$650.00 \$65.00 \$45.00 \$760.00 Required: Student Petition. Corequisite: Take the following CWE-281-03.

XWET-1-DAY CROSS CONNECTION SPECIALIST UPDATE, 0.70 C001 **CEUS**

Update on code information or any changes in the program.

ос	XWET-C001- 34	12093 F		8-3:50 PN	И
	J. NURMI	\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 11/7. Fee sign up.	: \$100.00. Go	to ccc-we	et.eventbrite	e.com to

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.

ОС	XWET-C002- 3420	97 F		8-3:50 PM	И
	M. LAFORCE J. NURMI	\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 10/3. Fee: \$ sign up.	100.00. Go	to ccc-we	et.eventbrite	e.com to
ОС	XWET-C002- 3421	101 F		8-3:50 PM	И
	M. LAFORCE	\$0.00	\$0.00	\$0.00	\$0.00
	Meets: 12/5. Fee: \$ sign up.	100.00. Go	to ccc-we	et.eventbrite	e.com to

XWET-2-DAY TESTER RETRAIN/RENEWAL, 1.40 CEUS

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- 342 21	2103 THF	3 THF 8-3:50 PM		
	M. LAFORCE Meets: 10/16-10/1	7	\$0.00 0. Go to	+	\$0.00

wet.eventbrite.com to sign up.

specialists, plumbing inspectors, waterworks managers, and backflow

4-DAY CROSS CONNECTION SPECIALIST COURSE, 3.20

This course should be of special interest to cross connection control device testers.

Designed to provide information to individuals involved in the protection

of public water systems from contamination due to cross connections.

ос	XWET-C004- 41	342107 TWTHF		8-3:50 PM	
	J. NURMI	\$0.00	\$0.00	\$0.00	\$0.00
		2/12 Fee: \$400.00 .com to sign up. T			

XWET-5-DAY BACKFLOW TESTER COURSE, 4.00 CEUS C005

Presentation of backflow prevention assemblies used for water/wastewater system cross connection control. Class 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. Students will be able to apply to Oregon Health Authority for Certification by that agency.

ос	XWET-C005- 51	342110 MTWTH	F	8-5:00 PM	
	M. LAFORCE	\$0.00	\$0.00	\$0.00	\$0.00
		2/12. Fee: \$500.0 .com to sign up.	0. Go to	ccc-	
		040444 5473471	_	0 F-00 DM	
ос	XWET-C005-	342111 MTWTH	F	8-5:00 PM	
ос	XWET-C005- 52	342111 MIWIH	F	8-5:00 PIVI	
ос	52 M. LAFORCE	\$0.00 19. Fee: \$500.00	\$0.00	\$0.00	\$0.00

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	341938 TH		2-4:50 PM	
	D. PODKOWA	\$390.00	\$39.00	\$219.00	\$648.00
ОС	WLD-100-02	341941 T		6-8:50 PM	
	D. PODKOWA	\$390.00	\$39.00	\$219.00	\$648.00

WLD-102 INTRODUCTION TO WELDING, 2 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 Credite

Course No Course Little, Credits				Course No	Course Title, C	realis						
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
Designed for the begin	ner and ext	erimenta	al welder	Includes: o	XV-	oc	WLD-110-07	347178	TTH		12:01 -1:	:50 AM
acetylene cutting and									MW		10-11:59	PM
GMAW & FCAW (Gas							K. DRURY		\$520.00	\$52.00	\$432.00	\$1,004.00
GTAW (Gas Tungster		_			0 ,		Required: Stu	dent Peti	tion.			

OC NCT	WLD-102-01	341943 F		6-9:50 PM	
	A. TOWN	\$260.00	\$26.00	\$146.00	\$432.00
OC NCT	WLD-102-02	341946 S		9-12:50 PI	VI
	K. DRURY	\$260.00	\$26.00	\$146.00	\$432.00
OC NCT	WLD-102-03	341947 S		2-5:50 PM	
	K. DRURY	\$260.00	\$26.00	\$146.00	\$432.00

INTRODUCCIÓN A LA SOLDADURA, 2 CREDITS WLD-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 LCT	WLD-102ES-	341948	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.

