

# Schedule



*Winter 2025*

# INDEX

## General Information

Academic Regulations . . . . .	90
Adding & Dropping Classes . . . . .	90
Bookstore . . . . .	93
Campus Map . . . . .	back page
Clackamas in Your Community . . . . .	12
CCC Harmony Community Campus . . . . .	12
College Closure Information . . . . .	93
Community Education . . . . .	89
Dates to Remember/Calendar . . . . .	3
Faculty Advisors . . . . .	94
Final Exam Schedule . . . . .	3
Financial Aid . . . . .	5
Getting Started . . . . .	4
Graduation . . . . .	7
Hours . . . . .	
CCC Oregon City Campus . . . . .	92
CCC Harmony Community Campus . . . . .	11
CCC Wilsonville Campus . . . . .	11
Online Learning . . . . .	10
Payment Options . . . . .	5
Registration Information . . . . .	6-7
Services for Students . . . . .	96
Si usted habla español . . . . .	8
Tuition & Fees . . . . .	5
Veterans Education & Training Center . . . . .	9
Web Registration Tips . . . . .	4
Where to Call . . . . .	95
Workforce Services . . . . .	9

## Course Listings . . . . . 15-88

Adult Basic Education . . . . .	15
American Sign Language (see <i>World Languages</i> ) . . . . .	
Anatomy & Physiology . . . . .	21
Anthropology . . . . .	15
Arboriculture (see <i>Horticulture</i> ) . . . . .	
Art . . . . .	15
Astronomy . . . . .	75
Auto Body/Collision Repair and Refinishing . . . . .	17
Automotive Service Technology . . . . .	18
Biology . . . . .	19
Business Administration . . . . .	22
Business Technology . . . . .	25
Chemistry . . . . .	26
College and Career Guidance . . . . .	28
Communication Studies . . . . .	29
Computer Science . . . . .	30
Computer-Aided Drafting Technology . . . . .	31
Cooperative Work Experience . . . . .	32
Criminal Justice/Corrections . . . . .	32
Dental Assistant . . . . .	33

Digital Media Communications . . . . .	34
Early Childhood Education . . . . .	36
Economics . . . . .	35
Education . . . . .	36
Educational Focus Area . . . . .	37
Electronics & Microelectronics . . . . .	38
Emergency Medical Technology . . . . .	38
Engineering . . . . .	39
English for Speakers of Other Languages . . . . .	39
English Literature/Composition . . . . .	43
Environmental Science . . . . .	43
Ethnic Studies . . . . .	44
Family Studies . . . . .	44
Fire Science (Wildland) . . . . .	44
First Year Experience . . . . .	45
Food & Nutrition . . . . .	45
French (see <i>World Languages</i> ) . . . . .	
Gardening (see <i>Horticulture</i> ) . . . . .	
GED-General Education Development . . . . .	46
General Science . . . . .	46
Geographic Information Systems (GIS) . . . . .	47
Geography . . . . .	47
Geology . . . . .	47
German (see <i>World Languages</i> ) . . . . .	
Gerontology . . . . .	48
Greenhouse (see <i>Horticulture</i> ) . . . . .	
Health . . . . .	48
Health and Fitness . . . . .	49
Health Professions . . . . .	49
High School Diploma . . . . .	50
History . . . . .	50
Horticulture/Arboriculture/Landscape/Organic Farming . . . . .	51
Human Services . . . . .	53
Humanities . . . . .	55
Industrial Maintenance Technology . . . . .	55
Journalism . . . . .	55
Landscape (see <i>Horticulture</i> ) . . . . .	
Library . . . . .	56
Machine Tool Technology . . . . .	56
Manufacturing Technology . . . . .	56
Mathematics . . . . .	57
Media Studies (see <i>Digital Multimedia Communications</i> ) . . . . .	
Medical Assistant . . . . .	60
Medical Billing and Coding . . . . .	61
Microbiology . . . . .	22
Microelectronics . . . . .	38
Music . . . . .	62
Music: Individual Lessons - Non-Music Majors . . . . .	66
Music: Individual Lessons - Year 1 . . . . .	67
Music: Individual Lessons - Year 2 . . . . .	69

Nursing . . . . .	72
Nursery (see <i>Horticulture</i> ) . . . . .	
Nutrition . . . . .	45
Organic Farming (see <i>Horticulture</i> ) . . . . .	
Philosophy . . . . .	74
Phlebotomy . . . . .	74
Physical Education . . . . .	74
Physics . . . . .	75
Political Science . . . . .	76
Psychology . . . . .	76
Religion . . . . .	77
Renewable Energy Technology . . . . .	77
Sign Language (see <i>World Languages</i> ) . . . . .	
Small Business Development Center . . . . .	78
Social Science . . . . .	79
Sociology . . . . .	79
Spanish (see <i>World Languages</i> ) . . . . .	
Speech (see <i>Communication Studies</i> ) . . . . .	
Statistics . . . . .	80
Theatre Arts . . . . .	80
Water and Environment Technology . . . . .	81
Welding Technology . . . . .	82
Women's Studies . . . . .	85
World Languages . . . . .	85
Writing . . . . .	86
Zoology . . . . .	88

## Registration Resources . . . . . 6-7

Registration resources and helpful information

## Financial Matters . . . . . 5

Tuition and fees, payment options, financial aid, scholarships and more

## Si Habla Español . . . . . 8

Para más información sobre clases de inglés y otras materias servicios, ver página 38

## Course Listings . . . . . 15-88

Credit and non-credit courses offered this term

## Faculty Advisors . . . . . 94

## Where to Call . . . . . 95

## 3 Convenient Campuses

### Oregon City

19600 Molalla Ave.  
Oregon City, OR 97045

### Wilsonville

29353 SW Town Center Loop E.  
Wilsonville, OR 97070

### Harmony

7738 SE Harmony Road  
Milwaukie, OR 97222

## Non-Discrimination

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



# IMPORTANT DATES TO REMEMBER

<b>CLASS START/END DATES + FINANCIAL DEADLINES *</b>	<b>WINTER TERM 2025</b>	<b>SPRING TERM 2025</b>	<b>SUMMER TERM 2025</b>
<b>Financial aid:</b> All required CCC financial aid documentation due to ensure funding for term	Sept. 23	Jan. 6	March 31
<b>Registration begins</b>	Nov. 12	Feb. 24	May 12
<b>Classes begin</b>	Jan. 6	March 31	June 23
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)	Jan. 19	April 13	July 6
Last day to drop classes and receive a "W" automatically	Feb. 28	May 23	August 15
Last day to submit petition for graduation	Feb. 14	April 9	August 1
Last day to change grading option	Mar. 14	June 6	August 29
Account balance due: \$100 non-payment fee applied if not paid	Feb. 14	April 9	August 4
<b>Final week</b>	March 17-21	June 9-13	see syllabus
<b>Last day of term</b>	March 22	June 14	Sept. 6
Commencement: GED & Adult High School Diploma	June 13, 2025		
Commencement: College Certificate & Degree	June 13, 2025		

\* 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

<b>WINTER TERM:</b> Jan. 1 New Years Day, Jan. 20 MLK Jr Day, Feb. 17 Presidents Day
<b>SPRING TERM:</b> May 26 Memorial Day
<b>SUMMER TERM:</b> June 19 Juneteenth July 3 Independence 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.



# New Students

If you are a new student with no previous CCC credits, follow these 6 steps to get started. For more information visit [www.clackamas.edu/gettingstarted](http://www.clackamas.edu/gettingstarted).

**1 APPLY TO CCC.** Visit [www.clackamas.edu/apply](http://www.clackamas.edu/apply). Once you receive your welcome email, log in to Navigate to review your to-do list, which will walk you through your next steps. \*TIP: Log in to your myClackamas account frequently—it is CCC’s primary means of communicating with students!

**2 APPLY FOR FINANCIAL AID AND SCHOLARSHIPS** (IF APPLICABLE). U.S. Citizens and permanent residents: Apply at [www.fafsa.gov](http://www.fafsa.gov). Undocumented Oregon residents: Complete the ORSAA at [www.oregonstudentaid.gov](http://www.oregonstudentaid.gov). The ORSAA is for undocumented Oregon students, including students who have DACA (Deferred Action for Childhood Arrivals) status. Apply for CCC Foundation Scholarships at [www.clackamas.edu/scholarships](http://www.clackamas.edu/scholarships).

**3 SUBMIT PREVIOUS COLLEGE TRANSCRIPTS** (IF APPLICABLE). CCC Degree/Certificate Seeking: If you are transferring to CCC from a regionally-accredited U.S. institution, or if you have AP, CLEP, IB or DSST scores, submit your official transcripts to Graduation Services. Non-Degree/ Certificate Seeking: If a course requisite waiver is needed, submit unofficial transcripts to Advising & Career Services. Visit [www.clackamas.edu/transferring-to-ccc](http://www.clackamas.edu/transferring-to-ccc) for details.

**4 DETERMINE PLACEMENT.** Math and writing placements must be completed prior to registration. Visit [www.clackamas.edu/pass](http://www.clackamas.edu/pass) for steps to complete your placement assessment.

**5 COMPLETE NEW STUDENT ORIENTATION.** Available online via your myClackamas account, your orientation will familiarize you with CCC’s resources, degree and certificate programs, student life, and more. Orientation must be completed before registering for classes.

**6 REGISTER FOR CLASSES.** For help choosing and registering for your classes, visit our [Advising page](#) to schedule an appointment.



**MORE QUESTIONS?** Our Admissions Center is here to help you get started at CCC. Call: 503-594-3284. Email: [welcome@clackamas.edu](mailto:welcome@clackamas.edu)



# Returning Students

**Returning CCC student? Start here.**

If you have taken classes or workshops at CCC within the last two years there’s no need to reapply for admission! You’re ready to register for classes online through myClackamas.

**1 NOTIFY ENROLLMENT SERVICES** if you’ve changed your major/program of study, address or phone number by emailing [registration@clackamas.edu](mailto:registration@clackamas.edu) or visiting the Enrollment Services Center at any of our three campuses.

**2 CLEAR OUTSTANDING DEBT** or prior term balances at any CCC Enrollment Services Center.

**3 REVIEW YOUR EDUCATION PLAN** with an academic advisor.

**4 REGISTER FOR CLASSES** online through myClackamas — <http://my.clackamas.edu>. You can also register by mail, fax or in person at any of our three campuses. Registration forms are available at [www.clackamas.edu/forms](http://www.clackamas.edu/forms).

**5 PAY YOUR TUITION AND FEES** online or in person. Tuition rates, payment and important dates can be found on the following page.

# How much will I owe? Tuition and Fees

Tuition and fee rates are subject to change without prior notice.



TUITION TYPE	RATE	COMMENT
In-state	\$126 per credit	Applies to U.S. citizens or immigrants with a residency status (90 days at that address prior to the start of the term) in Oregon, Idaho, California, Nevada and Washington.
Out-of-state	\$305 per credit	Applies to international students and students residing in states which do not border Oregon.
FEE TYPE	RATE	COMMENT
General Student and Technology Fee	\$13 per credit	Supports many CCC student activities including athletics, child care, instructional technology and student government.
College Services Fee	\$30 per term (non-refundable)	Non-refundable. Applies to credit courses only. The College Services Fee covers the cost of various services including graduation, parking, shuttle, testing and transcripts.
Non-Payment Fee	\$100	Applied after the sixth week of the term if a balance is owed to the college.
Non-Refundable Third-Party Billing Fee	\$15	Assessed on any student account where CCC is billing an outside business/organization for tuition and charges.
Returned Bank Item	\$25 each item	Fee for checks returned for nonsufficient funds.
Course Fees	Varies	Certain classes have special fees in addition to tuition and the general fee. These are listed in the "Course Fee" column in the credit course listing in the Schedule of Classes.

## Credit for prior learning

TYPE	RATE
Challenge Exam	\$50 flat fee plus \$25 per credit
Portfolio	\$50 flat fee plus ½ of the current tuition per credit
Other (Non-Portfolio, Non-Challenge Exam)	\$50 flat fee plus ½ of the current tuition per credit

## How do I pay?

**Pay Now:** Payment is due at the time of registration. You can pay in person with cash or a local, bank-imprinted check, for the amount due. You can make credit card payments in person or online using Visa, MasterCard, Discover or American Express.

**Deferred Payment:** Account balances must be paid by Feb. 14 or you will be charged a non-payment fee of \$100 and a hold will be put on your account that will prevent future registration.

## How do I get a refund?

CCC provides full refunds if you drop your classes on time. We do not provide partial refunds. To receive a full refund YOU must drop your classes:

- During the first two weeks of the class for classes meeting five weeks or more
- During the first week of the class for classes meeting three-four weeks
- Before the class begins for classes meeting two weeks or less

## Financial Aid: How do I apply?

1. Apply to CCC.
2. Complete your FAFSA or ORSAA application:
  - U.S. Citizens and permanent residents: Apply at [www.fafsa.gov](http://www.fafsa.gov).
  - Undocumented Oregon residents: Complete the ORSAA at [www.oregonstudentaid.gov/fafsa-orsaa](http://www.oregonstudentaid.gov/fafsa-orsaa). The ORSAA is for undocumented Oregon students, including students who have DACA (Deferred Action for Childhood Arrivals) status.
3. Check your email and Self-Service in myClackamas.

### Financial Aid questions?

Email us at [finaid@clackamas.edu](mailto:finaid@clackamas.edu)



### Want your refund deposited directly into your bank account?

Click on Payment Information in myClackamas then myProfile. Enter your bank account information. This includes financial aid and emergency loan checks. To view the complete refund policy, please go to [www.clackamas.edu](http://www.clackamas.edu).

# Money, registration and myClackamas – WHAT YOU NEED TO KNOW!

## College Services Fee

A non-refundable \$30 per term fee will be applied to students taking credit courses. The College Services Fee covers the cost of various services including graduation, parking, shuttle, testing and transcripts. The fee is applied at the time of registration for students registering for one or more credits.

## Refunds

If you stop going to class and you don't officially drop the classes from your schedule, you will be held academically and financially responsible.

See p.7 for important information about Financial Aid and refund deadlines.

## myClackamas

myClackamas is your portal to all things CCC. This secure site allows you to check your CCC assigned email, register and pay for classes, access financial aid documents and more.

After you are admitted to CCC, an email with your new CCC student email address and instructions for logging into myClackamas will be sent to the secondary email account (gmail, yahoo, etc.) you provided on your admission application.

If you applied for admission and:

- Don't know your CCC email address, go to myClackamas (<https://my.clackamas.edu>) and choose "Forgot your email address?"
- Don't know your password, go to myClackamas (<https://my.clackamas.edu>) and choose "Forgot Password?" Follow the directions provided.
- Still need help with this process, go to myClackamas (<https://my.clackamas.edu>) and click the help button or call 503-594-6074.

If you are a current CCC student and:

- Don't have a CCC email address:
  - Contact Enrollment Services at [registration@clackamas.edu](mailto:registration@clackamas.edu) and provide a secondary email account (gmail, yahoo, etc.). An email with instructions for logging into myClackamas will be sent to that account.
- Are experiencing problems logging into your myClackamas account:
  - Contact Enrollment Services at 503-594-6074.

**NOTE:** Your CCC email account is the primary method of communication between you and the college. Be sure to check your email at least twice a week through myClackamas.

## Registration

Registration is based on the number of completed credits at CCC (credits completed at other colleges are not counted for registration purposes). Courses in progress during the current term do not count toward this total. Registration is done online (myClackamas), in person or by mail/fax. Please visit <https://www.clackamas.edu/admissions-financial-aid/getting-started> to make sure you have completed the getting started steps to be able to register.

Registration times:

CREDITS	DATE	TIME
Veterans	Tuesday, Nov. 12, 2024	7 a.m.
80+	Tuesday, Nov. 12, 2024	8 a.m.
60-79	Tuesday, Nov. 12, 2024	Noon
40-59	Wednesday, Nov. 13, 2024	8 a.m.
30-39	Wednesday, Nov. 13, 2024	Noon
20-29	Thursday, Nov. 14, 2024	8 a.m.
6-19	Thursday, Nov. 14, 2024	Noon
1-5	Friday, Nov. 15, 2024	8 a.m.
Open Registration	Friday, Nov. 15, 2024	Noon

Note: If you miss your registration window, you are able to register any time after that.

## 2024-25 CHANGES:

- **In-state tuition:** Increased by \$5 resulting in a \$126 per credit rate
- **Out-of-state tuition:** Increased by \$12 resulting in a \$305 per credit rate

### Don't forget!

- Visit [www.clackamas.edu/im\\_registered\\_whats\\_next.aspx](https://www.clackamas.edu/im_registered_whats_next.aspx) for **your next steps after registration!**
- Get your **student ID card** at any of our three campuses.
- **Veterans and Military Dependents:** Visit [www.clackamas.edu/Veterans](https://www.clackamas.edu/Veterans) for VA educational benefits information.
- Information about **dates, policies and academic regulations** is available at [www.clackamas.edu](https://www.clackamas.edu) or the Enrollment Services Center at any of our three campuses.

# REGISTRATION AND IMPORTANT INFORMATION

**Academic Calendar** – Clackamas Community College operates on the quarter system. Each of our terms are eleven weeks in length with many courses being offered in a condensed and/or standard term format. Be sure to check the *Schedule of Classes* for individual class meeting times.

**Corequisite** – A corequisite is a second, related course in which a student must be simultaneously enrolled in addition to the primary course.

**Course Prerequisites** – Some CCC courses have prerequisite requirements. You will be required to meet these prior to enrolling.

**Grades** – Grade options generally include A, B, C, D, F, P/N (Pass, No Pass) or X (Audit). Be sure to select the grade option you want at the time of registration by selecting: Register Pass/Fail for P/N or Audit for all classes you wish to audit.

**Registration and Transcript Holds** – Students who have not met their financial obligations to the college may have restrictions placed on their ability to register for future terms and/or have official transcripts released.

**Ordering Transcripts** – Official transcripts (record of your classes, grades earned and degrees awarded) are available upon request. Unofficial transcripts are available via myClackamas. Order transcripts online via [www.parchment.com](http://www.parchment.com). For more information, call our transcript request line at 503-594-6074.

**Student Rights & Responsibilities** – When you enroll at Clackamas Community College you assume certain rights and responsibilities as a student that relate to your educational record, academic performance and individual conduct. These are stated in the Student Handbook—[www.clackamas.edu/student-rights](http://www.clackamas.edu/student-rights).

**Student Photo ID Cards** – Cards are available at the Enrollment Services Center and are necessary for library checkout, access to computer/tutorial labs and admission to college events. Picture ID and current enrollment are required. There is a \$10 replacement fee for stolen or lost ID cards.



**Cougar Alert!**

## GRADUATION

### Apply to Graduate

In order to be evaluated for a certificate or degree from CCC, students must fill out a “Graduation Application” and submit it to Graduation Services at the Oregon City campus.

Please refer to graduation information via the web for filing deadlines. Questions regarding this process may be directed to 503-594-6651 or [gradservices@clackamas.edu](mailto:gradservices@clackamas.edu).

### Graduation Ceremonies

The graduation ceremony which includes GED/ Adult High School Diploma students and certificate and degree graduation students will be held Friday evening, June 13, 2025. Information will be available at [www.clackamas.edu/graduation](http://www.clackamas.edu/graduation) in early spring. For questions related to the ceremony, contact [GradCeremony@clackamas.edu](mailto:GradCeremony@clackamas.edu).

# SI USTED HABLA ESPAÑOL

## Información en español

Visite el sitio de web [www.clackamas.edu/espanol](http://www.clackamas.edu/espanol) para más información.

¡Bienvenido a Clackamas Community College! Clackamas ofrece una gran variedad de oportunidades para todos. Ofrecemos más de 90 programas de carreras técnicas, programas para estudiantes internacionales, clases de inglés, y oportunidades para recibir su certificado de preparatoria GED.

En Clackamas Community College, creemos que todos tienen derecho a desarrollar todo su potencial. Les damos la bienvenida a todos, sin importar quiénes sean o de dónde son. Sus contribuciones son las que hacen de Clackamas un colegio comunitario. Estamos contentos de que esta aquí.

## Clases de ESOL (Inglés para hablantes de otras lenguas)

- Las clases de ESOL son para todos que desean mejorar sus habilidades de inglés
- Ofrecemos clases de todos niveles
- Los precios varían entre \$30 y \$70 por clase por un trimestre
- Estudiantes deben tener al menos 16 años de edad

Para más información y para registrarse, comuníquese con Cecilia Bracale al 503-594-3234.

## GED en español

Instrucción del desarrollo de habilidades básicas (GED) ofrecida en español. Se aplica un examen de diagnóstico para determinar las necesidades académicas del alumno.

Inscripciones abiertas todo el tiempo, se ofrece en el colegio principal, Harmony Center y Canby.

Para más información y para registrarse para la clase, llame a Camilo Sanchez al 503-594-3029

## Ayuda Financiera

Ayuda financiera está disponible para ayudarle alcanzar sus metas educativas. La Oficina de Ayuda Financiera y Becas de CCC brinda acceso a becas, trabajo-estudiantil y préstamos para ayudarle cubrir los costos de la escuela.

Para más información, llame al 503-594-6082

## Servicios de Workforce

WorkSource Clackamas ofrece servicios gratuitos que pueden ayudar con:

- Actualizar tus habilidades
- Mejorar tus técnicas en la búsqueda de empleo
- Acceso a empleos en alta demanda y crecimiento

Para más información, llame al 503-594-6246

## Para tomar clases de crédito

Si quiere tomar clases para recibir crédito, un consejero de admisiones le podrá ayudar en tomar los pasos adecuados y necesarios para registrarse en Clackamas Community College.

¡Nuestro Centro de Admisiones está aquí para ayudarle a comenzar! Llame al 503-594-3284



# VETERANS SERVICES

## Veterans Education and Training Center

CCC Oregon City campus, Community Center Room 100  
503-594-3438

[vetinfo@clackamas.edu](mailto:vetinfo@clackamas.edu)

[www.clackamas.edu/veterans](http://www.clackamas.edu/veterans)

The Veteran Education and Training Center is a service of Clackamas Community College dedicated in gratitude to providing hospitality, advocacy, and the highest quality of service to all Veterans. The VET Center's staff goal is to support every Veteran's transition from warrior to student to graduate and finally to working professional. The VET Center will ensure every individual Veteran's unique needs are met. Clackamas Community College recognizes and honors the Military Veterans of our community and their families. Please allow us the honor and privilege to serve you!

The college provides a wide range of services for Veterans which include:

- Information about benefits
- Education and career information
- Assistance with getting started and being successful
- Referrals to additional resources
- Assistance with necessary paperwork
- VA enrollment and progress certification
- Student Veterans Club
- Veterans Events
- Transition Assistance Workshops
- Veterans Book Share
- Veterans Text Book Grants
- Military Families Scholarship Endowment
- VA Work study

The regulations and requirements associated with providing and receiving the variety of veteran benefits are numerous and complex. We can help you understand your benefits and the process of accessing them. Please come see us soon and often to be informed and ensure you remain in compliance.

# WORKFORCE SERVICES

**Skill up for jobs of the future! WorkSource Clackamas is preparing Oregonians for jobs in health care, manufacturing, high tech, green technologies and more!**



## Job Search and Training Help

**Are you looking for a job?**

**Do you need to upgrade your skills to get a better job?**

**Interested in working and learning on the job?**

WorkSource Clackamas has no-cost career advancement services which can:

- Help you update your skills
- Sharpen your job search expertise
- Access jobs in high-growth careers

**Take the next step!** Contact our Career Specialists to learn more about our incredible career workshops and services. Contact us at 503-594-6246 or visit [www.clackamasworkforce.org](http://www.clackamasworkforce.org).

These programs are funded in whole or in part through the U.S. Department of Labor and the State of Oregon through Clackamas Workforce Partnership.

## Consult the experts!

### NO-COST CAREER WORKSHOPS AT WORKSOURCE CLACKAMAS

506 High Street, Oregon City 97045

Our Career Specialists are experts in job search strategies. Join a workshop to practice innovative techniques to find employers, develop a resume, improve networking, interview better and improve your job search.

Visit [www.clackamasworkforce.org](http://www.clackamasworkforce.org) or call to learn more about the NO COST workshops. Call 971-673-6400. Reservations required.

### *Building skills and growing businesses!*

Sponsored by the Clackamas Workforce Partnership  
[www.clackamasworkforce.org](http://www.clackamasworkforce.org).

WorkSource Oregon is an equal opportunity employer/program.  
WorkSource Oregon es un programa/empleador que respeta la igualdad de oportunidades.

# ONLINE LEARNING

In many ways, learning online is similar to learning in a classroom. Your instructor will provide quality readings, exercises, assignments, and quizzes. And just like an in-person class, what you get out of it is a direct result of how much you put into it. So... expect to spend the same amount of time and energy on an online class as you would in an in-person course.

Clackamas Community College (CCC) uses Moodle for its online course delivery. So... you'll see a Moodle 101 orientation course under My Courses in the **red** bar when you log in. This self-guided orientation will prepare you for online learning and make sure you have the skills and resources you'll need to succeed in your online course. It also includes student essentials, like tips for successful time management and home workspaces.

## New to Online Learning?

The Online Learning & Educational Technology (OLET) Team has collected the following resources on our website ([online.clackamas.edu](http://online.clackamas.edu)) to assist you:

- CCC [Schedule of Classes](#)
- [Are you prepared to take an online class?](#) Q&A
- [Recommended technology and software](#)
- [Assistive technology](#)

## Get Started in Online Learning

Before you begin, we recommend that you visit [online.clackamas.edu](http://online.clackamas.edu) to review the answers to these questions:

- [How do I find my course?](#)
- [How can I learn more about Moodle, access my classes, and be prepared for online learning?](#)
- [Where do I find Moodle Help?](#)
- [How do I participate synchronously via a Zoom meeting in my course?](#)

### Still need help?

During regular business hours, visit the [Cougar Connect Tech Help Desk](#), call 503-594-6632, or email [cougarconnect@clackamas.edu](mailto:cougarconnect@clackamas.edu).

For after hours, weekend, or bilingual support (English/ Español), visit our [extended support team](#) (find them at [online.clackamas.edu](http://online.clackamas.edu) > Students > Moodle Help).

## ONLINE COURSES

Online (ONL) courses do not have specific days or times for participation but some instructors **may schedule optional virtual meetings** and office hours. These courses have been intentionally developed to meet online course design standards. Online courses are identified in the *Schedule of Classes* by the term ONLINE and also by the icon **ONL**.

## REMOTE COURSES

Remote (REM) courses are held online at **specific days and times** and require students to use online tools, such as Zoom, in order to participate. Check the *Schedule of Classes* for the specific meeting days and times. Remote courses are identified in the schedule by the term REMOTE and also by the icon **REM**.

## HYBRID COURSES

Hybrid (HYB) courses are completed both in-person and online. For example, students might attend a weekly lecture on-campus, and then take part in a class discussion online. The amount of time spent on-campus varies between courses. Check the *Schedule of Classes* for specific meeting days and times, as well as campus location information. Hybrid courses are identified in the schedule by the term HYBRID and also the icon **HYB**.

## ALL COURSES

Additionally, you'll want to check the *Schedule of Classes* (or with your instructor) about required software, special course materials, course requirements, or prerequisites.



# CLACKAMAS IN YOUR COMMUNITY

## Credit and non-credit courses offered at Clackamas Community College sites near you!

Along with the Oregon City campus, Clackamas Community College has two additional campuses to serve the needs of students in other parts of the district. The college's Harmony campus is a full service campus in the North Clackamas area (near Clackamas Town Center). The Wilsonville campus is full service as well, and is easily accessible from I-5. In addition, there are many CCC courses available in other communities throughout the district.

### CCC at Harmony Community Campus

7738 SE Harmony Road, Milwaukie, OR 97222

#### HARMONY COMMUNITY CAMPUS HOURS

Hours are subject to change. Please call 503-594-0620 or check [www.clackamas.edu/hours](http://www.clackamas.edu/hours) for updated information.

Campus is closed Jan. 1, 20, and Feb. 17.

##### Building Hours

Jan. 2-Mar. 22 M-F 7 a.m.-10 p.m.

##### Student Services

Jan. 6-17 M-Th 9 a.m.-6:30 p.m.

F Remote Services

Jan. 21-Mar. 22 M-Th 9 a.m.-5:45 p.m.

F Remote Services

##### Advising

Jan. 6-10 M-W 10 a.m.-6:15 p.m.

Th 10 a.m.-4:30 p.m.

F Remote Services

Jan. 13-Mar. 22 M Remote Services

T-Th 10 a.m.-4:30 p.m.

F Remote Services

##### Testing & Assessment

Jan. 2-Mar. 22 TBD

##### ITS

Jan. 2-Mar. 22 TBD

##### Tutoring Services

See posted hours on web, [www.clackamas.edu/tutoring](http://www.clackamas.edu/tutoring)

### CCC Wilsonville Campus

29353 SW Town Center Loop East, Wilsonville, OR 97070

#### WILSONVILLE HOURS

Hours are subject to change. Please call 503-594-0940 or check [www.clackamas.edu/hours](http://www.clackamas.edu/hours) for updated information.

Campus is closed Sept. 2, Nov. 11, 28, and 29.

##### Building Hours

Jan. 2-Mar. 22 M-Th 7 a.m.-10 p.m.

##### Student Services

By appointment only. Please call 503-594-0940 or email [wilsonvilleinfo@clackamas.edu](mailto:wilsonvilleinfo@clackamas.edu)

Jan. 2-Mar. 22 M-Th 8:30 a.m.-6:30 p.m.

##### Advising Center

Advising by appointment. Please call 503-594-0959 or e-mail [apprenticeship.advising@clackamas.edu](mailto:apprenticeship.advising@clackamas.edu)

Jan. 2-Mar. 22 T 10 a.m.-7 p.m.

MWThF by appointment

##### Testing & Assessment Center

Testing by appointment. Please call 503-594-0940 or e-mail [testing.wilsonville@clackamas.edu](mailto:testing.wilsonville@clackamas.edu)

Jan. 6-Mar. 22 M-Th 9 a.m.-5 p.m.



**Cougar Alert!**

**To register for these classes,  
see Credit course listing for time,  
date, course registration number.**

#### Where to find food

**Vending Machines**, located in the Harmony East lobby and on Harmony West 2nd floor, are stocked with hot & cold drinks, snacks and a rotating assortment of breakfast items, sandwiches, burritos, hummus & veggie trays in the chilled cooler. There are microwaves available for student use in Harmony East on the 1st and 2nd floors.

# CLACKAMAS IN YOUR COMMUNITY

Credit and non-credit courses offered at Clackamas Community College sites near you Winter 2025

## Harmony Community Campus

Complete course information available in **Credit Course Listings**. Indicated with: **HAR**

### Biology

BI-112	GENERAL BIOLOGY FOR HEALTH SCIENCES	4 CREDITS
BI-112L	GENERAL BIOLOGY FOR HEALTH SCIENCES LAB	0 CREDIT
BI-120	INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY	4 CREDITS
BI-120L	INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY LAB	0 CREDIT
BI-232	HUMAN ANATOMY & PHYSIOLOGY II	4 CREDITS
BI-232L	HUMAN ANATOMY & PHYSIOLOGY II LAB	0 CREDIT

### Chemistry

CH-112	CHEMISTRY FOR HEALTH SCIENCES	4 CREDITS
CH-112L	CHEMISTRY FOR HEALTH SCIENCES LAB	0 CREDIT

### College and Career Guidance

HD-153	MANAGING CONFLICT IN YOUR LIFE	1 CREDIT
HD-154	BUILDING SELF-CONFIDENCE	1 CREDIT

### Communication Studies

COMM-111Z	PUBLIC SPEAKING	4 CREDITS
COMM-218Z	INTERPERSONAL COMMUNICATION	4 CREDITS

### Criminal Justice

CJA-101	CRIMINOLOGY	4 CREDITS
CJA-120	INTRODUCTION TO COURTS	3 CREDITS
CJA-134	CORRECTIONAL INSTITUTIONS	3 CREDITS
CJA-170	CAREERS IN CRIMINAL JUSTICE	3 CREDITS
CJA-201	JUVENILE DELINQUENCY	4 CREDITS
CJA-203	CRISIS INTERVENTION	3 CREDITS
CJA-222	PROCEDURAL LAW	3 CREDITS
CJA-280	CRIMINAL JUSTICE/CORRECTIONS/CWE	2-6 CREDITS
CJA-281	CRIMINAL JUSTICE/CORRECTIONS/CWE	2-6 CREDITS

### Dental Assistant

DA-102	DENTAL RADIOLOGY II	2 CREDITS
DA-102L	DENTAL RADIOLOGY II LAB	1 CREDIT
DA-105	CLINICAL PROCEDURES II	2 CREDITS
DA-105L	CLINICAL PROCEDURES II LAB	1 CREDIT
DA-108	DENTAL MATERIALS II	2 CREDITS
DA-108L	DENTAL MATERIALS II LAB	1 CREDIT
DA-120	CLINICAL PRACTICUM II	5 CREDITS

### Economics

EC-201	PRINCIPLES OF ECONOMICS: MICRO	4 CREDITS
--------	--------------------------------	-----------

### Emergency Medical Technology

EMT-101	EMERGENCY MEDICAL TECHNICIAN PART I	6 CREDITS
EMT-102	EMERGENCY MEDICAL TECHNICIAN PART II	6 CREDITS
EMT-105	INTRODUCTION TO EMERGENCY MEDICAL SERVICES	3 CREDITS

### English for Speakers of Other Languages

ESOL-012	BEGINNING ESOL	0 CREDIT
ESOL-015	BEGINNING READING, WRITING, AND GRAMMAR	0 CREDIT
ESOL-020	UPPER BEGINNING GRAMMAR	0 CREDIT
ESOL-022	UPPER BEGINNING CONVERSATION	0 CREDIT
ESOL-024	UPPER BEGINNING READING & WRITING	0 CREDIT
ESOL-030	INTERMEDIATE GRAMMAR A	0 CREDIT
ESOL-031	INTERMEDIATE GRAMMAR B	0 CREDIT
ESOL-033	INTERMEDIATE CONVERSATION 2	0 CREDIT
ESOL-034	INTERMEDIATE READING & WRITING	0 CREDIT
ESOL-043	UPPER INTERMEDIATE CONVERSATION 2	0 CREDIT
ESOL-044	UPPER INTERMEDIATE READING & WRITING	0 CREDIT
ESOL-046	EDITING FOR BETTER WRITING	0 CREDIT
ESOL-050	ADVANCED GRAMMAR A	0 CREDIT
ESOL-053	ADVANCED COMMUNICATION SKILLS 2	0 CREDIT
ESOL-082	ASSESS/EVALUATE NEW STUDENTS	0 CREDIT
ESOL-083	EDUCATIONAL PLANNING FOR RETURNING STUDENTS	0 CREDIT

### Environmental Science

ESR-172	INTRODUCTION TO CLIMATE CHANGE	4 CREDITS
ESR-172L	INTRODUCTION TO CLIMATE CHANGE LAB	0 CREDIT

### Food & Nutrition

FN-110	PERSONAL NUTRITION	3 CREDITS
FN-225	NUTRITION	4 CREDITS

**General Development Education (GED)**

GED-011	GED IN ESPAÑOL	0 CREDIT
GED-015	GED PREPARATION	0 CREDIT
GED-049	LATINO GED & LIFE SKILLS	0 CREDIT

**Geology**

G-102	GENERAL GEOLOGY	4 CREDITS
G-102L	GENERAL GEOLOGY LAB	0 CREDIT
G-202	GENERAL GEOLOGY	4 CREDITS
G-202L	GENERAL GEOLOGY LAB	0 CREDIT

**Gerontology**

GRN-182	AGING AND THE BODY	3 CREDITS
GRN-280	GERONTOLOGY/CWE	2-6 CREDITS (VAR)

**Health**

HE-163	BODY & DRUGS I: INTRODUCTION TO ABUSE & ADDICTION	3 CREDITS
--------	---	-----------

**Health Professions**

HP-100	HEALTHCARE PROVIDER BLS/CPR, FIRST AID/BLOODBORNE PATHOGENS	1 CREDIT
HP-110	MEDICAL TERMINOLOGY	4 CREDITS
HP-130	COMMUNICATIONS AND ETHICAL PRACTICES IN HEALTHCARE SETTINGS	2 CREDITS

**High School Diploma (AHSD)**

ASE-042	JOB SKILLS COMPETENCY LAB	0.5 CREDIT
XASE-0001	BASIC ESSENTIAL SKILLS SUPPORT	0 CREDIT

**Mathematics**

MTH-020	FUNDAMENTALS OF ARITHMETIC II	4 CREDITS
MTH-060	ALGEBRA I	4 CREDITS
MTH-065	ALGEBRA II	4 CREDITS
MTH-095	ALGEBRA III	4 CREDITS
MTH-111Z	PRECALCULUS I: FUNCTIONS	4 CREDITS
MTH-112Z	PRECALCULUS II: TRIGONOMETRY	4 CREDITS
MTH-211	FUNDAMENTALS OF ELEMENTARY MATH I	4 CREDITS

**Medical Assistant**

MA-156	PHLEBOTOMY I	1 CREDIT
MA-156L	PHLEBOTOMY I LAB	1 CREDIT
MA-160	INSURANCE & HEALTH INFORMATION MANAGEMENT	3 CREDITS
MA-162	EXAMINATION ROOM TECHNIQUES II	3 CREDITS
MA-162L	EXAMINATION ROOM TECHNIQUES LAB II	1 CREDIT
MA-164	CLINICAL LAB PROCEDURES I	1 CREDIT
MA-164L	CLINICAL LAB PROCEDURES I LAB	1 CREDIT
MA-168	SEMINAR II	2 CREDITS

**Medical Billing and Coding**

MBC-115	INSURANCE BILLING AND REIMBURSEMENT I	4 CREDITS
MBC-120	INTRODUCTION TO MEDICAL CODING	3 CREDITS
MBC-135	LAW AND ETHICS FOR HEALTHCARE PROFESSIONS	3 CREDITS

**Nursing**

NRS-111	FOUNDATIONS OF NURSING IN CHRONIC ILLNESS I	3 CREDITS
NRS-111C	FOUNDATIONS OF NURSING IN CHRONIC ILLNESS I CLINICAL	3 CREDITS
NRS-221	CHRONIC ILLNESS II AND END OF LIFE	4 CREDITS
NRS-221C	CHRONIC ILLNESS II AND END OF LIFE CLINICAL	5 CREDITS
NRS-231	CLINICAL PHARMACOLOGY II	3 CREDITS
NRS-232	PATHOPHYSIOLOGICAL PROCESSES I	3 CREDITS
NUR-100	NURSING ASSISTANT I	6.5 CREDITS
NUR-100C	NURSING ASSISTANT I CLINICAL	0 CREDIT

**Philosophy**

PHL-103	CRITICAL REASONING	4 CREDITS
---------	--------------------	-----------

**Phlebotomy**

PHB-125	PROFESSIONALISM IN HEALTHCARE	1 CREDIT
PHB-130	PHLEBOTOMY PRACTICUM	5 CREDITS

**Psychology**

PSY-101	HUMAN RELATIONS	3 CREDITS
PSY-215	INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY	4 CREDITS
PSY-219	INTRODUCTION TO ABNORMAL PSYCHOLOGY	4 CREDITS

**Religion**

R-211	HISTORY OF THE OLD TESTAMENT	4 CREDITS
-------	------------------------------	-----------

**Small Business Development Center**

SBM-011	PROPERTY MANAGEMENT PRE-LICENSE	0 CREDIT
SBM-020	SMALL BUSINESS GREENHOUSE	0 CREDIT
SBM-021	SMALL BUSINESS MANAGEMENT I	0 CREDIT
SBM-021B	SMALL BUSINESS MANAGEMENT I	0 CREDIT
SBM-024B	SUCCESSION PLANNING	0 CREDIT
SBM-028B	SMALL BUSINESS MANAGEMENT I FOR CONSTRUCTION CONTRACTORS	0 CREDIT
SBM-029B	SMALL BUSINESS MANAGEMENT II FOR CONSTRUCTION CONTRACTORS	0 CREDIT
SBM-030	BUSINESS RECOVERY SMALL BUSINESS MANAGEMENT I	0 CREDIT
XSBM-0003	GOING INTO BUSINESS	0 CREDIT
XSBM-0011	QUICKBOOKS PRO: PART I	0 CREDIT

**Writing**

---

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

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

# COURSE LISTING

Credit and non-credit Courses offered Winter 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.

oc	<b>ABE-012-07</b>	<b>334768</b>	<b>MTWTH</b>	<b>10-11:50 AM</b>		
	D. GREEN	\$0.00	\$0.00	\$55.00	\$55.00	

Required: Student Petition.

## Anthropology

### ANT-101 PHYSICAL 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 forensic science.

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

oc LCT	<b>ANT-101-01</b>	<b>334777</b>	<b>TTH</b>	<b>10-11:50 AM</b>		
	K. BACA	\$504.00	\$52.00	\$0.00	\$556.00	
	Online textbook provided first day of class.					
ONL LCT	<b>ANT-101-02</b>	<b>338057</b>				
	K. BACA	\$504.00	\$52.00	\$0.00	\$556.00	
	Online textbook provided first day of class.					

### 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

ONL LCT	<b>ANT-102-01</b>	<b>334783</b>				
	K. BACA	\$504.00	\$52.00	\$0.00	\$556.00	
	Online textbook provided first day of class.					

### 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

oc LCT	<b>ANT-103-01</b>	<b>334787</b>	<b>TTH</b>	<b>1-2:50 PM</b>		
	K. BACA	\$504.00	\$52.00	\$0.00	\$556.00	
	Online textbook provided first day of class.					

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

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

**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

**Corequisites:** CWE-281

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

oc	<b>ANT-280-01</b>	<b>334793</b>				
	K. BACA	\$756.00	\$78.00	\$45.00	\$879.00V	
	Required: Student Petition. Corequisite: Take the following CWE-281-06.					