OC LCT	WLD-103-01	341949 F		6-9:50 PM	Л
	M. TIZO	\$260.00	\$26.00	\$146.00	\$432.00
OC LCT	WLD-103-02	341951 SU		10-1:50 P	М
	M. TIZO	\$260.00	\$26.00	\$146.00	\$432.00

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.

OC NCT	WLD-110-01				8-11:50	
	D. PODKOWA Required: Stud			\$52.00	\$432.00	\$1,004.00
OC NCT	WLD-110-02				1-4:50 P	M
00 1101	R. THOMAS			\$52.00		
	Required: Stud	dent Peti	tion.			
OC NCT	WLD-110-03	341960	MW		6-9:50 P	М
	M. TIZO		\$520.00	\$52.00	\$432.00	\$1,004.00
	Required: Stud	dent Peti	tion.			
OC NCT	WLD-110-04	341962	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	341963	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	341966	TTH		1-4:50 P	М
	B. MULLIGAN		\$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.

OC NCT	WLD-111-01	341967 MTWTH	6-9:50 P	M
	J. PHELPS	\$1,040.0	\$104.00 \$584.00	\$1,728.00
		0		

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.

OC NCT	WLD-111A-01	341973	MW		6-9:50 PM	
	J. PHELPS		\$520.00	\$52.00	\$292.00	\$864.00
OC NCT	WLD-111A-02	341974	MTWTH		7:30 -9:20	AM
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00
OC NCT	WLD-111A-03	341979	MTWTH		1:15 -3:05	PM
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00
OC NCT	WLD-111A-04	341982	MTWTH		3:30 -5:20	PM
	R ABBOTT		\$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. Prerequisites: WLD-111A

OC NCT	WLD-111B-01	341985	TTH		6-9:50 PM	
	J. PHELPS		\$520.00	\$52.00	\$292.00	\$864.00
OC NCT	WLD-111B-02	341986	MTWTH		7:30 -9:20	AM
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00
OC NCT	WLD-111B-03	341990	MTWTH		1:15 -3:05	PM
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00
OC NCT	WLD-111B-04	341993	MTWTH		3:30 -5:20	PM
	R. ABBOTT		\$520.00	\$52.00	\$292.00	\$864.00

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 341996 MTWTH		8-11:50 AM		
	R. THOMAS	\$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.

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 Crs. Fee Total

oc WLD-113A-01 341998 MW 8-11:50 AM R. THOMAS \$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

oc WLD-113B-01 342000 TTH 8-11:50 AM R. THOMAS \$520.00 \$52.00 \$292.00 \$864.00

WLD-115 GAS TUNGSTEN ARC WELDING (GTAW), 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 Tungsten Arc Welding process. Plasma arc cutting will be covered. Welding codes, standards, and specifications will be reviewed.

ОС	WLD-115-02	345134 TWTHF	12:01 -1:	:50 AM
		MTWTH	10-11:59	PM
	K. DRURY	\$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-02	345135	TTH		12:01 -1:	50 AM
			MW		10-11:59	PM
	K. DRURY		\$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.

Prerequisites: WLD-115A

ОС	WLD-115B-02	345136 TTH		10-11:59	PM
		WF		12:01 -1:	50 AM
	K. DRURY	\$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 NCT	WLD-150-01	342002	MW		6-9:50 PM	Λ
	M. TIZO		\$520.00	\$52.00	\$292.00	\$864.00
ОС	WLD-150-02	342005	MW		8-11:50 A	M
	D. PODKOWA		\$520.00	\$52.00	\$292.00	\$864.00

WLD-200 WELDER'S PRINT READING II, 3 CREDITS

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

DE WLD-200-01 342007 T 2-5:00 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

OC NCT WLD-210-01 342010 MW 1-4:50 PM
R. THOMAS \$520.00 \$52.00 \$292.00 \$864.00
Required: Student Petition.

WLD-211 ADVANCED SHIELDED METAL 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 Shielded Metal Arc Welding (SMAW) process. Advanced welding theory and procedures will also be included.