## Art

### ART-100A JEWELRY MAKING TECHNIQUES, 1 CREDIT

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

oc LCT	<b>ART-100A-01</b>	<b>334939</b>	<b>T</b>	<b>9-11:50 AM</b>		
	J. IJIMA	\$126.00	\$13.00	\$125.00	\$264.00	
	Focus: Ring Making. Meets: 1/14-2/25.					
oc LCT	<b>ART-100A-02</b>	<b>334941</b>	<b>TH</b>	<b>2-4:50 PM</b>		
	J. IJIMA	\$126.00	\$13.00	\$125.00	\$264.00	
	Focus: Jewelry Casting Meets: 1/16-2/27.					
oc	<b>ART-100A-03</b>	<b>334942</b>	<b>TH</b>	<b>6-8:50 PM</b>		
	J. IJIMA	\$126.00	\$13.00	\$125.00	\$264.00	
	Focus: Basic Jewelry Making Techniques. Meets: 1/16-2/27.					

### ART-101 ART APPRECIATION, 3 CREDITS

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

ONL LCT	<b>ART-101-01</b>	<b>334943</b>				
	C. SIEGFRIED	\$378.00	\$39.00	\$6.00	\$423.00	

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

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

oc LCT	<b>ART-115-01</b>	<b>334946</b>	<b>MW</b>	<b>1-3:50 PM</b>		
	C. SIEGFRIED	\$504.00	\$52.00	\$80.00	\$636.00	
oc LCT	<b>ART-115-02</b>	<b>334951</b>	<b>TTH</b>	<b>1-3:50 PM</b>		
	R. KALMAN	\$504.00	\$52.00	\$80.00	\$636.00	

### ART-119 TIME-BASED ART, 4 CREDITS

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

ONL LCT	<b>ART-119-01</b>	<b>334952</b>				
	K. SIMMONS	\$504.00	\$52.00	\$80.00	\$636.00	

### ART-121 DIGITAL TOOLS, 2 CREDITS

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

An introductory course exploring digital systems used by artists and designers to create, see, process and communicate in a quickly changing world. Students will use phone and computer technologies to research ideas and create work related to the self, the world, spaces and places. They will also use technology to develop a personal aesthetic and art practice. Digital experience related to art practice and the world around us will be considered. Projects and critiques will introduce students to cultural themes and principles of design.

OC HYB LCT	<b>ART-121-01</b>	<b>334953 T</b>			<b>9-10:50 AM</b>	
	D. OLSEN		\$252.00	\$26.00	\$40.00	\$318.00

**ART-131 INTRODUCTION TO DRAWING, 4 CREDITS**

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 LCT	<b>ART-131-01</b>	<b>334956</b>				
	A. SCHROER		\$504.00	\$52.00	\$80.00	\$636.00
	Pick up supplies Week 1: Tue, 1/9, 11:00-1:00pm.					

ONL LCT	<b>ART-131-02</b>	<b>334957</b>				
	A. SCHROER		\$504.00	\$52.00	\$80.00	\$636.00
	Pick up supplies Week 1: Tue, 1/9, 11:00-1:00pm.					

OC	<b>ART-131-03</b>	<b>334958 MW</b>			<b>9-11:50 AM</b>	
	R. KALMAN		\$504.00	\$52.00	\$80.00	\$636.00

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

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

**Recommended Prerequisites:** WR-121Z

ONL LCT	<b>ART-205-01</b>	<b>334507</b>				
	J. SIMONE		\$504.00	\$52.00	\$21.00	\$577.00

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

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

**Prerequisites:** ART-131 or Student Petition

OC LCT	<b>ART-232-01</b>	<b>334970 MW</b>			<b>1-3:50 PM</b>	
	R. KALMAN		\$504.00	\$52.00	\$80.00	\$636.00

**ART-250 CERAMICS/BEGINNING, 4 CREDITS**

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

OC LCT	<b>ART-250-01</b>	<b>334975 TTH</b>			<b>1-3:50 PM</b>	
	N. BRODNICKI		\$504.00	\$52.00	\$79.00	\$635.00

OC LCT	<b>ART-250-02</b>	<b>334980 TTH</b>			<b>6-8:50 PM</b>	
	N. WARRENS		\$504.00	\$52.00	\$79.00	\$635.00

**ART-252 CERAMICS/WHEEL-THROWING 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, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
		Instructor		Tuition Fee	Crs. Fee	

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

OC LCT	<b>ART-252-01</b>	<b>334984 TTH</b>			<b>9-11:50 AM</b>	
	N. BRODNICKI		\$504.00	\$52.00	\$79.00	\$635.00

**ART-253 CERAMICS/INTERMEDIATE, 4 CREDITS**

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

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

OC LCT	<b>ART-253-01</b>	<b>334988 TTH</b>			<b>1-3:50 PM</b>	
	N. BRODNICKI		\$504.00	\$52.00	\$79.00	\$635.00

OC LCT	<b>ART-253-02</b>	<b>334991 TTH</b>			<b>6-8:50 PM</b>	
	N. WARRENS		\$504.00	\$52.00	\$79.00	\$635.00

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

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

**Prerequisites:** ART-252 or Student Petition

OC LCT	<b>ART-255-01</b>	<b>334993 TTH</b>			<b>9-11:50 AM</b>	
	N. BRODNICKI		\$504.00	\$52.00	\$79.00	\$635.00

**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

ONL LCT	<b>ART-262-01</b>	<b>334998</b>				
	S. ELIOT		\$504.00	\$52.00	\$80.00	\$636.00

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

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

**Prerequisites:** ART-131 or Student Petition

OC LCT	<b>ART-282-01</b>	<b>335005 TTH</b>			<b>9-11:50 AM</b>	
	A. SCHROER		\$504.00	\$52.00	\$95.00	\$651.00

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

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

**Prerequisites:** ART-282 or Student Petition

OC LCT	<b>ART-285-01</b>	<b>335010 TTH</b>			<b>9-11:50 AM</b>	
	A. SCHROER		\$504.00	\$52.00	\$95.00	\$651.00



Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>ART-292</b>	<b>SCULPTURE (FIGURE EMPHASIS), 4 CREDITS</b>					
Explores the human form using traditional and contemporary sculpture techniques and concepts. Use of clay, armatures and other sculpture media will be explored. Sculptural design, concepts and craftsmanship will be explored through projects, lectures, and critiques. Students will work from direct observation and source materials (nude and abstract). The human figure and other life forms in the history of sculpture will be examined.						
OC LCT	<b>ART-292-01</b>	<b>335012 MW</b>		<b>1-3:50 PM</b>		
	K. SIMMONS	\$504.00	\$52.00	\$80.00		\$636.00

**Auto Body/Collision Repair and Refinishing**

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

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-101</b>	<b>AUTO RESTORATION, 3 CREDITS</b>					
Designed for students interested in auto body repair and painting their own vehicles. Includes dent removal, panel replacement, welding and painting. May be repeated for up to 12 credits.						
oc	<b>AB-101-01</b>	<b>334817 S</b>		<b>8-7:50 PM</b>		
	A. DANIEK	\$378.00	\$39.00	\$175.00		\$592.00
	Meets: 1/11, 1/25, 2/8, 2/22, & 3/8.					
oc	<b>AB-101-02</b>	<b>334824 S</b>		<b>8-7:50 PM</b>		
	P. NESBITT	\$378.00	\$39.00	\$175.00		\$592.00
	Meets: 1/18, 2/1, 2/15, 3/1, & 3/15.					

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-105</b>	<b>STREET ROD CONSTRUCTION TECHNIQUES, 3 CREDITS</b>					
In this course, students will learn panel forming, welding, basic body work and repair of individual projects. Includes shop safety, chemical hazard safety, proper and safe use of tools, basic metal work and finishing, and paint preparation and application.						
oc	<b>AB-105-01</b>	<b>334825 THF</b>		<b>6:30 -9:20 PM</b>		
	F. DAVIS	\$378.00	\$39.00	\$175.00		\$592.00

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-112</b>	<b>COLLISION REPAIR WELDING I, 2 CREDITS</b>					
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	<b>AB-112-01</b>	<b>334828 F</b>		<b>8-12:20 PM</b>		
	C. DAHLSTRUD-RIVERA	\$252.00	\$26.00	\$170.00		\$448.00

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-113</b>	<b>COLLISION REPAIR I/NONSTRUCTURAL, 6 CREDITS</b>					
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.						
<b>Prerequisite or Corequisite:</b> AB-112 and ABR-125						
oc	<b>AB-113-01</b>	<b>334832 MT</b>		<b>7-12:20 PM</b>		
	M. GRIFFITH	\$756.00	\$78.00	\$337.00		\$1,171.00
	M. HOUSE					

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-123</b>	<b>COLLISION REPAIR WELDING II, 2 CREDITS</b>					
Training in light gauge metal repair: Gas Metal Arc Welding (GMAW), Plasma Arc Cutting (PAC), Squeeze Type Resistance Spot Welding (STRSW), and other advanced welding techniques specific to collision damage repair.						
<b>Prerequisites:</b> AB-112						

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
oc	<b>AB-123-01</b>	<b>334835 F</b>		<b>8-12:20 PM</b>		
	C. DAHLSTRUD-RIVERA	\$252.00	\$26.00	\$158.00		\$436.00
<b>AB-133</b>	<b>COLLISION REPAIR II/STRUCTURAL, 6 CREDITS</b>					
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.						
<b>Prerequisites:</b> AB-113						

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
oc	<b>AB-133-01</b>	<b>334838 MT</b>		<b>7-12:20 PM</b>		
	M. GRIFFITH	\$756.00	\$78.00	\$337.00		\$1,171.00
	M. HOUSE					

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-150</b>	<b>COLLISION REPAIR COMPUTERIZED ESTIMATING - AUDATEX, 2 CREDITS</b>					
Provides detailed instruction in the use of modern computerized estimating systems in the collision repair field. Focus is on Audatex software.						
<b>Prerequisites:</b> AB-149						

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
oc	<b>AB-150-01</b>	<b>334842 TTH</b>		<b>1:30 -3:20 PM</b>		
	A. YAGER-ROUNDS	\$252.00	\$26.00	\$154.00		\$432.00

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-222</b>	<b>COLLISION REPAIR III/ADVANCED STRUCTURAL, 6 CREDITS</b>					
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.						
<b>Prerequisites:</b> AB-133						

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
oc	<b>AB-222-01</b>	<b>334845 MT</b>		<b>7-12:20 PM</b>		
	M. GRIFFITH	\$756.00	\$78.00	\$337.00		\$1,171.00
	M. HOUSE					

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-224</b>	<b>COLLISION REPAIR IV/ADVANCED STRUCTURAL, 6 CREDITS</b>					
Advanced frame and Unibody repair procedures. Electronic measurement and dimensioning, repair documentation, brakes, suspension, and alignment as they relate to collision repair.						
<b>Prerequisites:</b> AB-222						

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
oc	<b>AB-224-01</b>	<b>334848 MT</b>		<b>7-12:20 PM</b>		
	M. GRIFFITH	\$756.00	\$78.00	\$337.00		\$1,171.00
	M. HOUSE					

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-226</b>	<b>COLLISION REPAIR V/ADVANCED STRUCTURAL, 6 CREDITS</b>					
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.						
<b>Prerequisites:</b> AB-224						

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
oc	<b>AB-226-01</b>	<b>334850 MT</b>		<b>7-12:20 PM</b>		
	M. GRIFFITH	\$756.00	\$78.00	\$337.00		\$1,171.00
	M. HOUSE					

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>AB-235</b>	<b>COLLISION REPAIR WELDING III, 2 CREDITS</b>					
Aluminum welding for collision damage repair. Gas Metal Arc Welding (GMAW) and Gas Tungsten Arc Welding (GTAW) processes are learned, along with related weld techniques and equipment/safety procedures.						
<b>Prerequisites:</b> AB-123						

Course No	Course Title, Credits	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Section No	Instructor	Tuition	Fee	Crs. Fee	
oc	<b>AB-235-01</b> 334855 F C. DAHLSTRUD- RIVERA	\$252.00	\$26.00	\$170.00	\$448.00
				<b>8-12:20 PM</b>	

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

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

**Corequisites:** CWE-281

oc	<b>AB-280-01</b> 334858 M. HOUSE	\$756.00	\$78.00	\$45.00	\$879.00V

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	<b>ABR-125-01</b> 334865 WTH M. GRIFFITH M. HOUSE	\$756.00	\$78.00	\$337.00	\$1,171.00

**ABR-127 COLLISION REPAIR/REFINISHING II, 6 CREDITS**

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

**Prerequisites:** ABR-125

oc	<b>ABR-127-01</b> 334870 WTH M. GRIFFITH M. HOUSE	\$756.00	\$78.00	\$337.00	\$1,171.00

**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

oc	<b>ABR-129-01</b> 334873 WTH M. GRIFFITH M. HOUSE	\$756.00	\$78.00	\$337.00	\$1,171.00

**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	<b>ABR-225-01</b> 334875 WTH M. GRIFFITH M. HOUSE	\$756.00	\$78.00	\$337.00	\$1,171.00

**ABR-227 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	<b>ABR-227-01</b> 334877 WTH M. GRIFFITH M. HOUSE	\$756.00	\$78.00	\$337.00	\$1,171.00

**Automotive Service 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

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

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

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

**AM-100 AUTOMOTIVE FUNDAMENTALS, 4 CREDITS**

An introductory automotive service class intended to provide fundamental knowledge and basic experience about automobiles. The course covers automotive systems, preventive maintenance and performing basic repairs. Also covered in the course is SP2 safety and pollution prevention training, communication skills, tool identification and general automotive maintenance and repair.

oc	<b>AM-100-01</b> 334882 MTWTH L. BLAHUTA	\$504.00	\$52.00	\$114.00	\$670.00
oc	<b>AM-100-02</b> 339522 MTWTH L. BLAHUTA	\$504.00	\$52.00	\$114.00	\$670.00
oc	<b>AM-100-02A</b> 339551 MTWTH L. BLAHUTA	\$504.00	\$52.00	\$114.00	\$670.00

Required: Student Petition. CTE Pathways Section. For more information contact HS connections 503-594-3161.

**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	<b>AM-101-01</b> 334895 MTWTHF N. ROBERTS	\$252.00	\$26.00	\$5.00	\$283.00

Meets: 1/6-1/10.

**AM-106 FIX YOUR OWN CAR, 2 CREDITS**

A do-it-yourself course for students who want to work on their own cars. Includes: oil change, lubrication, fluid checks, brakes, cooling system, electrical system, safety, and other quick services. May be repeated for up to 12 credits.

oc	<b>AM-106-01</b> 334906 S T. SHOCKLEY	\$252.00	\$26.00	\$63.00	\$341.00

Meets: 1/18, 2/1, 2/15, 3/1, & 3/15.

**AM-118 SMALL ENGINE REPAIR, 4 CREDITS**

This course is designed to provide an overview of basic small engine maintenance, operation and repair. It covers safety, small engine theory, electrical systems, and troubleshooting. Classroom instruction covering theory of operation, 2 cycle and 4 cycle designs and applications, combined with hands-on live projects provides the student the opportunity to learn basic principles of small engine operation, including outdoor equipment, motorcycles, and A.T.V.'s.

oc	<b>AM-118-01</b> 334918 THF T. CARLSON	\$504.00	\$52.00	\$121.00	\$677.00
oc	<b>AM-118-02</b> 334919 MTWTH L. BLAHUTA	\$504.00	\$52.00	\$121.00	\$677.00

**AM-131 SUSPENSION SYSTEMS, 5 CREDITS**

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

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

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

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

oc	<b>AM-131-01</b>	<b>334923</b>	<b>MTWTH</b>		<b>1-5:50 PM</b>	
	W. VAN RIPER	\$630.00	\$65.00	\$211.00	\$906.00	
	Meets: 1/13-2/13.					
oc	<b>AM-131-02</b>	<b>334924</b>	<b>MTWTH</b>		<b>1-5:50 PM</b>	
	W. VAN RIPER	\$630.00	\$65.00	\$211.00	\$906.00	
	Meets: 2/17-3/20.					

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

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

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

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

oc	<b>AM-133-01</b>	<b>334925</b>	<b>MTWTH</b>		<b>1-5:50 PM</b>	
	J. LEUCK	\$630.00	\$65.00	\$211.00	\$906.00	
	Meets: 1/13-2/13.					
oc	<b>AM-133-02</b>	<b>334927</b>	<b>MTWTH</b>		<b>1-5:50 PM</b>	
	J. LEUCK	\$630.00	\$65.00	\$211.00	\$906.00	
	Meets: 2/17-3/20.					

**AM-242 ENGINE PERFORMANCE II, 5 CREDITS**

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

**Prerequisites:** AM-142

oc	<b>AM-242-01</b>	<b>334929</b>	<b>MTWTH</b>		<b>7-11:50 AM</b>	
	N. ROBERTS	\$630.00	\$65.00	\$211.00	\$906.00	
	Meets: 1/6-2/6.					
oc	<b>AM-242-02</b>	<b>337985</b>	<b>MTWTH</b>		<b>7-11:50 AM</b>	
	N. ROBERTS	\$630.00	\$65.00	\$211.00	\$906.00	
	Meets: 2/10-3/13.					

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

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

**Prerequisites:** AM-129

oc	<b>AM-245-01</b>	<b>337986</b>	<b>MTWTH</b>		<b>7-11:50 AM</b>	
	D. BLACKMON	\$630.00	\$65.00	\$174.00	\$869.00	
	Meets: 1/6-2/6.					
oc	<b>AM-245-02</b>	<b>334935</b>	<b>MTWTH</b>		<b>7-11:50 AM</b>	
	D. BLACKMON	\$630.00	\$65.00	\$174.00	\$869.00	
	Meets: 2/10-3/13.					

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	

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

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

**Corequisites:** CWE-281

oc	<b>AM-280-01</b>	<b>334936</b>				
	N. ROBERTS	\$756.00	\$78.00	\$45.00	\$879.00V	
	Required: Student Petition. Corequisite: Take the following CWE-281-06.					

**Biology**

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

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

**Corequisites:** BI-101L

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

oc	<b>BI-101-01</b>	<b>335015</b>	<b>MW</b>		<b>9-10:20 AM</b>	
	E. DEBEY	\$504.00	\$52.00	\$55.00	\$611.00	
	This section has an in-person lab. Corequisite: Take the following BI-101L-01.					
ONL	<b>BI-101-40</b>	<b>335019</b>				
	E. DEBEY	\$504.00	\$52.00	\$55.00	\$611.00	
	Corequisite: Take the following BI-101L-40.					
ONL	<b>BI-101-41</b>	<b>335022</b>				
	M. ANDURI-FLYNN	\$504.00	\$52.00	\$55.00	\$611.00	
	Corequisite: Take the following BI-101L-41.					

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

Lab course for BI-101

**Corequisites:** BI-101

oc	<b>BI-101L-01</b>	<b>335023</b>	<b>MW</b>		<b>10:30 -11:50 AM</b>	
	E. DEBEY	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following BI-101-01.					
ONL	<b>BI-101L-40</b>	<b>335027</b>				
	E. DEBEY	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following BI-101-40.					
ONL	<b>BI-101L-41</b>	<b>335029</b>				
	M. ANDURI-FLYNN	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following BI-101-41.					

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

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

oc	<b>BI-102-01</b>	<b>335032</b>	<b>MW</b>		<b>1-2:20 PM</b>	
	E. DEBEY	\$504.00	\$52.00	\$55.00	\$611.00	
	Corequisite: Take 1 of the following BI-102L-01, BI-102L-02, BI-102L-03.					

Course No	Course Title, Credits	Section No	Instructor	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
OC	<b>BI-102-02 335037 TTH</b> S. SOLL Corequisite: Take 1 of the following BI-102L-02, BI-102L-01, BI-102L-03.					\$504.00	\$52.00	9:20 -10:40 AM	\$55.00	\$611.00
OC	<b>BI-102-20 335040 MW</b> K. OSTLUND Corequisite: Take the following BI-102L-20.					\$504.00	\$52.00	6-7:20 PM	\$55.00	\$611.00
ONL	<b>BI-102-40 335043</b> A. KAPILA Corequisite: Take the following BI-102L-40.					\$504.00	\$52.00		\$55.00	\$611.00
ONL	<b>BI-102-41 335044</b> A. KAPILA Corequisite: Take the following BI-102L-41.					\$504.00	\$52.00		\$55.00	\$611.00
<b>BI-102L GENERAL BIOLOGY; ANIMAL SYSTEMS LAB, 0 CREDIT</b>										
Lab course for BI-102										
<b>Corequisites:</b> BI-102										
OC	<b>BI-102L-01 335046 MW</b> E. DEBEY Corequisite: Take 1 of the following BI-102-01, BI-102-02.					\$0.00	\$0.00	2:30 -3:50 PM	\$0.00	\$0.00
OC	<b>BI-102L-02 335048 TTH</b> S. SOLL Corequisite: Take 1 of the following BI-102-02, BI-102-01.					\$0.00	\$0.00	10:50 -12:10 PM	\$0.00	\$0.00
OC	<b>BI-102L-03 339514 TTH</b> TBA Corequisite: Take 1 of the following BI-102-01, BI-102-02.					\$0.00	\$0.00	1-2:20 PM	\$0.00	\$0.00
OC	<b>BI-102L-20 335053 MW</b> K. OSTLUND Corequisite: Take the following BI-102-20.					\$0.00	\$0.00	7:30 -8:50 PM	\$0.00	\$0.00
ONL	<b>BI-102L-40 335058</b> A. KAPILA Corequisite: Take the following BI-102-40.					\$0.00	\$0.00		\$0.00	\$0.00
ONL	<b>BI-102L-41 335059</b> A. KAPILA Corequisite: Take the following BI-102-41.					\$0.00	\$0.00		\$0.00	\$0.00
<b>BI-112</b>	<b>GENERAL BIOLOGY FOR HEALTH SCIENCES, 4 CREDITS</b>									
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.										
<b>Corequisites:</b> BI-112L										
<b>Recommended Corequisite:</b> CH-112										
<b>Recommended Prerequisites:</b> MTH-060 or MTH-098 or placement in MTH-065, and WRD-098 or placement in WR-121Z										
OC	<b>BI-112-01 335061 TTH</b> J. BOWN Corequisite: Take 1 of the following BI-112L-01, BI-112L-02.					\$504.00	\$52.00	11-12:20 PM	\$55.00	\$611.00
HAR	<b>BI-112-15 335064 MW</b> P. JONES Corequisite: Take the following BI-112L-15.					\$504.00	\$52.00	9-10:20 AM	\$55.00	\$611.00
ONL	<b>BI-112-20 339515</b> S. KELSEY Corequisite: Take the following BI-112L-20.					\$504.00	\$52.00		\$55.00	\$611.00
ONL	<b>BI-112-40 335068</b> M. ANDURI- FLYNN Corequisite: Take the following BI-112L-40.					\$504.00	\$52.00		\$55.00	\$611.00
<b>BI-112L</b>	<b>GENERAL BIOLOGY FOR HEALTH SCIENCES LAB, 0 CREDIT</b>									
<b>Lab course for BI-112</b>										
<b>Corequisites:</b> BI-112										
OC	<b>BI-112L-01 335069 T</b> J. BOWN Corequisite: Take the following BI-112-01.					\$0.00	\$0.00	1-3:50 PM	\$0.00	\$0.00
OC	<b>BI-112L-02 335077 TH</b> J. BOWN Corequisite: Take the following BI-112-01.					\$0.00	\$0.00	8-10:50 AM	\$0.00	\$0.00
HAR	<b>BI-112L-15 335080 MW</b> P. JONES Corequisite: Take the following BI-112-15.					\$0.00	\$0.00	10:30 -11:50 AM	\$0.00	\$0.00
HAR	<b>BI-112L-20 339516 TH</b> S. KELSEY Corequisite: Take the following BI-112-20.					\$0.00	\$0.00	6-8:50 PM	\$0.00	\$0.00
ONL	<b>BI-112L-40 335084</b> S. KELSEY Corequisite: Take the following BI-112-40.					\$0.00	\$0.00		\$0.00	\$0.00
<b>BI-120</b>	<b>INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY, 4 CREDITS</b>									
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.										
<b>Corequisites:</b> BI-120L										
HAR	<b>BI-120-15 335085 MW</b> P. JONES					\$504.00	\$52.00	1-2:20 PM	\$55.00	\$611.00
<b>BI-120L</b>	<b>INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY LAB, 0 CREDIT</b>									
<b>Lab course for BI-120</b>										
<b>Corequisites:</b> BI-120										
HAR	<b>BI-120L-15 335090 MW</b> P. JONES					\$0.00	\$0.00	2:30 -3:50 PM	\$0.00	\$0.00
<b>BI-165D</b>	<b>NATURAL HISTORY OF THE WESTERN DESERTS, 4 CREDITS</b>									
A lecture and lab course studying plants, animals, geology, ecology and environmental issues of western deserts. This intensive nine-day field course travels through western desert regions. Required: Student Petition.										
<b>Corequisites:</b> BI-165DL										
<b>Prerequisites:</b> WRD-098 or placement in WR-121Z										
<b>Recommended:</b> One term of college-level science										
OC	<b>BI-165D-01 335094 M</b> J. BOWN Required: Student Petition. Students will travel to Death Valley to study desert processes during Spring Break (3/22-3/31). In addition, 4 meetings are required (6pm-7:20pm on Monday 1/29, 2/5, 2/26 and one meeting TBA). Contact Jennifer Bown (jenb@clackamas.edu) for more information. Corequisite: Take the following BI-165DL-01.					\$504.00	\$52.00	6-7:20 PM	\$450.00	\$1,006.00
<b>BI-165DL</b>	<b>NATURAL HISTORY OF THE WESTERN DESERTS LAB, 0 CREDIT</b>									
<b>Lab course for BI-165D</b>										
<b>Corequisites:</b> BI-165D										

**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,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
-----------	-----------------------	------------	------------	----------	------------------------	---------	-----	------	----------	-------

**OFF BI-165DL-01 335098 MTWTHFSSU**  
 J. BOWN \$0.00 \$0.00 \$0.00 \$0.00  
 Required: Student Petition. Students will travel to Death Valley to study desert processes during Spring Break (3/21-3/29). Contact Jennifer Bown (jenb@clackmas.edu) for more information. Corequisite: Take the following BI-165D-01.

**BI-204 ELEMENTARY MICROBIOLOGY, 4 CREDITS**

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

oc	<b>BI-204-01 335103 MW</b>	J. NURMI	\$504.00	\$52.00	\$50.00	\$606.00	9-11:50 AM			
Remote options available with this section.										
oc	<b>BI-204-02 339507 TTH</b>	J. NURMI	\$504.00	\$52.00	\$50.00	\$606.00	9-11:50 AM			

**BI-212 GENERAL BIOLOGY FOR SCIENCE MAJORS (ANIMAL BIOLOGY), 5 CREDITS**

This course is the second quarter of a three-quarter sequence of a laboratory course for science majors and pre-professional students. It emphasizes an evolutionary approach to animal biology; including animal diversity, development and the effects of Hox genes and hormones, comparisons of animal body systems including human, homeostasis and behavior.

**Corequisites:** BI-212L

**Prerequisite or Corequisite:** CH-105 or CH-222

oc	<b>BI-212-01 335108 MW</b>	T. BLACKWELL	\$630.00	\$65.00	\$55.00	\$750.00	8-9:50 AM			
ONL	<b>BI-212-02 335110</b>	T. BLACKWELL	\$630.00	\$65.00	\$55.00	\$750.00				
This section requires an in-person lab.										

**BI-212L GENERAL BIOLOGY FOR SCIENCE MAJORS (ANIMAL BIOLOGY) LAB, 0 CREDIT**

Lab course for BI-212

**Corequisites:** BI-212

oc	<b>BI-212L-01 335112 TH</b>	T. BLACKWELL	\$0.00	\$0.00	\$0.00	\$0.00	8-10:50 AM		
oc	<b>BI-212L-02 335114 TH</b>	T. BLACKWELL	\$0.00	\$0.00	\$0.00	\$0.00	1-3:50 PM		

**BI-231 HUMAN ANATOMY & PHYSIOLOGY I, 4 CREDITS**

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

**Prerequisites:** BI-112 (preferred), or BI-101 and BI-102, or BI-211. CH-112 (preferred), or CH-104 and CH-105, or CH-221 and CH-222

**Corequisites:** BI-231L

oc HYB	<b>BI-231-01 335116 T</b>	B. KOP	\$504.00	\$52.00	\$55.00	\$611.00	2:30 -4:20 PM			
Corequisite: Take the following BI-231L-01.										
oc HYB	<b>BI-231-20 335123 T</b>	B. KOP	\$504.00	\$52.00	\$55.00	\$611.00	6:30 -9:00 PM			
Corequisite: Take the following BI-231L-20.										

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

Lab course for BI-231

**Campus Locations:**

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

**Distance Education Notification:**

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

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

**Corequisites:** BI-231

oc	<b>BI-231L-01 335124 TH</b>	J. GALLEGOS	\$0.00	\$0.00	\$0.00	\$0.00	2:30 -5:20 PM			
Corequisite: Take the following BI-231-01.										

oc	<b>BI-231L-20 335131 TH</b>	J. GALLEGOS	\$0.00	\$0.00	\$0.00	\$0.00	6:30 -9:20 PM			
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	<b>BI-232-01 335132 M</b>	M. PATTERSON	\$504.00	\$52.00	\$55.00	\$611.00	10-11:50 AM			
Corequisite: Take 1 of the following BI-232L-01, BI-232L-02, BI-232L-03.										

oc HYB	<b>BI-232-02 335140 T</b>	B. KOP	\$504.00	\$52.00	\$55.00	\$611.00	1-2:50 PM			
Corequisite: Take 1 of the following BI-232L-01, BI-232L-02, BI-232L-03.										

HAR	<b>BI-232-15 335144 TTH</b>	M. PATTERSON	\$504.00	\$52.00	\$55.00	\$611.00	9-10:20 AM			
Corequisite: Take the following BI-232L-15.										

oc HYB	<b>BI-232-20 335142 M</b>	B. KOP	\$504.00	\$52.00	\$55.00	\$611.00	6:30 -9:00 PM			
Corequisite: Take the following BI-232L-20.										

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

Lab course for BI-232

**Corequisites:** BI-232

oc	<b>BI-232L-01 335146 M</b>	M. PATTERSON	\$0.00	\$0.00	\$0.00	\$0.00	1-3:50 PM			
Corequisite: Take 1 of the following BI-232-01, BI-232-02.										

oc	<b>BI-232L-02 335151 T</b>	J. GALLEGOS	\$0.00	\$0.00	\$0.00	\$0.00	3:30 -6:20 PM			
Corequisite: Take 1 of the following BI-232-01, BI-232-02.										

oc	<b>BI-232L-03 335155 W</b>	M. PATTERSON	\$0.00	\$0.00	\$0.00	\$0.00	9-11:50 AM			
Corequisite: Take 1 of the following BI-232-01, BI-232-02.										

HAR	<b>BI-232L-15 335161 TTH</b>	M. PATTERSON	\$0.00	\$0.00	\$0.00	\$0.00	10:30 -11:50 AM			
Corequisite: Take the following BI-232-15.										

oc	<b>BI-232L-20 335159 W</b>	J. GALLEGOS	\$0.00	\$0.00	\$0.00	\$0.00	6:30 -9:20 PM			
Corequisite: Take the following BI-232-20.										

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

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

**Prerequisites:** BI-232 with a C or better

**Corequisites:** BI-233L

oc HYB	<b>BI-233-01 335163 T</b>	B. KOP	\$504.00	\$52.00	\$55.00	\$611.00	9-10:50 AM			
Corequisite: Take the following BI-233L-01.										

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

Lab course for BI-233

**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,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
<b>Corequisites:</b> BI-233										
OC	<b>BI-233L-01</b> 335167 T		J. GALLEGOS			\$0.00	\$0.00	11:30 -2:20 PM	\$0.00	\$0.00
Corequisite: Take the following BI-233-01.										
<b>BI-234 INTRODUCTORY MICROBIOLOGY, 4 CREDITS</b>										
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.										
<b>Prerequisites:</b> BI-101, BI-112 or BI-211; and CH-104, CH-112 or CH-221										
<b>Corequisites:</b> BI-234L										
OC LCT	<b>BI-234-01</b> 335171 TTH		S. SOLL			\$504.00	\$52.00	1-2:20 PM	\$55.00	\$611.00
Corequisite: Take the following BI-234L-01.										
OC LCT	<b>BI-234-20</b> 335175 TTH		M. PLUMMER			\$504.00	\$52.00	6-7:20 PM	\$55.00	\$611.00
Corequisite: Take the following BI-234L-20.										
ONL LCT	<b>BI-234-40</b> 335176		S. SOLL			\$504.00	\$52.00		\$170.00	\$726.00
Corequisite: Take the following BI-234L-40.										
<b>BI-234L INTRODUCTORY MICROBIOLOGY LAB, 0 CREDIT</b>										
Lab course for BI-234										
<b>Corequisites:</b> BI-234										
OC	<b>BI-234L-01</b> 335178 TTH		S. SOLL			\$0.00	\$0.00	2:30 -3:50 PM	\$0.00	\$0.00
Corequisite: Take the following BI-234-01.										
OC	<b>BI-234L-20</b> 335179 TTH		M. PLUMMER			\$0.00	\$0.00	7:30 -8:50 PM	\$0.00	\$0.00
Corequisite: Take the following BI-234-20.										
ONL	<b>BI-234L-40</b> 335182		TBA			\$0.00	\$0.00		\$0.00	\$0.00
Corequisite: Take the following BI-234-40.										
<b>Business Administration</b>										
<b>BA-101Z INTRODUCTION TO BUSINESS, 4 CREDITS</b>										
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.										
<b>Recommended Prerequisites:</b> WRD-090 or placement in WRD-098										
OC	<b>BA-101Z-01</b> 335035 MW		J. EICHENBERGER			\$504.00	\$52.00	8-9:50 AM	\$5.00	\$561.00
OC HYB	<b>BA-101Z-02</b> 335047 W		J. EICHENBERGER			\$504.00	\$52.00	10-11:50 AM	\$5.00	\$561.00
REM	<b>BA-101Z-03</b> 335050 TH		K. HEINIG			\$504.00	\$52.00	6-7:50 PM	\$48.75	\$604.75
Online textbook included in section fees.										
ONL	<b>BA-101Z-04</b> 335051		S. RAHN			\$504.00	\$52.00		\$48.75	\$604.75
Online textbook included in section fees.										
ONL	<b>BA-101Z-05</b> 335054		M. MOISO			\$504.00	\$52.00		\$48.75	\$604.75
Online textbook included in section fees.										
ONL	<b>BA-101Z-06</b> 335056		C. CHATTERTON			\$504.00	\$52.00		\$5.00	\$561.00
<b>BA-104 BUSINESS MATH, 3 CREDITS</b>										
Apply mathematics to a variety of transactions found in the business world, from finance to project management, and from sales to accounting, including: payroll, product or service mark-ups and mark-downs; simple and compound interest; present and future value of a single sum of money and annuities; and financial ratio analysis.										
<b>Prerequisites:</b> Placement in MTH-020 or higher										
ONL	<b>BA-104-01</b> 335057		J. AMAN			\$378.00	\$39.00		\$82.86	\$499.86
Online textbook included in section fees.										
<b>BA-111 GENERAL ACCOUNTING I, 3 CREDITS</b>										
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.										
<b>Recommended Prerequisites:</b> Placement in MTH-020										
OC	<b>BA-111-01</b> 335063 TH		J. SAN-CLAIRE			\$378.00	\$39.00	1-3:50 PM	\$114.99	\$531.99
Online textbook included in section fees.										
ONL	<b>BA-111-02</b> 335066		J. SAN-CLAIRE			\$378.00	\$39.00		\$114.99	\$531.99
Online textbook included in section fees.										
<b>BA-112 GENERAL ACCOUNTING II, 4 CREDITS</b>										
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.										
<b>Prerequisites:</b> BA-111 or BA-211Z										
<b>Prerequisite or Corequisite:</b> BA-131 or some knowledge of Excel										
ONL	<b>BA-112-01</b> 335067		J. SAN-CLAIRE			\$504.00	\$52.00		\$114.99	\$670.99
Online textbook included in section fees.										
<b>BA-119 PROJECT MANAGEMENT PRACTICES, 2 CREDITS</b>										
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	<b>BA-119-01</b> 335070		C. PLOWMAN			\$252.00	\$26.00		\$0.00	\$278.00
OC	<b>BA-119-02</b> 335072 W		C. PLOWMAN			\$252.00	\$26.00	1-2:50 PM	\$0.00	\$278.00
<b>BA-120 PROJECT MANAGEMENT FUNDAMENTALS, 4 CREDITS</b>										

**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	Crns Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crns. Fee			
ONL	<b>BA-120-01</b> S. RAHN	<b>335074</b>	\$504.00	\$52.00	\$0.00	\$556.00

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

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

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

**Prerequisites:** BA-120 and BA-125

ONL	<b>BA-127-01</b> S. RAHN	<b>335076</b>	\$504.00	\$52.00	\$0.00	\$556.00
-----	-----------------------------	---------------	----------	---------	--------	----------

**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.

OC HYB	<b>BA-128-01</b> C. CHATTERTON	<b>335079 TH</b>	\$504.00	\$52.00	\$20.00	\$576.00
--------	-----------------------------------	------------------	----------	---------	---------	----------

**BA-131 INTRODUCTION TO BUSINESS COMPUTING, 4 CREDITS**

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

**Required:** Access to the following equipment and software: Personal computer or laptop with MS Windows operating system (preferably Windows 8 or 10), Microsoft Office Professional, 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	<b>BA-131-01</b> F. MEYERS	<b>335082 TTH</b>	\$504.00	\$52.00	\$130.00	\$686.00
Office 2021 version is used. Online textbook included in section fees.						
OC HYB	<b>BA-131-02</b> F. MEYERS	<b>335089 TH</b>	\$504.00	\$52.00	\$130.00	\$686.00
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

Course No	Course Title, Credits	Section No	Crns Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crns. Fee			
REM	<b>BA-131-03</b> J. AMAN	<b>335091 M</b>	\$504.00	\$52.00	\$130.00	\$686.00
Office 2021 version is used. Online textbook included in section fees.						
ONL	<b>BA-131-04</b> B. FORNEY	<b>335093</b>	\$504.00	\$52.00	\$130.00	\$686.00
Office 2021 version is used. Online textbook included in section fees.						
ONL	<b>BA-131-05</b> T. FRANK	<b>335096</b>	\$504.00	\$52.00	\$130.00	\$686.00
Office 2021 version is used. Online textbook included in section fees.						
ONL	<b>BA-131-06</b> D. HEINIG	<b>335097</b>	\$504.00	\$52.00	\$130.00	\$686.00
Office 2021 version is used. Online textbook included in section fees.						

**BA-177 PAYROLL ACCOUNTING, 3 CREDITS**

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

**Prerequisites:** BA-111 or BA-211Z

**Recommended Prerequisites:** BA-131 or some knowledge of Excel

ONL	<b>BA-177-01</b> I. SETO	<b>335099</b>	\$378.00	\$39.00	\$118.78	\$535.78
Online textbook included in section fees.						

**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	<b>BA-205-01</b> J. HERNANDEZ	<b>335100</b>	\$504.00	\$52.00	\$48.30	\$604.30
Online textbook included in section fees.						