Prerequisites: WLD-111; or WLD-111A and WLD-111B

OC NCT	WLD-211-01	342012 TTH		6-9:50 PM	
	B. MULLIGAN	\$520.00	\$52.00	\$292.00	\$864.00

WLD-212 SHIELDED METAL ARC WELDING PIPE WELDING, 4

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

 WLD-212-01
 342014 MW
 1-4:50 PM

 R. THOMAS
 \$520.00
 \$52.00
 \$292.00
 \$864.00

 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

OC NCT WLD-213-01 342015 TTH 8-11:50 AM
D. BATES \$520.00 \$52.00 \$292.00 \$864.00

WLD-250 WELDING FABRICATION I BEGINNING PROJECT, 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

department first class VAR: Variable credit class

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

Course No Course Title, Credits

mondotoi	raidon		010.100	rotai
This course consists of lecture an fabrication techniques including b of material, job cost calculations, Students will be assigned beginni be responsible for all aspects of n completion.	lueprint re	eading,	layout, sketchi	ng, bills
	measuring	g, fitting	, cutting and w	velding.
	ing fabrica	ation pro	pjects. The stud	dent will

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

Crs Fe

Prerequisites: WLD-111, WLD-111A and WLD-111B, WLD-113, WLD-113A and WLD-113B, WLD-115, or WLD-115A and WLD-115B

OC NCT WLD-250-01 342017 TTH 1-4:50 PM B. MULLIGAN \$520.00 \$52.00 \$292.00 \$864.00

WELDING FABRICATION II INTERMEDIATE PROJECT, 4 WLD-251 **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

Course No Course Title, Credits Section No

OC NCT WLD-251-01 342021 TTH 1-4:50 PM B. MULLIGAN \$520.00 \$52.00 \$292.00 \$864.00

WELDING FABRICATION III ADVANCED PROJECT, 4 WLD-252

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

OC NCT 342024 TTH WI D-252-01 1-4:50 PM 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.

OC NCT	WLD-261-01	342026 M		8-11:50	AM
	R. THOMAS	•	\$26.00	\$146.00	\$432.00V
	Required: Stu				
OC NCT				1-4:50 PI	M
	R. THOMAS		\$26.00	\$146.00	\$432.00V
	Required: Stu	dent Petition.			
OC NCT	WLD-261-03	342033 M		6-9:50 PI	M
	J. PHELPS	\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stu	dent Petition.			
OC NCT	WLD-261-05	342045 T		8-11:50	AM
	R. THOMAS	\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stu	dent Petition.			
OC NCT	WLD-261-07	342035 T		6-9:50 PI	M
	J. PHELPS	\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stu	dent Petition.			
OC NCT	WLD-261-08	345139 T		10-11:59 12:01 -1:	PM
		W		12:01 -1:	50 AM
	K. DRURY	\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stu	dent Petition.			
OC NCT	WLD-261-09	342036 W		8-11:50	AM
	R. THOMAS	\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stu	dent Petition.			

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

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

\$280.00

	Section No Instructor	Crs Reg.	Days (M,T,V Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
OC NCT	WLD-261-10				1-4:50 PI	
	R. THOMAS Required: Stud			\$26.00	\$146.00	\$432.00V
OC NCT	WLD-261-11				6-9:50 PI	И
	J. PHELPS					\$432.00V
	Required: Stud			φ20.00	φ110.00	Ψ102.001
OC NCT	WLD-261-13				8-11:50 A	AM.
	R. THOMAS					\$432.00V
	Required: Stud		tion			•
OC NCT	WLD-261-14		TH		1-4:50 PI	И
	B. MULLIGAN		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud	lent Peti	tion.			
OC NCT	WLD-261-15	342039	TH		6-9:50 PM	И
	J. PHELPS		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud	lent Peti	tion.			
OC NCT	WLD-261-16	345142	TH		10-11:59	PM
			-		12:01-1:	
	K. DRURY			\$26.00	\$146.00	\$432.00V
	Required: Stud		tion.			
OC NCT	WLD-261-19				6-9:50 PI	
	M. TIZO			\$26.00	\$146.00	\$432.00V
	Required: Stud					
OC NCT	WLD-261-20				9-12:50 F	
	K. DRURY			\$26.00	\$146.00	\$432.00V
	Required: Stud					
OC NCT	WLD-261-21		_		2-5:50 PI	
	K. DRURY			\$26.00	\$146.00	\$432.00V
	Required: Stud		tion.			
OC NCT	WLD-261-23		SU	\$00.00	10-1:50 F	'M • 400 00\
	M. TIZO		\$260.00	\$26.00	\$146.00	\$432.00V
	Required: Stud	ient Petii	tion.			