**BA-206 MANAGEMENT FUNDAMENTALS, 4 CREDITS**

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

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

**Recommended Prerequisites:** BA-101Z and BA-251

ONL	<b>BA-206-01</b> S. PARKER	<b>335102</b>	\$504.00	\$52.00	\$0.00	\$556.00
-----	-------------------------------	---------------	----------	---------	--------	----------

**BA-208 EMPLOYEE AND LABOR RELATIONS, 4 CREDITS**

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

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor	Tuition	Fee		Crs. Fee			Instructor	Tuition	Fee		Crs. Fee	
ONL	<b>BA-208-01</b> 335106 M. MOISO Online textbook included in section fees.	\$504.00	\$52.00		\$113.15	\$669.15	ONL LCT	<b>BA-223-01</b> 335129 S. PARKER	\$504.00	\$52.00		\$5.00	\$561.00
<b>BA-211Z</b>	<b>PRINCIPLES OF FINANCIAL ACCOUNTING, 4 CREDITS</b> 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. <b>Prerequisites:</b> BA-101Z and BA-131 <b>Recommended Prerequisites:</b> BA-111, and MTH-050 or higher						<b>BA-224</b>	<b>HUMAN RESOURCE MANAGEMENT, 4 CREDITS</b> 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.					
OC HYB	<b>BA-211Z-01</b> 335109 T I. SETO Online textbook included in section fees.	\$504.00	\$52.00		\$60.00	\$616.00	ONL LCT	<b>BA-224-01</b> 335135 M. MOISO Online textbook included in section fees.	\$504.00	\$52.00		\$44.00	\$600.00
ONL	<b>BA-211Z-02</b> 335118 I. SETO Online textbook included in section fees.	\$504.00	\$52.00		\$60.00	\$616.00	<b>BA-226</b>	<b>BUSINESS LAW I, 4 CREDITS</b> Includes concepts, principles, and rules of law applicable to business and personal transactions, with emphasis on sources of law, the U.S. Constitution, personal and business torts and crimes, case-based applications, ethics, and consumer contract law.					
<b>BA-213Z</b>	<b>PRINCIPLES OF MANAGERIAL ACCOUNTING, 4 CREDITS</b> Builds an understanding of the role of managerial accounting in a business, focusing on the development and use of information to evaluate production costs and operational performance in support of short- and long-term organizational decision-making. <b>Prerequisites:</b> BA-211Z						ONL	<b>BA-226-01</b> 335139 M. MOISO Online textbook included in section fees.	\$504.00	\$52.00		\$48.30	\$604.30
OC HYB	<b>BA-213Z-01</b> 339538 M I. SETO Online textbook included in section fees.	\$504.00	\$52.00		\$118.78	\$674.78	<b>BA-228</b>	<b>COMPUTERIZED ACCOUNTING, 3 CREDITS</b> An introductory, hands-on experience with computer applications that are used for accounting, including transaction entry for a full accounting cycle, from business setup through month-end close. This course features instruction for Quickbooks Online. <b>Prerequisites:</b> BA-111 or BA-211Z					
ONL	<b>BA-213Z-02</b> 335120 J. SAN-CLAIRE Online textbook included in section fees.	\$504.00	\$52.00		\$118.78	\$674.78	ONL	<b>BA-228-01</b> 339562 T. FRANK Online textbook included in section fees.	\$378.00	\$39.00		\$111.25	\$528.25
<b>BA-216</b>	<b>COST ACCOUNTING, 4 CREDITS</b> Cost accounting extends the content of BA-213Z, which focused on managerial accounting. Specifically, job order and process costing are examined in depth, including: variances and cost estimations; standard and variable costing in the manufacturing environment; inventory and capacity analysis; customer-profitability analysis; spoilage, rework and scrap; and performance measurement. <b>Prerequisites:</b> BA-213Z						<b>BA-239</b>	<b>ADVERTISING, 4 CREDITS</b> Emphasizes a strategic and integrated approach to promotion where traditional and non-traditional techniques of promotion are explored. The relationship and role of advertising to marketing will be stressed throughout the course. <b>Recommended Prerequisites:</b> BA-101Z, and WRD-090 or placement in WRD-098					
ONL	<b>BA-216-01</b> 335127 T. FRANK Online textbook included in section fees.	\$504.00	\$52.00		\$114.98	\$670.98	ONL	<b>BA-239-01</b> 335145 J. EICHENBERGER	\$504.00	\$52.00		\$5.00	\$561.00
<b>BA-218</b>	<b>PERSONAL FINANCE, 4 CREDITS</b> 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. <b>Prerequisites:</b> BA-104 or MTH-050 or higher, and WRD-098						<b>BA-251</b>	<b>SUPERVISORY MANAGEMENT, 3 CREDITS</b> 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. <b>Recommended Prerequisites:</b> WRD-090 or placement in WRD-098					
ONL	<b>BA-218-01</b> 335128 S. PARKER	\$504.00	\$52.00		\$0.00	\$556.00	ONL	<b>BA-251-01</b> 335147 S. PARKER	\$378.00	\$39.00		\$0.00	\$417.00
<b>BA-223</b>	<b>PRINCIPLES OF MARKETING, 4 CREDITS</b> 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. <b>Recommended Prerequisites:</b> WRD-090 or placement in WRD-098						<b>BA-256</b>	<b>INCOME TAX ACCOUNTING, 4 CREDITS</b> Detailed review of the federal tax structure, as it relates to the preparation of individual tax returns, including those with business and investment activities. This course briefly overviews corporate tax returns. <b>Prerequisites:</b> BA-211Z or financial accounting experience					
ONL	<b>BA-223-01</b> 335153 J. SAN-CLAIRE Online textbook included in section fees.	\$504.00	\$52.00		\$114.99	\$670.99	ONL	<b>BA-256-01</b> 335153 J. SAN-CLAIRE Online textbook included in section fees.	\$504.00	\$52.00		\$114.99	\$670.99

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time			
Instructor		Tuition	Fee	Crs. Fee	Total	

**BA-264 PROJECT MANAGEMENT TOOLS, 3 CREDITS**  
 This course introduces students to three tools used in managing projects: Microsoft Teams, Microsoft Planner, and Microsoft Project. Students examine the criteria for selecting the right project management tool for task management, work management, and project management. Students learn how to use these tools for communicating and collaborating with project team members and stakeholders; planning a project, adding project tasks, assigning resources and costs; building a project schedule, moving tasks to different phases, tracking project progress, and properly closing out a project. Students will also gain an understanding of how to share project information across applications using dashboards and reports. In addition, students will briefly explore cloud-based options as alternative project management tools.

**Prerequisites:** BA-120

ONL	<b>BA-264-01</b>	<b>335154</b>				
	S. RAHN		\$378.00	\$39.00	\$0.00	\$417.00

**BA-268 APPLIED PROJECT DEMONSTRATION, 3 CREDITS**  
 Students demonstrate the ability to manage a real-world project from initiation through closing. Course deliverables include project scope statement, communication management plan, risk management plan, status report with Gantt chart, and 'Lessons Learned' report and presentation. The project as well as a comprehensive exam will demonstrate knowledge acquired in prerequisite classes required for the Project Management AAS. Required: Student Petition.

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

OC HYB	<b>BA-268-01</b>	<b>339569 TH</b>	<b>4-5:50 PM</b>			
	S. RAHN			\$378.00	\$39.00	\$5.00
	Required: Student Petition.					

**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 LCT	<b>BA-270-01</b>	<b>335157</b>				
	C. CHATTERTON		\$504.00	\$52.00	\$0.00	\$556.00

**BA-280 BUSINESS/CWE, 2-6 CREDITS**  
 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	<b>BA-280-01</b>	<b>335158</b>				
	S. PARKER		\$756.00	\$78.00	\$45.00	\$879.00V
	Required: Student Petition. Corequisite: Take the following CWE-281-06.					
ONL	<b>BA-280-02</b>	<b>335165</b>				
	B. FORNEY		\$756.00	\$78.00	\$45.00	\$879.00V
	Required: Student Petition. Corequisite: Take the following CWE-281-06.					

**BA-285 HUMAN RELATIONS IN BUSINESS, 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					
Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time			
Instructor		Tuition	Fee	Crs. Fee	Total	

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	<b>BA-285-01</b>	<b>335166</b>				
	M. MOISO		\$504.00	\$52.00	\$48.75	\$604.75
	Online textbook included in section fees.					
ONL	<b>BA-285-02</b>	<b>335168</b>				
	S. PARKER		\$504.00	\$52.00	\$5.00	\$561.00

**Business Technology**

**BT-120 PERSONAL KEYBOARDING, 2 CREDITS**  
 Basic instruction on electronic alphanumeric keyboard. Provides practice for speed and accuracy within an individual program. Students will also develop the necessary skills to effectively use the Internet, use email, and create simple documents within a Google email profile and/or Microsoft Word.

ONL	<b>BT-120-01</b>	<b>335169</b>				
	S. SIMMONS		\$252.00	\$26.00	\$10.00	\$288.00
ONL	<b>BT-120-02</b>	<b>335170</b>				
	S. SIMMONS		\$252.00	\$26.00	\$10.00	\$288.00

**BT-121 DATA ENTRY, 1 CREDIT**  
 This course is designed to teach the computer numeric keypad by touch with speed and accuracy using industry standards for data entry. This skill is especially helpful to people in the fields of data entry, accounting, office administration, insurance, banking and finance, and any other work that requires numeric input.

ONL	<b>BT-121-01</b>	<b>335172</b>				
	S. SIMMONS		\$126.00	\$13.00	\$10.00	\$149.00
ONL	<b>BT-121-02</b>	<b>335173</b>				
	S. SIMMONS		\$126.00	\$13.00	\$10.00	\$149.00

**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.

**Prerequisites:** BT-120

ONL	<b>BT-122-01</b>	<b>335174</b>				
	S. SIMMONS		\$252.00	\$26.00	\$10.00	\$288.00
ONL	<b>BT-122-02</b>	<b>335180</b>				
	S. SIMMONS		\$252.00	\$26.00	\$10.00	\$288.00

**BT-124 BUSINESS EDITING I, 3 CREDITS**  
 Course builds business communication skills through the study of the written communication process and the correct use of grammar, spelling, vocabulary, types of written business communication, and basic editing principles.

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

ONL	<b>BT-124-01</b>	<b>339580</b>				
	S. SIMMONS		\$378.00	\$39.00	\$10.00	\$427.00

**BT-125 BUSINESS EDITING II, 3 CREDITS**

Course No	Course Title, Credits					Course No	Course Title, Credits					
	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total		Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	
	Instructor		Tuition	Fee	Crs. Fee		Instructor		Tuition	Fee	Crs. Fee	
	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 in-depth, 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.					OC	<b>CH-104L-40</b>	<b>335197</b>	<b>TBA</b>			
									\$0.00	\$0.00	\$0.00	\$0.00
	Each student is required 3 hours of lab time in DJ-242 per week. The available lab hours are W & F: 9 AM- 4 PM, TH 9 AM-8 PM For further information, please e-mail the instructor at george.burgess@clackamas.edu. Corequisite: Take the following CH-104-40, CH-104S-40.											

**Prerequisites:** BT-124 with a C or better

ONL	<b>BT-125-01</b>	<b>335181</b>				
	S. SIMMONS		\$378.00	\$39.00	\$10.00	\$427.00

### BT-160 WORD I, 3 CREDITS

Introductory-level course where students learn basic concepts of the Word software program. This course is designed for students who have no or little knowledge of Word.

**Required:** Access to the following equipment and software: Personal computer or laptop with MS Windows operating system (preferably Windows 8 or 10), MS Word, or access to the CCC Dye Academic Computer Lab for coursework

**Recommended:** 35 words per minute typing skill or BT-120

REM	<b>BT-160-01</b>	<b>339579</b>	<b>TH</b>		<b>10-11:50 AM</b>	
	F. MEYERS			\$378.00	\$39.00	\$119.99
	Office 2019 version is used. Online textbook included in section fees.					\$536.99

### BT-216 OFFICE PROCEDURES, 4 CREDITS

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

**Prerequisites:** BA-131

ONL	<b>BT-216-01</b>	<b>335186</b>				
	B. FORNEY		\$504.00	\$52.00	\$10.00	\$566.00

## Chemistry

### CH-104 INTRODUCTORY CHEMISTRY, 5 CREDITS

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

**Corequisites:** CH-104L and CH-104S

**Prerequisites:** MTH-065 or MTH-098 or placement in MTH-095; and WRD-090 or placement in WRD-098

ONL	<b>CH-104-40</b>	<b>335191</b>				
	TBA		\$630.00	\$65.00	\$50.00	\$745.00
	Each student is required 3 hours of lab time in DJ-242 per week. The available lab hours are W & F: 9 AM- 4 PM, TH 9 AM-8 PM For further information, please e-mail the instructor at george.burgess@clackamas.edu. Corequisite: Take the following CH-104L-40, CH-104S-40.					

### CH-104L INTRODUCTORY CHEMISTRY LAB, 0 CREDIT

Lab course for CH-104

**Corequisites:** CH-104 and CH-104S

#### 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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	
	Instructor		Tuition	Fee	Crs. Fee			Instructor		Tuition	Fee	Crs. Fee		
<b>CH-112</b>	<b>CHEMISTRY FOR HEALTH SCIENCES, 4 CREDITS</b>						ONL	<b>CH-221-41</b>	<b>335221</b>					
	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.							S. MCDONALD		\$630.00	\$65.00	\$45.00	\$740.00	
	<b>Corequisites:</b> CH-112L							This section has an in-person lab and seminar requirement. Corequisite: Take the following CH-221S-41, CH-221L-41.						
	<b>Prerequisites:</b> MTH-065 or MTH-098 with a C or better or placement in MTH-095							<b>CH-221L</b>	<b>GENERAL CHEMISTRY LAB, 0 CREDIT</b>					
	<b>Prerequisites:</b> WRD-090 or placement in WRD-098							Lab course for CH-221						
	<b>Recommended Corequisite:</b> BI-112							<b>Corequisites:</b> CH-221 and CH-221S						
oc	<b>CH-112-01</b>	<b>335206</b>	<b>MW</b>		<b>1-2:20 PM</b>		oc	<b>CH-221L-01</b>	<b>335222</b>	<b>T</b>		<b>9-11:50 AM</b>		
	TBA		\$504.00	\$52.00	\$50.00	\$606.00		S. MCDONALD		\$0.00	\$0.00	\$0.00	\$0.00	
	This section has an in-person lab requirement. Corequisite: Take the following CH-112L-01, CH-112L-02.							Corequisite: Take the following CH-221-01, CH-221S-01.						
ONL	<b>CH-112-15</b>	<b>335208</b>					oc	<b>CH-221L-40</b>	<b>335224</b>	<b>T</b>		<b>1-3:50 PM</b>		
	E. FRANCIS		\$504.00	\$52.00	\$50.00	\$606.00		D. MYERS		\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following CH-112L-15.							Corequisite: Take the following CH-221-40, CH-221L-40.						
ONL	<b>CH-112-20</b>	<b>339517</b>					oc	<b>CH-221L-41</b>	<b>335226</b>	<b>W</b>		<b>2-4:50 PM</b>		
	TBA		\$504.00	\$52.00	\$50.00	\$606.00		S. MCDONALD		\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following CH-112L-20.							Corequisite: Take the following CH-221-41, CH-221S-41.						
ONL	<b>CH-112-40</b>	<b>335209</b>						<b>CH-221S</b>	<b>GENERAL CHEMISTRY SEMINAR, 0 CREDIT</b>					
	TBA		\$504.00	\$52.00	\$50.00	\$606.00		Seminar course for CH-221						
	Corequisite: Take the following CH-112L-40.							<b>Corequisites:</b> CH-221 and CH-221L						
oc	<b>CH-112L-01</b>	<b>335210</b>	<b>W</b>		<b>9-11:50 AM</b>		oc	<b>CH-221S-01</b>	<b>335228</b>	<b>TH</b>		<b>9-9:50 AM</b>		
	TBA		\$0.00	\$0.00	\$0.00	\$0.00		S. MCDONALD		\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following CH-112-01.							Corequisite: Take the following CH-221-01, CH-221L-01.						
oc	<b>CH-112L-02</b>	<b>335213</b>	<b>TH</b>		<b>1-3:50 PM</b>		oc	<b>CH-221S-40</b>	<b>335231</b>	<b>W</b>		<b>2-2:50 PM</b>		
	TBA		\$0.00	\$0.00	\$0.00	\$0.00		D. MYERS		\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following CH-112-01.							Corequisite: Take the following CH-221-40, CH-221L-40.						
HAR	<b>CH-112L-15</b>	<b>335215</b>	<b>TH</b>		<b>1-3:50 PM</b>		oc	<b>CH-221S-41</b>	<b>335233</b>	<b>W</b>		<b>1-1:50 PM</b>		
	E. FRANCIS		\$0.00	\$0.00	\$0.00	\$0.00		S. MCDONALD		\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following CH-112-15.							Corequisite: Take the following CH-221-41, CH-221L-41.						
HAR	<b>CH-112L-20</b>	<b>339518</b>	<b>W</b>		<b>6-8:50 PM</b>			<b>CH-222</b>	<b>GENERAL CHEMISTRY, 5 CREDITS</b>					
	TBA		\$0.00	\$0.00	\$0.00	\$0.00		A lab course discussing basic concepts of chemical bonding; molecular geometry and bonding theories; gases; intermolecular forces, solids, and liquids; properties of solutions; kinetics; and chemical equilibrium.						
	Corequisite: Take the following CH-112-20.							<b>Prerequisites:</b> CH-221 with a C or better						
ONL	<b>CH-112L-40</b>	<b>335217</b>						<b>Corequisites:</b> CH-222L and CH-222S						
	TBA		\$0.00	\$0.00	\$0.00	\$0.00	oc	<b>CH-222-01</b>	<b>335234</b>	<b>MWF</b>		<b>10-10:50 AM</b>		
	Corequisite: Take the following CH-112-40.								D. MYERS		\$630.00	\$65.00	\$50.00	\$745.00
								Corequisite: Take 2 of the following CH-222L-01, CH-222L-02, CH-222S-01, CH-222S-02.						
								oc	<b>CH-222-20</b>	<b>335238</b>	<b>T</b>		<b>6-8:50 PM</b>	
									N. DAS		\$630.00	\$65.00	\$50.00	\$745.00
								Corequisite: Take the following CH-222L-20, CH-222S-20.						
								ONL	<b>CH-222-40</b>	<b>335240</b>				
									J. DU BOULAY		\$630.00	\$65.00	\$50.00	\$745.00
								This section has an in-person lab and seminar requirement. Corequisite: Take the following CH-222L-40, CH-222S-40.						
								<b>CH-222L</b>	<b>GENERAL CHEMISTRY LAB, 0 CREDIT</b>					
								Lab course for CH-222						
								<b>Corequisites:</b> CH-222 and CH-222S						
oc	<b>CH-221-01</b>	<b>335218</b>	<b>MWF</b>		<b>10-10:50 AM</b>		oc	<b>CH-222L-01</b>	<b>335241</b>	<b>TH</b>		<b>9-11:50 AM</b>		
	S. MCDONALD		\$630.00	\$65.00	\$45.00	\$740.00		D. MYERS		\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following CH-221S-01, CH-221L-01.							Corequisite: Take 2 of the following CH-222-01, CH-222S-01, CH-222S-02.						
ONL	<b>CH-221-40</b>	<b>335220</b>					oc	<b>CH-222L-02</b>	<b>335243</b>	<b>TH</b>		<b>1-3:50 PM</b>		
	D. MYERS		\$630.00	\$65.00	\$45.00	\$740.00		D. MYERS		\$0.00	\$0.00	\$0.00	\$0.00	
	This section has an in-person lab and seminar requirement. Corequisite: Take the following CH-221S-40, CH-221L-40.							Corequisite: Take 2 of the following CH-222-01, CH-222S-01, CH-222S-02.						

**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,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
oc	<b>CH-222L-20 335245 TH</b> N. DAS Corequisite: Take the following CH-222-20, CH-222S-20.					\$0.00	\$0.00	7-9:50 PM	\$0.00	\$0.00
oc	<b>CH-222L-40 335247 F</b> J. DU BOULAY Corequisite: Take the following CH-222-40, CH-222S-40.					\$0.00	\$0.00	2-4:50 PM	\$0.00	\$0.00
<b>CH-222S GENERAL CHEMISTRY SEMINAR, 0 CREDIT</b>										
Seminar course for CH-222										
<b>Corequisites:</b> CH-222 and CH-222L										
oc	<b>CH-222S-01 335249 W</b> D. MYERS Corequisite: Take 2 of the following CH-222-01, CH-222L-01, CH-222L-02.					\$0.00	\$0.00	11-11:50 AM	\$0.00	\$0.00
oc	<b>CH-222S-02 335252 W</b> D. MYERS Corequisite: Take 1 of the following CH-222L-01, CH-222L-02.					\$0.00	\$0.00	1-1:50 PM	\$0.00	\$0.00
oc	<b>CH-222S-20 335254 TH</b> N. DAS Corequisite: Take 2 of the following CH-222-20, CH-222L-01, CH-222L-02.					\$0.00	\$0.00	6-6:50 PM	\$0.00	\$0.00
oc	<b>CH-222S-40 335256 F</b> J. DU BOULAY Corequisite: Take the following CH-222-40, CH-222L-40.					\$0.00	\$0.00	1-1:50 PM	\$0.00	\$0.00
<b>CH-242 ORGANIC CHEMISTRY II, 5 CREDITS</b>										
Second term of transfer sequence meeting organic chemistry requirement for premedical, dental, veterinary, pharmacy, chiropractic medicine, chemical engineering and biology majors.										
<b>Prerequisites:</b> CH-241										
<b>Corequisites:</b> CH-242L and CH-242S										
oc	<b>CH-242-01 335258 MW</b> E. FRANCIS Corequisite: Take the following CH-242L-01, CH-242S-01.					\$630.00	\$65.00	1-2:20 PM	\$50.00	\$745.00
<b>CH-242L ORGANIC CHEMISTRY I LAB, 0 CREDIT</b>										
Lab course for CH-242										
<b>Corequisites:</b> CH-242 and CH-242S										
oc	<b>CH-242L-01 335260 F</b> E. FRANCIS Corequisite: Take the following CH-242-01, CH-242S-01.					\$0.00	\$0.00	9-11:50 AM	\$0.00	\$0.00
<b>CH-242S ORGANIC CHEMISTRY II SEMINAR, 0 CREDIT</b>										
Seminar course for CH-242										
<b>Corequisites:</b> CH-242 and CH-242L										
ONL	<b>CH-242S-01 335261</b> E. FRANCIS Corequisite: Take the following CH-242-01, CH-242L-01.					\$0.00	\$0.00		\$0.00	\$0.00
<b>College and Career Guidance</b>										
<b>EL-103 TAKING EFFECTIVE NOTES, 1 CREDIT</b>										
Designed to help students develop effective note-taking skills. Several note-taking systems are introduced and practiced.										
<b>Prerequisites:</b> WRD-080 or placement in WRD-090										
ONL	<b>EL-103-13 335259</b> B. MALONEY					\$126.00	\$13.00		\$0.00	\$139.00
<b>EL-111 COLLEGE STUDY SKILLS, 3 CREDITS</b>										
Emphasizes time management, listening/notetaking, testing skills/anxiety, college resources, learning styles, reading strategies, textbook reading, and concentration skills.										
<b>Prerequisites:</b> WRD-080 or placement in WRD-090										
oc HYB	<b>EL-111-01 335262 T</b> B. MALONEY Meets: 1/21-3/22.					\$378.00	\$39.00	1-2:50 PM	\$15.00	\$432.00
<b>HD-102 SERVICE LEARNING EXPERIENCE, 1-6 CREDITS</b>										
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	<b>HD-102-01 335367</b> J. GINSBURG Required: Student Petition.					\$756.00	\$78.00		\$0.00	\$834.00V
<b>HD-138 UNDERSTANDING AND MANAGING ANXIETY AND DEPRESSION, 3 CREDITS</b>										
Identifies components of anxiety and depression, contexts in which anxiety and depression occur, and solutions for coping with anxiety and depression symptoms through the use of various anxiety and depression management techniques.										
oc	<b>HD-138-01 335368 MW</b> TBA					\$378.00	\$39.00	9-10:20 AM	\$0.00	\$417.00
<b>HD-140 CAREER EXPLORATION, 3 CREDITS</b>										
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.										
ONL	<b>HD-140-01 335371</b> J. CORTES Meets: 1/27-3/21.					\$378.00	\$39.00		\$10.00	\$427.00
<b>HD-146 VALUES CLARIFICATION - THE TALK YOU WALK, 1 CREDIT</b>										
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	<b>HD-146-01 335373</b> T. BOYLE- GALESTIANTZ Meets: 1/22-2/3. Contact: counseling@clackamas.edu.					\$126.00	\$13.00		\$10.00	\$149.00
<b>HD-153 MANAGING CONFLICT IN YOUR LIFE, 1 CREDIT</b>										
Introduction to managing conflict in a positive and efficient way. Students will examine personal beliefs about conflict and become familiar with techniques for effective problem solving.										
HAR	<b>HD-153-30 335377 F</b> T. BOYLE- GALESTIANTZ Meets 1/31 & 2/1. Contact: counseling@clackamas.edu.					\$126.00	\$13.00	6-8:50 PM 9-4:50 PM	\$10.00	\$149.00
<b>HD-154 BUILDING SELF-CONFIDENCE, 1 CREDIT</b>										

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
HAR	<b>HD-154-30</b>	<b>335382 F</b>			<b>6-8:50 PM</b>	
		<b>S</b>			<b>9-4:50 PM</b>	
	TBA	\$126.00	\$13.00	\$10.00		\$149.00
	Meets: 3/7 & 3/8. Contact: counseling@clackamas.edu.					