WLD-280 WELDING TECHNOLOGY/CWE, 1-6 CREDITS (VAR)

Cooperative work experience in the welding trades. Worksite to be determined prior to registering for this class. Skills learned from welding classes will be applied while working at a job site. Goals for this class will be established with the company supervisor, instructor, and student. May be repeated for up to 9 credits. Required: Student Petition.

Corequisites: CWE-281

OC NCT WLD-280-01 342047 D. BATES \$780.00 \$78.00 \$45.00 \$903.00V Required: Student Petition. Corequisite: Take the following CWE-281-06.

XWI D-**AMERICAN WELDING SOCIETY (WLD) CERTIFICATION 1** 0001 **PLATE TEST, 0 CREDIT**

Welder certification in accordance with AWS D1.1 for one position for students enrolled in any CCC welding course.

XWLD-0001- 342112 TBA 01 B. MULLIGAN \$0.00 \$0.00 \$140.00 \$140.00 Required: Student Petition.

XWLD-**AMERICAN WELDING SOCIETY CERTIFICATION 2** PLATE OR 1 PIPE TEST, 0 CREDIT 0002

Welder certification in any two positions, in accordance with AWS D1.1 for students enrolled in any CCC welding course.

oc XWLD-0002- 342114 TBA B. MULLIGAN \$0.00 \$0.00 \$280.00 Required: Student Petition.

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

XWLD-0003 AMERICAN WELDING SOCIETY CERTIFICATION 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.

oc XWLD-0003- 342116 TBA 01

B. MULLIGAN \$0.00 \$0.00 \$25.00 \$25.00 Required: Student 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.

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

 OC NCT
 WS-101-01
 342164 TTH
 10-11:50 AM

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

 ONL NCT
 WS-101-02
 342165
 \$520.00
 \$52.00
 \$0.00
 \$572.00

World Languages

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	341251 MW		10-11:50 A	M
	A. ELLIS	\$520.00	\$52.00	\$10.00	\$582.00
	One-time text	tbook purchase for	ASL-101	& ASL-102.	
ОС	ASL-101-02	341255 MW		1-2:50 PM	
	A. ELLIS	\$520.00	\$52.00	\$10.00	\$582.00
	One-time text	tbook purchase for	ASL-101	& ASL-102.	
ONL	ASL-101-03	341258			
	A. ELLIS	\$520.00	\$52.00	\$10.00	\$582.00
	One-time text	tbook 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

ONL ASL-102-01 341260
A. ELLIS \$520.00 \$52.00 \$10.00 \$582.00
One-time textbook purchase for ASL-101 & ASL-102.

ASL-201 SECOND-YEAR AMERICAN SIGN LANGUAGE I, 4 CREDITS

Review and expansion of American Sign Language vocabulary and structure in order to perfect expressive skill. Emphasizes active communication in sign language.

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

Prerequisites: ASL-103 with a C or better

ASL-201-01 341261 TTH 10-11:50 AM
A. ELLIS \$520.00 \$52.00 \$10.00 \$582.00
One-time textbook purchase for ASL-103 & ASL-201.

FR-101 FIRST-YEAR FRENCH I. 4 CREDITS

First 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.