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

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

**Corequisites:** HD-208

OC HYB	<b>HD-202-01</b>	<b>335386 T</b>			<b>10-11:50 AM</b>	
	L. NIELSON	\$0.00	\$0.00	\$40.00		\$40.00
	Meets: 1/23-3-22.					

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

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

**Corequisites:** HD-202

OC HYB	<b>HD-208-01</b>	<b>335390 TH</b>			<b>10-11:50 AM</b>	
	C. SIMS	\$0.00	\$0.00	\$40.00		\$40.00
	Meets: 1/23-3/22.					

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

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

OC	<b>HD-221-03</b>	<b>335395 M</b>			<b>3-4:50 PM</b>	
	M. BAKER	\$252.00	\$26.00	\$0.00		\$278.00
REM	<b>HD-221-04</b>	<b>335397 TH</b>			<b>8-9:50 AM</b>	
	J. GINSBURG	\$252.00	\$26.00	\$0.00		\$278.00

**Communication Studies**

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

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

OC LCT	<b>COMM-100Z-01</b>	<b>334568 MW</b>			<b>3-4:50 PM</b>	
	L. HANN	\$504.00	\$52.00	\$0.00		\$556.00
OC LCT	<b>COMM-100Z-02</b>	<b>334570 TTH</b>			<b>10-11:50 AM</b>	
	L. HANN	\$504.00	\$52.00	\$0.00		\$556.00

**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	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
OC LCT	<b>COMM-100Z-03</b>	<b>339427 TTH</b>			<b>1-2:50 PM</b>	
	L. HANN	\$504.00	\$52.00	\$0.00		\$556.00
<b>COMM-111Z</b>	<b>PUBLIC SPEAKING, 4 CREDITS</b>					
	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.					
	<b>Prerequisites:</b> WRD-098 or placement in WR-121Z					
	<b>Recommended Prerequisite or Corequisite:</b> FYE-101					
OC LCT	<b>COMM-111Z-01</b>	<b>334574 MW</b>			<b>8-9:50 AM</b>	
	TBA	\$504.00	\$52.00	\$20.00		\$576.00
REM LCT	<b>COMM-111Z-02</b>	<b>334584 MW</b>			<b>8-9:50 AM</b>	
	J. SMITH	\$504.00	\$52.00	\$20.00		\$576.00
OC LCT	<b>COMM-111Z-03</b>	<b>334586 TTH</b>			<b>8-9:50 AM</b>	
	M. WILLIAMS	\$504.00	\$52.00	\$20.00		\$576.00
OC LCT	<b>COMM-111Z-04</b>	<b>334588 MW</b>			<b>10-11:50 AM</b>	
	J. HULT	\$504.00	\$52.00	\$20.00		\$576.00
OC LCT	<b>COMM-111Z-05</b>	<b>334589 MW</b>			<b>10-11:50 AM</b>	
	A. SAMBOR	\$504.00	\$52.00	\$20.00		\$576.00
REM LCT	<b>COMM-111Z-06</b>	<b>334590 MW</b>			<b>10-11:50 AM</b>	
	J. SMITH	\$504.00	\$52.00	\$20.00		\$576.00
OC LCT	<b>COMM-111Z-07</b>	<b>334592 TTH</b>			<b>10-11:50 AM</b>	
	TBA	\$504.00	\$52.00	\$20.00		\$576.00
OC LCT	<b>COMM-111Z-08</b>	<b>334593 MW</b>			<b>10-11:50 AM</b>	
	A. SAMBOR	\$504.00	\$52.00	\$20.00		\$576.00
OC LCT	<b>COMM-111Z-09</b>	<b>334595 MW</b>			<b>1-2:50 PM</b>	
	L. HANN	\$504.00	\$52.00	\$20.00		\$576.00
OC LCT	<b>COMM-111Z-10</b>	<b>334596 TTH</b>			<b>1-2:50 PM</b>	
	A. SAMBOR	\$504.00	\$52.00	\$20.00		\$576.00
REM	<b>COMM-111Z-11</b>	<b>339536 TTH</b>			<b>6-7:50 PM</b>	
	J. SMITH	\$504.00	\$52.00	\$20.00		\$576.00
HAR LCT	<b>COMM-111Z-30</b>	<b>334599 TTH</b>			<b>1-2:50 PM</b>	
	J. HULT	\$504.00	\$52.00	\$20.00		\$576.00
HAR LCT	<b>COMM-111Z-31</b>	<b>334601 MW</b>			<b>6-7:50 PM</b>	
	J. NETZER	\$504.00	\$52.00	\$20.00		\$576.00

**COMM-212 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

ONL LCT	<b>COMM-212-01</b>	<b>334604</b>				
	K. DOSS	\$504.00	\$52.00	\$10.00		\$566.00

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

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

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

REM LCT	<b>COMM-218Z-01</b>	<b>334606 MW</b>			<b>1-2:50 PM</b>	
	J. SMITH		\$504.00	\$52.00	\$0.00	\$556.00
HAR LCT	<b>COMM-218Z-30</b>	<b>334608 TTH</b>			<b>10-11:50 AM</b>	
	J. HULT		\$504.00	\$52.00	\$0.00	\$556.00

**COMM-227 NONVERBAL COMMUNICATION, 4 CREDITS**

Explores how humans encode and decode nonverbal behavior in the communication process, based on existing research. Examines the influence, interpretation, and/or management of various nonverbal signals, such as appearance, facial expression, body movement, etc. Considers how setting, social roles, gender, and inter/intra-cultural beliefs and values have an effect on interactions among individuals and groups.

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

OC	<b>COMM-227-01</b>	<b>334610 MW</b>			<b>10-11:50 AM</b>	
	A. NELSON LEWIS		\$504.00	\$52.00	\$0.00	\$556.00

**COMM-280 SPEECH/CWE, 2-6 CREDITS**

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

**Corequisites:** CWE-281

ONL	<b>COMM-280-01</b>	<b>334613</b>				
	L. HANN		\$756.00	\$78.00	\$45.00	\$879.00V
	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	<b>CS-120-01</b>	<b>334620 W</b>			<b>10-11:50 AM</b>	
		<b>M</b>			<b>10-11:50 AM</b>	
	M. SORRENTINO		\$504.00	\$52.00	\$20.00	\$576.00
	Section meets Mondays remote via Zoom from 10:00-11:50am. Section meets in-person on campus on Wednesdays from 10:00-11:50am.					

**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	<b>CS-125H-01</b>	<b>334625 MW</b>			<b>8-9:50 AM</b>	
	M. SORRENTINO		\$504.00	\$52.00	\$20.00	\$576.00
ONL	<b>CS-125H-30</b>	<b>334631</b>				
	D. CARINO		\$504.00	\$52.00	\$20.00	\$576.00

**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	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	

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

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

**Prerequisites:** CS-125H

OC HYB	<b>CS-133J-01</b>	<b>334632 T</b>			<b>1-2:50 PM</b>	
		<b>TH</b>			<b>1-2:50 PM</b>	
	D. CARINO		\$504.00	\$52.00	\$20.00	\$576.00
	Section meets Tuesdays remote via Zoom from 1:00-2:50pm. Section meets in-person on campus on Thursdays from 1:00-2:50pm.					

**CS-135I ADVANCED WEB DESIGN, 4 CREDITS**

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

**Prerequisites:** CS-125H

OC HYB	<b>CS-135I-01</b>	<b>334635 W</b>			<b>1-2:50 PM</b>	
		<b>M</b>			<b>1-2:50 PM</b>	
	D. CARINO		\$504.00	\$52.00	\$20.00	\$576.00
	Section meets Mondays remote via Zoom from 1:00-2:50pm. Section meets in-person on campus on Wednesdays from 1:00-2:50pm.					

**CS-135S MICROSOFT EXCEL, 3 CREDITS**

Focuses on advanced spreadsheet capabilities using a current version of Microsoft Excel. Topics include design, construction, and documentation of spreadsheets, use of templates, multiple worksheets, complex formulas, functions and filtering, Pivot Tables, advanced chart features, sorting, database capabilities, finding data, creating subtotals, using lookup tables, finding trends and forecasting, creating and editing macros, validating data, and working with controls.

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

ONL	<b>CS-135S-30</b>	<b>334637</b>				
	D. HEINIG		\$378.00	\$39.00	\$20.00	\$437.00

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

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

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

OC HYB LCT	<b>CS-151-01</b>	<b>334640 T</b>			<b>1-2:50 PM</b>	
		<b>TH</b>			<b>1-2:50 PM</b>	
	R. CARINO		\$504.00	\$52.00	\$20.00	\$576.00
	Section meets Tuesdays remote via Zoom from 1:00-2:50pm. Section meets in-person on campus on Thursdays from 1:00-2:50pm.					

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

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

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

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

ONL	<b>CS-160-01</b>	<b>334644</b>				
	R. ALBERS		\$504.00	\$52.00	\$20.00	\$576.00
ONL	<b>CS-160-02</b>	<b>334647</b>				
	R. ALBERS		\$504.00	\$52.00	\$20.00	\$576.00

**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	<b>CS-161-01</b>	<b>334648 TTH</b>			<b>10-11:50 AM</b>	
	J. MILLER		\$504.00	\$52.00	\$20.00	\$576.00
ONL	<b>CS-161-02</b>	<b>334653</b>				
	J. MILLER		\$504.00	\$52.00	\$20.00	\$576.00
ONL	<b>CS-161-03</b>	<b>334654</b>				
	J. MILLER		\$504.00	\$52.00	\$20.00	\$576.00

**CS-162 COMPUTER SCIENCE II, 4 CREDITS**

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

**Prerequisites:** CS-161

OC	<b>CS-162-01</b>	<b>334655 MW</b>			<b>1-2:50 PM</b>	
	R. ALBERS		\$504.00	\$52.00	\$20.00	\$576.00
ONL	<b>CS-162-02</b>	<b>334659</b>				
	R. ALBERS		\$504.00	\$52.00	\$20.00	\$576.00

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

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

**Prerequisites:** CS-125H

OC HYB	<b>CS-181-01</b>	<b>334660 T</b>			<b>3-4:20 PM</b>	
		<b>TH</b>			<b>3-4:20 PM</b>	
	D. CARINO		\$504.00	\$52.00	\$20.00	\$576.00

Section meets Tuesdays remote via Zoom from 3:00-4:20pm. Section meets in-person on campus on Thursdays from 3:00-4:20pm.

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

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

**Prerequisites:** CS-162

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

OC	<b>CS-205-01</b>	<b>334663 MW</b>			<b>10-11:50 AM</b>	
	R. ALBERS		\$504.00	\$52.00	\$20.00	\$576.00

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

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

**Prerequisites:** CS-227

OC	<b>CS-228-01</b>	<b>334666 MW</b>			<b>9-11:50 AM</b>	
	E. MCBRIDE		\$504.00	\$52.00	\$20.00	\$576.00

**CS-240M MACOS ADMINISTRATION, 3 CREDITS**

Covers the fundamentals of installing, configuring, troubleshooting, and supporting the macOS operating system. Topics include: installation and setup, user accounts, file systems, data management, applications, network configuration, network services, peripherals, startup and troubleshooting. This course covers the topics of the Apple macOS Support Essentials certification exam.

**Prerequisites:** CS-140

OC HYB	<b>CS-240M-01</b>	<b>334670 W</b>			<b>10-11:50 AM</b>	
		<b>M</b>			<b>10-11:50 AM</b>	
	R. CARINO		\$378.00	\$39.00	\$20.00	\$437.00

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

**CS-240W WINDOWS DESKTOP ADMINISTRATION, 3 CREDITS**

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

**Prerequisites:** CS-140

OC HYB	<b>CS-240W-01</b>	<b>334674 T</b>			<b>10-11:50 AM</b>	
		<b>TH</b>			<b>10-11:50 AM</b>	
	R. CARINO		\$378.00	\$39.00	\$20.00	\$437.00

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

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

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

**Prerequisites:** MTH-251

OC	<b>CS-250-01</b>	<b>334679 TTH</b>			<b>3-4:50 PM</b>	
	J. MILLER		\$504.00	\$52.00	\$20.00	\$576.00

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

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

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

**Prerequisites:** CS-120 or placement into CS-275

OC HYB	<b>CS-275-01</b>	<b>334684 T</b>			<b>10-11:50 AM</b>	
				<b>TH</b>	<b>10-11:50 AM</b>	
	D. CARINO	\$378.00	\$39.00	\$20.00		\$437.00
Section meets Tuesdays remote via Zoom from 10:00-11:50am. Section meets in-person on campus on Thursdays from 10:00-11:50am.						

**CS-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.

**Corequisites:** CWE-281

ONL	<b>CS-280-01</b>	<b>334686</b>				
	J. MILLER	\$756.00	\$78.00	\$45.00		\$879.00V
Required: Student Petition. Restricted to Computer Science students. Corequisite: Take the following CWE-281-05.						

**CS-284 NETWORK SECURITY, 3 CREDITS**

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

**Prerequisites:** CS-151

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

ONL	<b>CS-284-30</b>	<b>334691</b>				
	R. CARINO	\$378.00	\$39.00	\$20.00		\$437.00

**CS-288W WINDOWS NETWORK ADMINISTRATION, 4 CREDITS**

Continued coverage of network services and administration using Microsoft Windows Server. Topics include: IPv4 and IPv6 addressing, DNS, DHCP, IPAM, network protection, and remote access. This course covers the topics of the Microsoft Networking with Windows Server certification exam.

**Prerequisites:** CS-279W

ONL	<b>CS-288W-30</b>	<b>334694</b>				
	R. MCMILLEN	\$504.00	\$52.00	\$20.00		\$576.00

**Computer-Aided Drafting Technology**

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

**CDT-103 COMPUTER-AIDED DRAFTING I, 3 CREDITS**

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			

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

**Recommended Prerequisites:** CDT-102

OC	<b>CDT-103-01</b>	<b>335185 TTH</b>			<b>12-2:50 PM</b>	
	C. ANDERSON	\$378.00	\$39.00	\$153.75		\$570.75

**CDT-108A INTRODUCTION TO SOLIDWORKS, 3 CREDITS**

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

REM	<b>CDT-108A-01</b>	<b>335187 TTH</b>			<b>4:30 -7:20 PM</b>	
	M. ROTUNDO	\$378.00	\$39.00	\$153.75		\$570.75

**CDT-130 INTRODUCTION TO FUSION, 2 CREDITS**

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

OC	<b>CDT-130-01</b>	<b>335189 MW</b>			<b>12-1:50 PM</b>	
	J. CARLSTON	\$252.00	\$26.00	\$0.00		\$278.00

**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

REM	<b>CWE-281-01</b>	<b>334527 T</b>			<b>11:30 -12:20 PM</b>	
	M. LAFORCE	\$0.00	\$0.00	\$0.00		\$0.00
Restricted to Water Environmental Technology students. Contact: laforce@clackamas.edu or 503-594-3148 for more information.						
ONL	<b>CWE-281-05</b>	<b>334528</b>				
	J. MILLER	\$0.00	\$0.00	\$0.00		\$0.00
Required: Student Petition. Restricted to Computer Science students. Contact: jen.miller@clackamas.edu or 503-594-3138.						
ONL	<b>CWE-281-06</b>	<b>334529</b>				
	J. STAPLETON	\$0.00	\$0.00	\$0.00		\$0.00

**Criminal Justice**

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



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

**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	<b>CJA-101-01 334510</b>	T. MUSGRAVE	\$504.00	\$52.00	\$0.00	\$556.00
ONL LCT	<b>CJA-101-02 334511</b>	T. MUSGRAVE	\$504.00	\$52.00	\$0.00	\$556.00
ONL LCT	<b>CJA-101-03 334512</b>	J. LOVELESS	\$504.00	\$52.00	\$0.00	\$556.00

**CJA-120 INTRODUCTION TO COURTS, 3 CREDITS**  
 Studies the judicial process from arrest through appeals, including search and seizure; interrogation; roles of defense attorneys, prosecutors, juries, grand juries, and judges; plea bargaining and guilty pleas; rights of criminal defendants at trial; appeals and habeas corpus.

HAR LCT	<b>CJA-120-01 334513 T</b>	S. HEALY	\$378.00	\$39.00	\$0.00	\$417.00
---------	----------------------------	----------	----------	---------	--------	----------

**CJA-134 CORRECTIONAL INSTITUTIONS, 3 CREDITS**  
 Analyzes prisons, jails and other correctional institutions. Discusses punishment history and rationale. Identifies the functions of the custodial staff and describes institutional procedures: reception, classification, program assignment and release. Studies prison management systems and examines juvenile facilities.

REM LCT	<b>CJA-134-01 334514 W</b>	G. RONNING	\$378.00	\$39.00	\$0.00	\$417.00
---------	----------------------------	------------	----------	---------	--------	----------

**CJA-170 CAREERS IN CRIMINAL JUSTICE, 3 CREDITS**  
 Prepares students for pursuing a career in the Criminal Justice field. Explores careers in the criminal justice system, including law enforcement, the practice of law, courts, corrections, and private security. Addresses hiring processes, promotions, and workplace ethics. Students will begin creating an e-portfolio. As part of the e-portfolio process, students will analyze first year CJA courses and second year fall term CJA courses for assessment purposes. Provides information on choosing Cooperative Work Experience or Service learning placement in preparation for Criminal Justice Capstone course.

**Prerequisites:** CJA-110 with a C or better

HAR HYB LCT	<b>CJA-170-01 334515 M</b>	J. JONES	\$378.00	\$39.00	\$0.00	\$417.00
-------------	----------------------------	----------	----------	---------	--------	----------

**CJA-201 JUVENILE DELINQUENCY, 4 CREDITS**  
 Surveys the nature, extent, and causes of delinquent behavior focusing on theories of criminal behavior as they apply to juveniles. Studies historical and contemporary perspectives on juvenile offenders. Provides a multidisciplinary study of the causes of juvenile delinquency. Describes laws, enforcement, court, and correctional procedures within the juvenile system, and explores the differences between adult and juvenile practices.

ONL	<b>CJA-201-01 334516</b>	J. JONES	\$504.00	\$52.00	\$0.00	\$556.00
-----	--------------------------	----------	----------	---------	--------	----------

**CJA-203 CRISIS INTERVENTION, 3 CREDITS**  
 Examines crisis intervention as it applies to emergency service workers. Includes the psychodynamics of family crisis; alcohol/drug related problems; suicide; sexual assault victims; domestic violence; mentally disturbed individuals; neglected, battered, and abused children.

**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

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

HAR HYB LCT	<b>CJA-203-01 334517 M</b>	J. JONES	\$378.00	\$39.00	\$0.00	\$417.00
-------------	----------------------------	----------	----------	---------	--------	----------

**CJA-210 CRIMINAL INVESTIGATION I, 3 CREDITS**  
 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.

**Prerequisites:** CJA-110 with a C or better

OC HYB	<b>CJA-210-01 334519 T</b>	T. MUSGRAVE	\$378.00	\$39.00	\$0.00	\$417.00
--------	----------------------------	-------------	----------	---------	--------	----------

**CJA-222 PROCEDURAL LAW, 3 CREDITS**  
 This course discusses the constitutional and statutory provisions related to arrest, search and seizure. The course includes use of deadly force, admissions, interrogations, plain view limitations, law of stop and frisk, and officer testimony.

**Prerequisites:** CJA-122 with a C or better

HAR	<b>CJA-222-01 334520 TH</b>	S. HEALY	\$378.00	\$39.00	\$0.00	\$417.00
-----	-----------------------------	----------	----------	---------	--------	----------

**CJA-280 CRIMINAL JUSTICE/CORRECTIONS/CWE, 2-6 CREDITS**  
 Cooperative work experience. Supervised experience in criminal justice, corrections, juvenile corrections, or related occupations. May be repeated for up to 6 credits. Required: Student Petition.

**Prerequisites:** CJA-170

**Corequisites:** CWE-281

ONL	<b>CJA-280-01 334521</b>	G. RONNING	\$756.00	\$78.00	\$45.00	\$879.00V
-----	--------------------------	------------	----------	---------	---------	-----------

Required: Student Petition. Corequisite: Take the following CWE-281-06.

**CJA-281 CRIMINAL JUSTICE/CORRECTIONS/CWE, 2-6 CREDITS**  
 Cooperative work experience. Supervised experience in criminal justice, corrections, juvenile corrections, or related occupations. May be repeated for up to 6 credits. Required: Student Petition.

**Prerequisites:** CJA-170 and CJA-280

**Corequisites:** CWE-281

ONL	<b>CJA-281-01 334522</b>	TBA	\$756.00	\$78.00	\$45.00	\$879.00V
-----	--------------------------	-----	----------	---------	---------	-----------

Required: Student Petition. Corequisite: Take the following CWE-281-06.

## Dental Assistant

*For more information, contact Health Sciences at [healthsciences@clackamas.edu](mailto:healthsciences@clackamas.edu)*

**DA-102 DENTAL RADIOLOGY II, 2 CREDITS**  
 Alternative radiographic techniques are discussed as students develop their knowledge in the following areas: bisecting, extra-oral radiography, techniques for children, and patients with special needs. This course provides an in-depth study of the purpose and uses of panoramic imaging, digital imaging, three-dimensional digital imaging, and occlusal examinations. Identification of radiographic interpretation and infection control procedures will also be covered. Required: Student Petition.

**Required:** Acceptance into Dental Assistant program

**Prerequisites:** DA-101 with a C or better

**Corequisites:** DA-102L

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	
	Instructor		Tuition	Fee	Crs. Fee			Instructor		Tuition	Fee	Crs. Fee		
HAR	<b>DA-102-01</b> 334531 F K. HIATT Required: Student Petition. Weekly online sessions required (through Moodle).		\$252.00	\$26.00	\$310.00	\$588.00		This course focuses on in-depth knowledge of the properties, uses and manipulation of impression materials, gypsum products and waxes. Foundational knowledge will prepare students for the fabrication of custom trays, bleaching trays, and provisional restorations. Includes knowledge of fixed and removable prosthodontic procedures and rational for polishing removable appliances. An overview of dental implants will also be covered. Required: Student Petition. <b>Required:</b> Acceptance into Dental Assistant program <b>Prerequisites:</b> DA-107 with a C or better <b>Corequisites:</b> DA-108L						
<b>DA-102L DENTAL RADIOLOGY II LAB, 1 CREDIT</b>														
Knowledge and skills in alternative radiographic techniques are taught as students demonstrate exposure techniques and corrective measures of various alternative radiographic techniques. Students meeting radiographic proficiency on the x-ray mannequin prepare for the Radiation Health and Safety (RHS) proficiency exam. Candidates for the RHS proficiency exam will follow all RHS, Dental Assisting National Board (DANB) and Oregon examination requirements in preparation of patient radiographs. Required: Student Petition. <b>Required:</b> Acceptance into Dental Assistant program <b>Prerequisites:</b> DA-101 with a C or better <b>Corequisites:</b> DA-102														
HAR	<b>DA-102L-01</b> 334532 F M. BUTKOVICH K. HIATT Required: Student Petition.		\$126.00	\$13.00	\$0.00	\$139.00	ONL	<b>DA-108-01</b> 334537 R. MASCARENHAS Required: Student Petition.		\$252.00	\$26.00	\$285.00	\$563.00	
HAR	<b>DA-102L-02</b> 334533 F M. BUTKOVICH Required: Student Petition.		\$126.00	\$13.00	\$0.00	\$139.00		<b>DA-108L DENTAL MATERIALS II LAB, 1 CREDIT</b>						
Essential skills in the manipulation and application of dental impression materials, gypsum products and waxes will be covered. Thorough knowledge of laboratory skills in the fabrication of bleaching trays and provisional restorations will be taught. Demonstration of custom trays and uses are introduced. The instrumentation and procedures for fixed and removable prosthodontics will also be covered. Required: Student Petition. <b>Required:</b> Acceptance into Dental Assistant program <b>Prerequisites:</b> DA-107L with a C or better <b>Corequisites:</b> DA-108														
<b>DA-105 CLINICAL PROCEDURES II, 2 CREDITS</b>														
A foundational course in preventive dentistry. Examines the study of preventive education, oral hygiene instruction, nutrition, fluoride agents, coronal polishing and sealants. The continuation of oral evacuation and isolation techniques will also be covered. Required: Student Petition. <b>Required:</b> Acceptance into Dental Assistant program <b>Prerequisites:</b> DA-104 with a C or better <b>Corequisites:</b> DA-105L							HAR	<b>DA-108L-01</b> 334538 TH K. HIATT Required: Student Petition. Twelve hours clinical practicum seminar. Dates TBA.		\$126.00	\$13.00	\$0.00	\$139.00	
ONL	<b>DA-105-01</b> 334534 M. BUTKOVICH Required: Student Petition.		\$252.00	\$26.00	\$225.00	\$503.00	HAR	<b>DA-108L-02</b> 334539 TH K. HIATT Required: Student Petition. Twelve hours clinical practicum seminar. Dates TBA.		\$126.00	\$13.00	\$0.00	\$139.00	
<b>DA-105L CLINICAL PROCEDURES II LAB, 1 CREDIT</b>														
Further develops the development of chairside skills and introduces the application of preventive procedures such as coronal polishing, fluoride treatment and oral hygiene instruction. Basic knowledge in the application of dental sealants is also taught. Lab skills such as the placement and removal of matrix retainers and rubber dams are taught to provide preparation for chairside dental assisting functions. Aseptic procedures are practiced during all lab skills. Required: Student Petition. <b>Required:</b> Acceptance into Dental Assistant program <b>Prerequisites:</b> DA-104L with a C or better <b>Corequisites:</b> DA-105														
HAR	<b>DA-105L-01</b> 334535 M A. SLUITER Required: Student Petition.		\$126.00	\$13.00	\$0.00	\$139.00		<b>DA-120 CLINICAL PRACTICUM II, 5 CREDITS</b>						
HAR	<b>DA-105L-02</b> 334536 M A. SLUITER Required: Student Petition.		\$126.00	\$13.00	\$0.00	\$139.00		Supervised unpaid practice and improvement of clinical skills taught in clinical procedures, dental materials and radiology. Covers advanced Expanded Functions Dental Assisting (EFDA) skills. Implement infection control protocols. Introduce basic business office procedures. Ten hours of community service will be required. Participate in 9 hours of seminar during the term. Required: Student Petition. <b>Required:</b> Acceptance into Dental Assistant program <b>Prerequisites:</b> DA-110 with a C or better						
<b>DA-108 DENTAL MATERIALS II, 2 CREDITS</b>							HAR	<b>DA-120-01</b> 334540 TW T M. BUTKOVICH K. HIATT Required: Student Petition. First Seminar Date: Tuesday, Feb 25th from 9 AM - 3 PM in Harmony West Room 150.		\$630.00	\$65.00	\$335.00	\$1,030.00	

**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	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
OC LCT	<b>DMC-104-01</b> 335263 MW	M. DEVENDORF	\$504.00	\$52.00	\$106.00	\$662.00

**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 LCT	<b>DMC-106-01</b> 335264 MW	T. WASSON	\$504.00	\$52.00	\$106.00	\$662.00
--------	-----------------------------	-----------	----------	---------	----------	----------

**DMC-147 MUSIC, SOUND & MOVIE MAKING, 1 CREDIT**

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

OC LCT	<b>DMC-147-01</b> 334508 F	B. ROSE	\$126.00	\$13.00	\$99.00	\$238.00
		Meets: 1/31 & 2/1.				

**DMC-205 DIRECTING FOR FILM & VIDEO, 4 CREDITS**

This course provides students interested in filmmaking the opportunity to develop the skills needed to successfully direct films and performances specifically for the screen.

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

OC LCT	<b>DMC-205-01</b> 335267 MW	M. DEVENDORF	\$504.00	\$52.00	\$106.00	\$662.00
--------	-----------------------------	--------------	----------	---------	----------	----------

**DMC-221 INTRODUCTION TO 2D ANIMATION: DESIGN & TECHNIQUES, 4 CREDITS**

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

**Recommended Prerequisites:** DMC-225 or equivalent experience

OC LCT	<b>DMC-221-01</b> 335268 TTH	T. WASSON	\$504.00	\$52.00	\$106.00	\$662.00
--------	------------------------------	-----------	----------	---------	----------	----------

**DMC-225 COMPUTER GRAPHICS I, 4 CREDITS**

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

**Recommended Prerequisites:** ART-115

ONL LCT	<b>DMC-225-01</b> 337012	B. THWING	\$504.00	\$52.00	\$106.00	\$662.00
oc	<b>DMC-225-02</b> 337014 MW	B. THWING	\$504.00	\$52.00	\$106.00	\$662.00

**DMC-230 DOCUMENTARY FILM PRODUCTION, 4 CREDITS**

Introduction to the concepts, fundamentals and production of documentary film making. This lecture and lab course will explore traditions and new technological approaches to creating digital documentary films.

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
<b>Recommended Prerequisites:</b> DMC-104 and ENG-194. Previous experience with film studies and digital video						

OC	<b>DMC-230-01</b> 339375 TTH	M. DEVENDORF	\$504.00	\$52.00	\$106.00	\$662.00
----	------------------------------	--------------	----------	---------	----------	----------

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

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

**Corequisites:** CWE-281

ONL LCT	<b>DMC-280-01</b> 335272	T. WASSON	\$756.00	\$78.00	\$45.00	\$879.00V
		Required: Student Petition.				

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

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

**Prerequisites:** DMC-100 and DMC-104

**Recommended:** Two courses from a DMC Focus Area

OC LCT	<b>DMC-291-01</b> 335275 TTH	T. WASSON	\$504.00	\$52.00	\$106.00	\$662.00
--------	------------------------------	-----------	----------	---------	----------	----------

**Economics**

**EC-201 PRINCIPLES OF ECONOMICS: MICRO, 4 CREDITS**

Focuses on microeconomic theory dealing with the behavior of individuals and profit-maximizing firms in market structures with varying degrees of competition. Coverage includes price theory, international trade, consumer behavior, the theory of the firm, and the potential role of government in affecting market outcomes.

**Prerequisites:** MTH-020 or placement in MTH-098

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

OC LCT	<b>EC-201-01</b> 335188 TTH	D. LOUGEE	\$504.00	\$52.00	\$0.00	\$556.00
		Online textbook provided first day of class.				

ONL LCT	<b>EC-201-02</b> 335190	M. PARTAPURWALA	\$504.00	\$52.00	\$0.00	\$556.00
		Online textbook provided first day of class.				

HAR LCT	<b>EC-201-15</b> 339429 W	A. ARMEN	\$504.00	\$52.00	\$0.00	\$556.00
		Online textbook provided first day of class.				

**EC-202 PRINCIPLES OF ECONOMICS: MACRO, 4 CREDITS**

Introduction to economic theory, policy, and institutions. Focuses on macroeconomic theory, money, unemployment, inflation, fiscal and monetary policies, international finance, and economic growth.

**Prerequisites:** MTH-020 or placement in MTH-050 or MTH-060

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

OC LCT	<b>EC-202-01</b> 335193 MW	D. LOUGEE	\$504.00	\$52.00	\$0.00	\$556.00
		Online textbook provided first day of class.				

ONL LCT	<b>EC-202-02</b> 335194	M. PARTAPURWALA	\$504.00	\$52.00	\$0.00	\$556.00
		Online textbook provided first day of class.				

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			

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

**Education**

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

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

ONL	<b>ECE-121-01</b>	<b>335195</b>				
	TBA	\$504.00	\$52.00	\$0.00	\$556.00	
	Meets: 1/6-2/9. This is an accelerated 5-week section that is all online with no synchronous meetings.					

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

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

REM ESPAÑOL	<b>ECE-121ES-01</b>	<b>335196</b>	<b>M</b>	<b>6-7:50 PM</b>		
	Y. SANCHEZ	\$504.00	\$52.00	\$0.00	\$556.00	
	La clase se reúne seis lunes por Zoom de 6:00-7:50pm. (1/6, 1/13, 1/27, 2/10, 2/24, 3/10).					

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

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

REM ESPAÑOL	<b>ECE-150ES-01</b>	<b>335205</b>	<b>TH</b>	<b>6-7:50 PM</b>		
	L. JAMES	\$504.00	\$52.00	\$0.00	\$556.00	
	La clase se reúne seis jueves por Zoom de 6:00PM a 7:50PM (1/9, 1/23, 2/6, 2/20, 3/6, 3/20).					

**ECE-154 LANGUAGE & LITERACY DEVELOPMENT IN YOUNG CHILDREN, 4 CREDITS**

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

ONL	<b>ECE-154-01</b>	<b>335214</b>				
	B. KING	\$504.00	\$52.00	\$0.00	\$556.00	
	Meets: 1/6-2/9. This is an accelerated 5-week course that is all online with no synchronous meetings.					

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

REM ESPAÑOL	<b>ECE-154ES-01</b>	<b>335216</b>	<b>T</b>	<b>6-7:50 PM</b>		
	A. ECHEVARRIA	\$504.00	\$52.00	\$0.00	\$556.00	
	La clase se reúne seis martes por Zoom de 6:00PM a 7:50PM (1/7, 1/21, 2/4, 2/18, 3/4, 3/18).					

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

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

REM ESPAÑOL	<b>ECE-169ES-01</b>	<b>335219</b>	<b>W</b>	<b>6-7:50 PM</b>		
	M. GARCIA AVILEZ	\$504.00	\$52.00	\$0.00	\$556.00	
	La clase se reúne seis miércoles por Zoom de 6:00-7:50pm. (1/8, 1/22, 2/5, 2/19, 3/5, 3/19).					
REM ESPAÑOL	<b>ECE-169ES-02</b>	<b>335223</b>	<b>TH</b>	<b>6-7:50 PM</b>		
	M. GARCIA AVILEZ	\$504.00	\$52.00	\$0.00	\$556.00	
	La clase se reúne seis jueves por Zoom de 6:00-7:50pm. (1/9, 1/23, 2/6, 2/20, 3/6, 3/20).					

**ECE-235 SAFETY, HEALTH AND NUTRITION, 3 CREDITS**

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

ONL	<b>ECE-235-01</b>	<b>335225</b>				
	B. KING	\$378.00	\$39.00	\$0.00	\$417.00	
	Meets: 2/10-3/22. This is an accelerated 5-week course that is all online with no synchronous meetings.					

**ECE-235ES SEGURIDAD, SALUD, Y NUTRICIÓN, 3 CREDITS**

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

REM LCT ESPAÑOL	<b>ECE-235ES-01</b>	<b>335227</b>	<b>T</b>	<b>6-7:50 PM</b>		
	L. JAMES	\$378.00	\$39.00	\$0.00	\$417.00	
	La clase se reúne seis martes por Zoom de 6:00-7:50pm. (1/7, 1/21, 2/4, 2/18, 3/4, 3/18).					

**ECE-239ES PRÁCTICAS INFORMADAS POR EL TRAUMA EN EL CUIDADO Y LA EDUCACIÓN DE LA PRIMERA INFANCIA, 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	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
		Instructor		Tuition	Fee	Crs. Fee

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

ONL ESPAÑOL	<b>ECE-239ES-01 335229</b>					
	B. MARRON	\$504.00	\$52.00	\$0.00		\$556.00
ONL ESPAÑOL	<b>ECE-239ES-02 335230</b>					
	B. MARRON	\$504.00	\$52.00	\$0.00		\$556.00

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

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

**Prerequisites:** ECE-154ES and ECE-240ES

REM ESPAÑOL	<b>ECE-254ES-01 335236 M</b>					<b>6-7:50 PM</b>
	A. ECHEVARRIA	\$504.00	\$52.00	\$0.00		\$556.00
	La clase se reúne seis lunes por Zoom de 6:00-7:50pm. (1/6, 1/20, 2/3, 2/17, 3/3, 3/17).					

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

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

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

OC HYB	<b>ECE-291-01 335237 TH</b>					<b>3-4:50 PM</b>
	B. KING	\$504.00	\$52.00	\$0.00		\$556.00
	Required: Student Petition. Meets in-person on six Thursdays from 3:00pm to 4:50pm. (1/9, 1/23, 2/6, 2/20, 3/3, 3/17).					

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

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

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

REM ESPAÑOL	<b>ECE-291ES-02 335242 F</b>					<b>6-8:50 PM</b>
	A. ECHEVARRIA	\$504.00	\$52.00	\$0.00		\$556.00
	Requerido: petición del estudiante. La clase se re ne viernes por Zoom de 6:00-8:50pm. (1/10, 1/24, 2/7, 2/21, 3/7).					

**ED-131 INSTRUCTIONAL STRATEGIES, 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

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

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

ONL LCT	<b>ED-131-01 335246</b>					
	L. SCOTT	\$378.00	\$39.00	\$39.00		\$456.00
	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	<b>ED-216-01 335250 TTH</b>					<b>10-11:50 AM</b>
	L. SCOTT	\$504.00	\$52.00	\$43.75		\$599.75
	Online textbook included in section fees.					

ONL	<b>ED-216-02 335251</b>					
	L. SCOTT	\$504.00	\$52.00	\$43.75		\$599.75
	Online textbook included in section fees.					

**ED-229 LEARNING & DEVELOPMENT, 3 CREDITS**

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

ONL LCT	<b>ED-229-01 335253</b>					
	L. SCOTT	\$378.00	\$39.00	\$39.00		\$456.00
	Online textbook included in section fees.					

OC HYB LCT	<b>ED-229-02 338040 TH</b>					<b>1-2:50 PM</b>
	L. SCOTT	\$378.00	\$39.00	\$39.00		\$456.00
	Online textbook included in section fees. This class meets on six Thursdays from 1:00pm-2:50pm. (1/16, 1/30, 2/13, 2/27, 3/6, 3/20).					

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

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

ONL LCT	<b>ED-254-01 335255</b>					
	D. HENDRICKS	\$378.00	\$39.00	\$0.00		\$417.00

**ED-269 OVERVIEW OF SPECIAL EDUCATION, 3 CREDITS**

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

ONL LCT	<b>ED-269-01 337492</b>					
	T. GOWDY	\$378.00	\$39.00	\$0.00		\$417.00

**Educational Focus Area**

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

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	

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 LCT	<b>EFA-101J-01</b>	<b>334695</b>				
	Y. SMITH		\$252.00	\$26.00	\$0.00	\$278.00

**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.

REM	<b>EFA-101S-01</b>	<b>334698 TTH</b>			<b>2-2:50 PM</b>	
	J. BOWN		\$252.00	\$26.00	\$0.00	\$278.00
	E. LEE					

**Electronics & Microelectronics**

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

**EET-113 ELECTRONIC EQUIPMENT AND ASSEMBLY II, 1 CREDIT**

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

**Prerequisites:** EET-112

oc	<b>EET-113-01</b>	<b>335278 MW</b>			<b>4:30 -5:20 PM</b>	
	B. PALACIOS		\$126.00	\$13.00	\$43.75	\$182.75

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

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

**Prerequisite or Corequisite:** EET-113

**Prerequisites:** EET-137

**Recommended Prerequisite or Corequisite:** MTH-111Z

oc	<b>EET-141-01</b>	<b>335281 MW</b>			<b>12-3:50 PM</b>	
	W. SELLEVAAG		\$504.00	\$52.00	\$174.00	\$730.00

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

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

**Prerequisites:** EET-215

oc	<b>EET-225-01</b>	<b>335282 MW</b>			<b>1-2:50 PM</b>	
	M. MATTSON		\$252.00	\$26.00	\$87.50	\$365.50

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

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

**Prerequisites:** EET-127

oc	<b>EET-227-01</b>	<b>335283 MW</b>			<b>5:30 -8:20 PM</b>	
	J. KUEBLER		\$378.00	\$39.00	\$130.50	\$547.50

**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

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

**EET-233 PROGRAMMABLE LOGIC CONTROLLERS I, 3 CREDITS**

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

**Recommended Prerequisites:** MFG-130

oc	<b>EET-233-01</b>	<b>335287 TH</b>			<b>6-8:50 PM</b>	
	B. GARDNER		\$378.00	\$39.00	\$0.00	\$417.00

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

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

**Prerequisites:** EET-157

oc	<b>EET-257-01</b>	<b>335289 MW</b>			<b>5:30 -8:20 PM</b>	
	J. LEE		\$378.00	\$39.00	\$130.50	\$547.50

**SM-136 PHOTOLITHOGRAPHY, 2 CREDITS**

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

**Recommended Prerequisites:** SM-150

ONL	<b>SM-136-01</b>	<b>335584</b>				
	W. SELLEVAAG		\$252.00	\$26.00	\$87.00	\$365.00

**SM-160 SEMICONDUCTOR PROCESSING II, 2 CREDITS**

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

**Recommended Prerequisites:** SM-150

ONL	<b>SM-160-01</b>	<b>335585</b>				
	W. SELLEVAAG		\$252.00	\$26.00	\$87.00	\$365.00

**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	<b>SM-280-01</b>	<b>335586</b>				
	C. CONNORS		\$756.00	\$78.00	\$255.00	\$1,089.00V
	Required: Student Petition. Restricted: Microelectronics & Electronics students. 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.