OC NCT FR-101-01 341573 TTH 10-11:50 AM E. HERNANDEZ \$520.00 \$52.00 \$10.00 \$582.00

FR-201 SECOND-YEAR FRENCH I, 4 CREDITS

The second year of academic French expands on first-year French in the review of essential grammar structures, the use of more advanced grammar, and cross-cultural discussion and analysis. Emphasis is on communication skills, stressing both oral proficiency and written expression.

Prerequisites: FR-103

OC NCT FR-201-01 341577 TTH 1-2:50 PM E. HERNANDEZ \$520.00 \$52.00 \$10.00 \$582.00

FR-211 INTERMEDIATE FRENCH CONVERSATION, 3 CREDITS

First term of a three-term series in intermediate development of speaking and listening proficiency through creative activities such as discussions of excerpts from contemporary French-language media, presentations, games, role-plays, debates, pair and group work. This course is ideally suited as a language elective or for personal enrichment. Materials, topics and level of difficulty will parallel work in FR-201.

Prerequisites: FR-103 with a C or better

 OC NCT
 FR-211-01
 341579 TTH
 1-2:20 PM

 E. HERNANDEZ
 \$390.00
 \$39.00
 \$10.00
 \$439.00

GER-101 FIRST-YEAR GERMAN I, 4 CREDITS

First 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.

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

OC NCT GER-101-01 341690 MW 1-2:50 PM
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 342016	TTH		10-11:50 A	M
	A. METHADZOVIC	\$520.00	\$52.00	\$10.00	\$582.00
OC NCT	SPN-101-02 342018	TTH		1-2:50 PM	
	A. METHADZOVIC	\$520.00	\$52.00	\$10.00	\$582.00
ONL NCT	SPN-101-03 342019)			
	E. HERNANDEZ	\$520.00	\$52.00	\$10.00	\$582.00
ONL NCT	SPN-101-04 345187	,			
	A. METHADZOVIC	\$520.00	\$52.00	\$10.00	\$582.00

Other Coding Translations: ESPAÑOL: Enseñado en español LCT: Low-Cost Text department first class NCT: No-Cost Text

VAR: Variable credit class

Course	Listing											20)25/FA
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
							OC HYB	WR-121Z-12	342075	Т		1-2:50 PM	
SPN-102	FIRST-YEAR	SPANIS	SH II, 4 C	REDITS				S. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
Second of	a three-term fo	undation	al, multin	nedia cou	rse for beg	inners.	OC HYB LCT	WR-121Z-13	342077	T		3-4:50 PM	
Initial empl	nasis is on spea	aking and	distening	g compret	nension, wi	th		S. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
secondary	emphasis on re	eading ar	nd writing	. Various	cultural the	emes are	OC HYB LCT	WR-121Z-14	342079	W		1-2:50 PM	
presented.								W. DAWKINS		\$520.00	\$52.00	\$19.00	\$591.00
Prerequisi	tes: SPN-101						HAR LCT	WR-121Z-15	342081	MW		1-2:50 PM	
•	nded Preregui	sites: W	RD-098	or placem	ent in WR-	121Z		J. PONS		\$520.00	\$52.00		\$591.00
ONL NCT	SPN-102-01	342020					HAR HYB	WR-121Z-16	342085			6-7:50 PM	
ONL NCT				ΦEO 00	# 10.00	¢ E00.00		M. SCHUMAC		\$520.00	\$52.00	\$19.00	\$591.00
	A. METHADZ	OVIC	ֆ520.0C	\$52.00	\$10.00	\$582.00	ONL LCT	WR-121Z-17	342088				
SPN-201	SECOND-YE	AD SDA	иісні л	CREDIT	2			M. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
			,				ONL LCT	WR-121Z-18	342090				
	ree-term interr	,						T. DODGE		\$520.00	\$52.00	\$19.00	\$591.00
	istening compr						ONL LCT	WR-121Z-19	342092				
	among Spanis		ing count	ries and t	etween the	e latter		T. DODGE		\$520.00	\$52.00	\$19.00	\$591.00
	ean-American o						ONL LCT	WR-121Z-20	342094				
Prerequisi	tes: SPN-103	or Studer	nt Petitior	1				T. DODGE		\$520.00	\$52.00	\$19.00	\$591.00
ONL NCT	SPN-201-01	342022	2				ONL LCT	WR-121Z-21	342095				
	V. SHORT			\$52.00	\$10.00	\$582.00		R. MURPHY		\$520.00	\$52.00	\$19.00	\$591.00
			•	,	•	•	ONL LCT	WR-121Z-22	342096				
Writing								R. DAVIS		\$520.00	\$52.00	\$19.00	\$591.00
							ONL LCT	WR-121Z-23	342098				
WD 404	WORKEL AG	E WOITH		EDITO				R. DAVIS		\$520.00	\$52.00	\$19.00	\$591.00
WR-101	WORKPLAC		•				ONL LCT	WR-121Z-24	342099				
Students in	n this course lea	arn and p	ractice b	asic mode	es of techn	ical		R. DAVIS		\$520.00	\$52.00	\$19.00	\$591.00
writing, inc	luding summar	ies, proce	ess analy	sis, instru	ictions, and	l reports.	ONL	WR-121Z-25	342100				

\$591.00

\$591.00

WR-121Z COMPOSITION I, 4 CREDITS

L. ORMANDY

WR-101-02

OC HYB LCT WR-101-01

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.

C. ZIMMERLY-BECK \$520.00 \$52.00 \$19.00

\$520.00 \$52.00 \$19.00

Prerequisites: WRD-098 or placement in WR-101 or WR-121Z

342048

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

OC LCT	WR-121Z-01	342049	MW		10-11:50 A	м
	E. WILDER-TA	\CK	\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-121Z-02	342054	MW		1-2:50 PM	
	J. DAVIS		\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-121Z-03	342056	MW		3-4:50 PM	
	TBA		\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-121Z-04	342058	TTH		10-11:50 A	AM
	S. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-121Z-05	342060	TTH		10-11:50 A	AM
	J. BEREZHNO	Υ	\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-121Z-06	342062	TTH		1-2:50 PM	
	J. BEREZHNO					
OC LCT	WR-121Z-07	342065	TTH		3-4:50 PM	
	M. SCHUMAC					
OC HYB LCT	WR-121Z-08	342066	M		10-11:50 A	M
	C. BURNELL		\$520.00	\$52.00	\$19.00	\$591.00
	WR-121Z-09					
	C. BURNELL		\$520.00	\$52.00	\$19.00	\$591.00
	WR-121Z-10					
	M. SCHUMAC	HER	\$520.00	\$52.00	\$19.00	\$591.00
OC HYB	WR-121Z-11	342073	T		10-11:50 A	AM .
	TBA				\$19.00	

WR-122Z COMPOSITION II, 4 CREDITS

B. EHLERS

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.

\$520.00 \$52.00 \$19.00

\$591.00

Prerequisites: WR-121Z with a C or better

OC LCT	WR-122Z-01	342109	MW		10-11:50 A	M
	J. BRYANT-TF	RERISE	\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-122Z-02	342113	TTH		10-11:50 A	M
	R. MURPHY		\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WR-122Z-03	342115	TTH		1-2:50 PM	
	M. SCHUMAC	HER	\$520.00	\$52.00	\$19.00	\$591.00
OC HYB	WR-122Z-04	342117	M		1-2:50 PM	
	S. NIZIOLEK		\$520.00	\$52.00	\$19.00	\$591.00
OC HYB	WR-122Z-05	342118	Т		1-2:50 PM	
	R. MURPHY		\$520.00	\$52.00	\$19.00	\$591.00
OC HYB LCT	WR-122Z-06	342120	W		1-2:50 PM	
	S. NIZIOLEK		\$520.00	\$52.00	\$19.00	\$591.00
ONL	WR-122Z-07	342121				
	M. WARREN		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-122Z-08	342122				
	R. MURPHY		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-122Z-09	342124				
	S. PESZNECK	ŒR	\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-122Z-10	342125				
	C. BURNELL		\$520.00	\$52.00	\$19.00	\$591.00
WD 404E4	- FOODITUDA	DE ENO	4.VOO DE		INIIVEDOIT	4 DIO
W H-124F	S FSCRITURA I	UE ENS	ムYUS DF	·NIVEI	UNIVERSII	AKIL)

EN ESPAÑOL, 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

Section No Instructor	Crs Reg. Da Tui	ys (M,T,W,TH.F ition Fee		Total		Section No Instructor	Crs Reg.	Days (M,T,) Tuition	W,TH.F,S,SU) Fee	Time Crs. Fee	Total
Este curso involucra a lo	s estudiantes	en el esti	udio v la práctic	a del	ONL LCT	WR-227Z-04	342135				
pensamiento crítico, la le						J. MCALPINE		\$520.00	\$52.00	\$19.00	\$591.00
análisis y la composición					ONL	WR-227Z-05	342136				
géneros. Los estudiantes			,	•		J. MCALPINE		\$520.00	\$52.00	\$19.00	\$591.00
flexible y colaborativa en	sus procesos	s de escrit	tura e indagació	ón.	ONL	WR-227Z-06	347218				
Required: Estudiantes de	eben leer y e	scribir a n	ivel universitario	o, en		TBA		\$520.00	\$52.00	\$19.00	\$591.00
Español, antes de comer	zar el curso										

Prerequisites: WRD-098ES o tener un nivel de evaluación de WR-124ES

Course No Course Title, Credits

Recommended Prerequisite or Corequisite: FYE-101ES

REM LCT ESPAÑOL	WR-124ES-01 342128	TH	5-6:00 PM	
	A. DEFREESE Meets remotely 10/2, 1 completed online.	\$520.00 0/30, & 1	 	\$591.00 s
	completed offillie.			

WR-127 SCHOLARSHIP ESSAY WRITING, 1 CREDIT

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	342129)			
	S. PESZNECK	KER	\$0.00	\$0.00	\$19.00	\$19.00
	Meets: 9/29-1	0/31.				

INTRODUCTION TO APA STYLE & DOCUMENTATION, 1 WR-128 **CREDIT**

Introduces American Psychological Association (APA) style and documentation, including document format, in-text citation, and References page. Includes style and documentation for narrative and academic papers. Students will work with provided sources. Recommended for pre-nursing and nursing students, allied health students, and STEM and social science students.

Prerequisites: WR-121Z with a C or better

ONL LCT	WR-128-01 342	130			
	S. PESZNECKER	\$0.00	\$0.00	\$19.00	\$19.00

INTRODUCTION TO WRITING CREATIVELY, 4 CREDITS WR-140

Guides students through the discussion and practice of writing creatively in many genres and formats, primarily poetry, fiction, drama, and creative non-fiction in a workshop format. May also include screenwriting, digital story telling, film, and performance genres.

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

ос нув LCT WR-140-01	342131 TTH		3-4:50 PM		
R DAVIS	\$520.00	\$52.00	\$19.00	\$591.00	

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	342132	TTH		10-11:50 A	M
	L. ORMANDY		\$520.00	\$52.00	\$19.00	\$591.00
OC HYB LCT	WR-227Z-02	342133	T		3-4:50 PM	
	L. ORMANDY		\$520.00	\$52.00	\$19.00	\$591.00
ONL LCT	WR-227Z-03	342134				
	A WARREN		\$520.00	\$52.00	\$19.00	\$591.00

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department first class VAR: Variable credit class

FICTION WRITING I, 4 CREDITS WR-241

Course No Course Title, Credits

Introduction to the theory, art and creative practice of fiction writing, with specific emphasis on short prose forms.

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

OC HYB LCT WR-241-01		1-2:50 PM		
N. ROSEVEAR	R \$520.00	\$52.00	\$19.00	\$591.00

WR-246 **PUBLISHING LITERATURE: READING AND REVISING** 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 acquire and revise manuscripts for publication in 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

ос	WR-246-01	345320 TTH		10-11:50 AM			
	M. WARREN	\$520.00	\$52.00	\$60.00	\$632.00		

WR-270 **CREATIVE NONFICTION WRITING II: FOOD WRITING, 4**

Learn to write uniquely and powerfully about food, from recipes to reviews to personal narrative. Bring the pen to the plate and vice versa, enriching your appreciation for sustenance and sentences at the same

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

ONL LCT	WR-270-01	342139			
	N. ROSEVEA	R \$520.00	\$52.00	\$19.00	\$591.00

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	342140 MW	10-11:50 AM			
	W. DAWKINS	\$520.00	\$52.00	\$19.00	\$591.00	
OC LCT	WRD-090-02	342142 TTH		1-2:50 PM		
	A. WARREN	\$520.00	\$52.00	\$19.00	\$591.00	
ONL LCT	WRD-090-03	342144				
	A WARREN	\$520.00	\$52 00	\$19.00	\$591 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	342146	MW		1-2:50 PM	1
	E. WILDER-TA	ACK	\$520.00	\$52.00	\$19.00	\$591.00
OC LCT	WRD-098-02	342148	TTH		10-11:50	AM
	J. PONS		\$520.00	\$52.00	\$19.00	\$591.00

Course No Course Title, Credits

Section No

Instructor

Crs Reg.

Time

Crs. Fee

Total

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

Fee

Tuition

Course No	Course Title, Credits						
	Section No Instructor	Crs Reg.	Days (M,T,W,TH.F,S,SU)		Time		
	instructor		Tuition	Fee	Crs. Fee	Total	
ONL LCT	WRD-098-03	342150)				
	M. WARREN		\$520.00	\$52.00	\$19.00	\$591.00	
ONL LCT	WRD-098-04	342152	2				
	M. WARREN		\$520.00	\$52.00	\$19.00	\$591.00	
ONL LCT	WRD-098-05	347219)				
	M. WARREN		\$520.00	\$52.00	\$19.00	\$591.00	
HAR LCT	WRD-098-15	342158 MW 10-11:			10-11:50	0 AM	
	J. PONS		\$520.00	\$52.00	\$19.00	\$591.00	

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

informales.

WRD-

Prerequisites: Tener un nivel de evaluación de WRD-098ES

WRD-098ES- 342162 ESPAÑOL

01

A. DEFREESE

\$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 342169 W 12-1:50 PM P. LICHEN \$0.00 \$0.00 \$0.00 \$0.00 This workshop will be held via Zoom.

Zoology

GENERAL ZOOLOGY, 4 CREDITS Z-201

A lecture and lab course offering cellular and molecular basis of animal life including genetics, embryology, evolution, systematics, and protozoan diversity.

Prerequisites: MTH-095 or placement in MTH-111Z

Corequisites: Z-201L

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

Z-201-01 342119 MW 10:30 -11:50 AM J. BOWN \$520.00 \$52.00 \$55.00 \$627.00

GENERAL ZOOLOGY LAB, 0 CREDIT Z-201L

Lab course for Z-201 Corequisites: Z-201

OC Z-201L-01 342123 W 1-3:50 PM J. BOWN \$0.00 \$0.00 \$0.00 \$0.00

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COMMUNITY EDUCATION

Please register directly through the Community Education partner hosting the class you would like to attend.

Back this fall by popular demand!

The Northstar Basic Computer Skills courses are returning to the Clackamas Community College Harmony campus this fall! Community Education is excited to bring back this popular offering, along with a brand-new class designed to help learners take the next step in their digital literacy knowledge.

Internet Basics is a beginner-level course for those who want to build confidence and use the internet more effectively. Topics include how to connect to the internet, navigate websites and internet privacy. It's a great next step for anyone who has completed the Basic Computer Skills course or wants to improve their digital confidence. Curriculum is taught over nine weeks through interactive lessons.

Basic Computer Skills will be available in both English and Spanish, with Internet Basics offered in English.

Registration is expected to open in August and will be available through the Clackamas Community College online registration system.

All classes will be held at the Harmony campus.

For more information before registration opens, contact Community Education at 503-594-6705 or communityeducation@clackamas.edu.

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



Senior Discount

Seniors 62 years of age or older qualify for discounted tuition for many Community Education classes. Proof of age is required.