**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

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			

**HAR HYB EMT-101-01 334541 MWF 1-4:20 PM**  
 T. SAWZAK \$756.00 \$78.00 \$400.00 \$1,234.00  
 Required: Student Petition.

**EMT-102 EMERGENCY MEDICAL TECHNICIAN PART II, 6 CREDITS**

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

**Required:** Completion and documentation of all OHA Health Profession Student Clinical Training Administrative Requirements

**Prerequisites:** EMT-101 with a C or better

**HAR HYB EMT-102-01 334542 MWF 6-9:20 PM**  
 T. SAWZAK \$756.00 \$78.00 \$400.00 \$1,234.00  
 Required: Student Petition.

**EMT-105 INTRODUCTION TO EMERGENCY MEDICAL SERVICES, 3 CREDITS**

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

**ONL EMT-105-01 334543**  
 T. SAWZAK \$378.00 \$39.00 \$0.00 \$417.00

**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

**oc ENGR-111-01 335291 MW 1-2:20 PM**  
 J. NURMI \$378.00 \$39.00 \$10.00 \$427.00

**ENGR-112 ENGINEERING PROGRAMMING, 3 CREDITS**

Introduction to basic scientific and engineering computing using MATLAB. 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

**oc ENGR-112-01 335293 TTH 1-2:20 PM**  
 E. LEE \$378.00 \$39.00 \$0.00 \$417.00

**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

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

**ENGR-171 DIGITAL LOGIC, 4 CREDITS**  
 The first course in digital design covers basic logic gates, Boolean algebra, Karnaugh mapping, number systems, timing analysis, and state machines. Students will become proficient with computational tools including schematic capture programs and circuit simulators.

**Prerequisites:** MTH-111Z

**oc ENGR-171-01 335295 TTH 12:30 -3:20 PM**  
 W. SELLEVAAG \$504.00 \$52.00 \$0.00 \$556.00

**ENGR-212 DYNAMICS, 4 CREDITS**

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

**Prerequisites:** ENGR-211 and PH-211

**oc ENGR-212-01 335297 MW 3-4:50 PM**  
 E. LEE \$504.00 \$52.00 \$20.00 \$576.00

**ENGR-222 ELECTRICAL CIRCUIT ANALYSIS II, 4 CREDITS**

Expands upon the techniques of circuit analysis begun in Circuits I through theory and laboratory experiments. The course covers the time response of first- and second-order circuits, the steady-state circuit behavior of circuits driven by sinusoidal sources, three phase circuits, AC power, electrical motors, and the use of Laplace transforms to analyze the transient and steady-state behavior for a number of signal types.

**Prerequisites:** ENGR-221

**Corequisites:** ENGR-222L

**oc ENGR-222-01 335299 TTH 9-10:20 AM**  
 E. LEE \$504.00 \$52.00 \$52.00 \$608.00

**ENGR-222L ELECTRICAL CIRCUIT ANALYSIS II LAB, 0 CREDIT**

Lab course for ENGR-222

**Corequisites:** ENGR-222

**oc ENGR-222L-01 335301 TTH 9-10:30 AM**  
 E. LEE \$0.00 \$0.00 \$0.00 \$0.00

**ENGR-231 PROPERTIES OF MATERIALS, 4 CREDITS**

This course is an introduction to materials science, a field that describes the behavior of materials by utilizing principles of chemistry and physics to engineer new materials and predict their resultant properties. The course will focus on describing the microscopic physical and chemical structure of materials and relating that structure to the macroscopic thermal, electrical, and mechanical properties. The course will also cover the connection between atomic/crystal structure and materials processing.

**Prerequisites:** CH-221

**oc ENGR-231-01 335303 TTH 9-10:20 AM**  
**T 10:30 -1:30 PM**  
 E. LEE \$504.00 \$52.00 \$52.00 \$608.00

**English for Speakers of Other Languages**

**ESOL-012 BEGINNING ESOL, 0 CREDIT**

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	

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	<b>ESOL-012-01</b>	<b>334642 MW</b>			<b>9-11:50 AM</b>	
	TBA	\$0.00	\$0.00	\$60.00	\$60.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-012-06</b>	<b>334646 MW</b>			<b>6-8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$60.00	\$60.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-012-07</b>	<b>334649 MW</b>			<b>6-8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$60.00	\$60.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-012-08</b>	<b>339447 MW</b>			<b>6-8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$60.00	\$60.00	
	Required: Student Petition.					

**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 LCT	<b>ESOL-015-01</b>	<b>334651 T</b>			<b>9-11:50 AM</b>	
		<b>TH</b>			<b>9-10:20 AM</b>	
		<b>TH</b>			<b>10:30 -11:50 AM</b>	
	TBA	\$0.00	\$0.00	\$65.00	\$65.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-015-06</b>	<b>334657 T</b>			<b>6-7:50 PM</b>	
		<b>T</b>			<b>8-8:50 PM</b>	
		<b>TH</b>			<b>6-8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$65.00	\$65.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-015-07</b>	<b>339440 T</b>			<b>6-7:20 PM</b>	
		<b>T</b>			<b>7:30 -8:50 PM</b>	
		<b>TH</b>			<b>6-8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$65.00	\$65.00	
	Required: Student 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 LCT	<b>ESOL-020-01</b>	<b>334661 TTH</b>			<b>12:30 -1:50 PM</b>	
	TBA	\$0.00	\$0.00	\$35.00	\$35.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-020-06</b>	<b>334665 MW</b>			<b>7:30 -8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$35.00	\$35.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-020-07</b>	<b>339450 MW</b>			<b>7:30 -8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$35.00	\$35.00	
	Required: Student Petition.					

**ESOL-022 UPPER BEGINNING CONVERSATION, 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

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

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	<b>ESOL-022-06</b>	<b>339448 MW</b>			<b>6-7:20 PM</b>	
	TBA	\$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	<b>ESOL-024-01</b>	<b>334669 T</b>			<b>9-11:50 AM</b>	
		<b>TH</b>			<b>9-10:20 AM</b>	
		<b>TH</b>			<b>10:30 -11:50 AM</b>	
	TBA	\$0.00	\$0.00	\$60.00	\$60.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-024-06</b>	<b>334672 T</b>			<b>6-8:50 PM</b>	
		<b>TH</b>			<b>6-7:20 PM</b>	
		<b>TH</b>			<b>7:30 -8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$60.00	\$60.00	
	Required: Student Petition.					

**ESOL-030 INTERMEDIATE GRAMMAR A, 0 CREDIT**

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

HAR LCT	<b>ESOL-030-06</b>	<b>339521 MW</b>			<b>7:30 -8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$30.00	\$30.00	
	Required: Student Petition.					

**ESOL-031 INTERMEDIATE GRAMMAR B, 0 CREDIT**

One of a two-part series. English language learners study and practice simple past and present perfect verb forms with time expressions, and comparative and superlative adjectives in written and spoken English. Aligns with the Oregon Adult English Language Proficiency Standards, Level 2. Required: Student Petition.

OC LCT	<b>ESOL-031-01</b>	<b>334675 TTH</b>			<b>12:30 -1:50 PM</b>	
	S. MUNRO	\$0.00	\$0.00	\$30.00	\$30.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-031-06</b>	<b>334677 MW</b>			<b>7:30 -8:50 PM</b>	
	TBA	\$0.00	\$0.00	\$30.00	\$30.00	
	Required: Student Petition.					

**ESOL-033 INTERMEDIATE CONVERSATION 2, 0 CREDIT**

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

OC LCT	<b>ESOL-033-01</b>	<b>334682 MW</b>			<b>10:30 -11:50 AM</b>	
	TBA	\$0.00	\$0.00	\$30.00	\$30.00	
	Required: Student Petition.					
HAR LCT	<b>ESOL-033-06</b>	<b>334685 MW</b>			<b>6-7:20 PM</b>	
	TBA	\$0.00	\$0.00	\$30.00	\$30.00	
	Required: Student Petition.					

**ESOL-034 INTERMEDIATE READING & WRITING, 0 CREDIT**



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

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	<b>ESOL-034-01 334689 TTH</b>	TBA	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Petition.					
HAR LCT	<b>ESOL-034-06 334692 TTH</b>	TBA	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Petition.					
HAR LCT	<b>ESOL-034-07 339568 TTH</b>	TBA	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Petition.					

**ESOL-043 UPPER INTERMEDIATE CONVERSATION 2, 0 CREDIT**

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

OC LCT	<b>ESOL-043-01 334696 MW</b>	S. MUNRO	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student Petition.					
HAR LCT	<b>ESOL-043-06 334699 MW</b>	TBA	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student Petition.					
HAR LCT	<b>ESOL-043-07 339449 MW</b>	TBA	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student 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 LCT	<b>ESOL-044-01 334702 TTH</b>	L. JOYCE	\$0.00	\$0.00	\$70.00	\$70.00
	Required: Student Petition.					
HAR LCT	<b>ESOL-044-06 334704 TTH</b>	I. FERGUSON	\$0.00	\$0.00	\$70.00	\$70.00
	Required: Student Petition.					

**ESOL-046 EDITING FOR BETTER WRITING, 0 CREDIT**

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

OC LCT	<b>ESOL-046-01 334706 TTH</b>	K. LONG	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Petition.					
HAR LCT	<b>ESOL-046-06 334710 TTH</b>	TBA	\$0.00	\$0.00	\$60.00	\$60.00
	Required: Student Petition.					

**ESOL-050 ADVANCED 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

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	

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	<b>ESOL-050-01 339445 TTH</b>	K. LONG	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student Petition.					
HAR LCT	<b>ESOL-050-06 339451 MW</b>	TBA	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student Petition.					

**ESOL-053 ADVANCED COMMUNICATION SKILLS 2, 0 CREDIT**

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

OC LCT	<b>ESOL-053-01 334713 MW</b>	K. LONG	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student Petition.					
HAR LCT	<b>ESOL-053-06 334717 MW</b>	I. FERGUSON	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student Petition.					

**ESOL-054 ADVANCED READING & WRITING, 0 CREDIT**

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

OC LCT	<b>ESOL-054-01 334720 TTH</b>	S. MUNRO	\$0.00	\$0.00	\$70.00	\$70.00
	Required: Student Petition.					

**ESOL-061 VOCABULARY BUILDING 2, 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.

OC LCT	<b>ESOL-061-01 339441 MW</b>	S. MUNRO	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student Petition.					

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

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

OC LCT	<b>ESOL-075-01 339444 MW</b>	TBA	\$0.00	\$0.00	\$30.00	\$30.00
	Required: Student Petition.					

**ESOL-082 ASSESS/EVALUATE NEW STUDENTS, 0 CREDIT**

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

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	<b>ESOL-082-01 334735</b> L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00	
	Required: Student Petition.					
ONL	<b>ESOL-082-06 334739</b> L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00	
	Required: Student 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	<b>ESOL-083-01 334740</b> L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00	
	Required: Student Petition.					
ONL	<b>ESOL-083-06 334742</b> L. JOYCE	\$0.00	\$0.00	\$0.00	\$0.00	
	Required: Student 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	<b>PIE-020-01 334745 TTH</b>					<b>12:30 -1:50 PM</b>
	TBA	\$378.00	\$39.00	\$240.00	\$657.00	
	Required: Student Petition.					

**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.

oc	<b>PIE-024-01 334748 T</b>					<b>9-11:50 AM</b>
	TH					<b>9-10:20 AM</b>
	TH					<b>10:30 -11:50 AM</b>
	TBA	\$756.00	\$78.00	\$480.00	\$1,314.00	
	Required: Student Petition.					

**PIE-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.

oc	<b>PIE-031-01 334752 TTH</b>					<b>12:30 -1:50 PM</b>
	S. MUNRO	\$378.00	\$39.00	\$240.00	\$657.00	
	Required: Student Petition.					

**PIE-033 INTERMEDIATE CONVERSATION 2, 0 CREDIT**

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

oc	<b>PIE-033-01 334755 MW</b>					<b>10:30 -11:50 AM</b>
	TBA	\$378.00	\$39.00	\$240.00	\$657.00	
	Required: Student Petition.					

**PIE-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	<b>PIE-034-01 334758 TTH</b>					<b>9-11:50 AM</b>
	TBA	\$756.00	\$78.00	\$480.00	\$1,314.00	
	Required: Student Petition.					

**PIE-043 UPPER INTERMEDIATE CONVERSATION 2, 0 CREDIT**

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

oc	<b>PIE-043-01 334761 MW</b>					<b>10:30 -11:50 AM</b>
	S. MUNRO	\$378.00	\$39.00	\$240.00	\$657.00	
	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	<b>PIE-044-01 334763 TTH</b>					<b>9-11:50 AM</b>
	L. JOYCE	\$756.00	\$78.00	\$480.00	\$1,314.00	
	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.

oc	<b>PIE-046-01 334767 TTH</b>					<b>9-11:50 AM</b>
	K. LONG	\$756.00	\$78.00	\$480.00	\$1,314.00	
	Required: Student Petition.					

**PIE-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	<b>PIE-050-01 339446 TTH</b>					<b>12:30 -1:50 PM</b>
	K. LONG	\$378.00	\$39.00	\$240.00	\$657.00	
	Required: Student Petition.					

<b>Campus Locations:</b> HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location	<b>Distance Education Notification:</b> ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work	<b>Other Coding Translations:</b> TBA: To be arranged: contact department first class VAR: Variable credit class	<b>ESPAÑOL:</b> Enseñado en español LCT: Low-Cost Text
--	---	--	---

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

**PIE-053 ADVANCED COMMUNICATION SKILLS 2, 0 CREDIT**  
 English language learners practice speaking and listening strategies for effective communication for discussions, interviews, presentations, and note-taking to improve fluency in speaking and listening. Students will study the important effect intonation and body language have on meaning, build vocabulary and critical thinking skills, and develop confidence in speaking with purpose. The focus of this course is to prepare students for success in the workplace and community. Aligns with the Oregon Adult English Language Proficiency Standards, Level 4 & 5. Required: Student Petition.

oc	<b>PIE-053-01</b>	<b>334770 MW</b>			<b>10:30 -11:50 AM</b>	
	K. LONG	\$378.00	\$39.00	\$240.00		\$657.00

Required: Student Petition.

**PIE-054 ADVANCED READING & WRITING, 0 CREDIT**  
 English language learners develop writing skills including summarizing, response writing, and paraphrasing, and improve writing fluency. Develop reading skills and fluency through reading a range of texts on a variety of topics. Aligns with the Oregon Adult English Language Proficiency Standards, Levels 4 and 5. Required: Student Petition.

oc	<b>PIE-054-01</b>	<b>334774 TTH</b>			<b>9-11:50 AM</b>	
	S. MUNRO	\$756.00	\$78.00	\$480.00		\$1,314.00

Required: Student Petition.

**PIE-061 VOCABULARY BUILDING 2, 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.

oc	<b>PIE-061-01</b>	<b>339442 MW</b>			<b>9-10:20 AM</b>	
	S. MUNRO	\$378.00	\$39.00	\$240.00		\$657.00

Required: Student Petition.

**PIE-075 PRONUNCIATION: SOUNDS OF AMERICAN ENGLISH, 0 CREDIT**  
 English language learners develop pronunciation skills and knowledge to improve speech clarity, listening effectiveness, and pronunciation of written words. This course focuses on the sounds (phonemes) of American English. Required: Student Petition.

oc	<b>PIE-075-01</b>	<b>339443 MW</b>			<b>12:30 -1:50 PM</b>	
	TBA	\$378.00	\$39.00	\$240.00		\$657.00

Required: Student Petition.

## English Literature

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

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

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

ONL	<b>ENG-108-01</b>	<b>338047</b>				
	A. WARREN	\$504.00	\$52.00	\$0.00		\$556.00

**ENG-205 BRITISH LITERATURE: ROMANTIC TO CONTEMPORARY, 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

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

Representative study of British literature, including major works, writers, and literary forms. Nineteenth century through modern, with readings from the Romantic, Victorian, and modern periods.

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

ONL LCT	<b>ENG-205-01</b>	<b>335271</b>				
	J. MCALPINE	\$504.00	\$52.00	\$0.00		\$556.00

This course uses an online text. Students who did not take ENG-204 in Fall 2021 will be charged \$24.28 for access to the text.

**ENG-222 CHILDREN'S AND YOUNG ADULT LITERATURE, 4 CREDITS**

Surveys the development of the genres of children's and young adult literature, including fairy tales, picture books, classic children's novels, and contemporary young adult novels, studying how these texts reflect their culture's understanding of young readers' psychology, taste, and learning needs over time.

**Recommended Prerequisites:** Placement in WRD-098 or above

oc	<b>ENG-222-01</b>	<b>338048 MW</b>			<b>10-11:50 AM</b>	
	T. DONNELLY	\$504.00	\$52.00	\$0.00		\$556.00

**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 HYB	<b>ENG-226-01</b>	<b>339555 T</b>			<b>1-2:50 PM</b>	
	C. BURNELL	\$504.00	\$52.00	\$0.00		\$556.00

Focus on American fiction by, about, and for queer and trans people.

**ENG-240 NATIVE AMERICAN MYTHOLOGY, 4 CREDITS**

Explores Native American mythology and its cultural, social, and literary significance; views Native American mythology in its historical and geographic positions and in the larger context of world literary tradition; considers how studying myth affects and influences reading other works; introduces theoretical approaches to mythology and basic literary elements and terminology.

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

oc	<b>ENG-240-01</b>	<b>338049 MW</b>			<b>1-2:50 PM</b>	
	J. BRYANT-TRERISE	\$504.00	\$52.00	\$0.00		\$556.00

**ENG-260 INTRODUCTION TO WOMEN WRITERS, 4 CREDITS**

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

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

ONL	<b>ENG-260-01</b>	<b>338050</b>				
	N. ROSEVEAR	\$504.00	\$52.00	\$0.00		\$556.00

## Environmental Science

**ESR-172 INTRODUCTION TO CLIMATE CHANGE, 4 CREDITS**

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

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			

**Corequisites:** ESR-172L  
**Recommended Prerequisites:** MTH-060 with a C or better or placement in MTH-065  
**Recommended Prerequisites:** WRD-098 or placement in WR-121Z

oc	<b>ESR-172-01 335306 TTH</b>				<b>1-2:20 PM</b>	
	E. CAVALIERE	\$504.00	\$52.00	\$55.00		\$611.00
	Corequisite: Take 1 of the following ESR-172L-01, ESR-172L-02, ESR-172L-03.					
ONL	<b>ESR-172-02 335310</b>					
	E. CAVALIERE	\$504.00	\$52.00	\$55.00		\$611.00
	Corequisite: Take 1 of the following ESR-172L-01, ESR-172L-02, ESR-172L-03.					
ONL	<b>ESR-172-15 335312</b>					
	E. CAVALIERE	\$504.00	\$52.00	\$55.00		\$611.00
	Corequisite: Take the following ESR-172L-15.					

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

Lab course for ESR-172

**Corequisites:** ESR-172

oc	<b>ESR-172L-01 335314 T</b>				<b>9-11:50 AM</b>	
	E. CAVALIERE	\$0.00	\$0.00	\$0.00		\$0.00
	Corequisite: Take 1 of the following ESR-172-01, ESR-172-02.					
oc	<b>ESR-172L-02 335316 W</b>				<b>1-3:50 PM</b>	
	E. CAVALIERE	\$0.00	\$0.00	\$0.00		\$0.00
	Corequisite: Take 1 of the following ESR-172-01, ESR-172-02.					
oc	<b>ESR-172L-03 335318 TH</b>				<b>2:30 -5:20 PM</b>	
	E. CAVALIERE	\$0.00	\$0.00	\$0.00		\$0.00
	Corequisite: Take 1 of the following ESR-172-01, ESR-172-02.					
HAR	<b>ESR-172L-15 335320 TH</b>				<b>6-8:50 PM</b>	
	S. BALLEW	\$0.00	\$0.00	\$0.00		\$0.00
	Corequisite: Take the following ESR-172-15.					

**Ethnic Studies**

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

An introductory and survey course analyzing the historical context of Latinos 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

oc	<b>ES-211-01 339426 MW</b>				<b>1-2:50 PM</b>	
	L. MARTINEZ	\$504.00	\$52.00	\$0.00		\$556.00

**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.

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			

ONL LCT **HDF-225-01 335398**  
 D. GLASCOCK \$378.00 \$39.00 \$0.00 \$417.00  
 Meets: 2/10-3/22. This is an accelerated 5-week course that is all online with no synchronous meetings.

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

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

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

REM LCT ESPAÑOL	<b>HDF-247ES-01 335401 TH</b>				<b>6-7:50 PM</b>	
	D. TORRADO	\$504.00	\$52.00	\$0.00		\$556.00
	La clase se reúne seis jueves por Zoom de 6:00-7:50pm. (1/9, 1/23, 2/6, 2/20, 3/6, 3/20).					

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

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

ONL	<b>HDF-260-01 335404</b>					
	C. BAKER	\$378.00	\$39.00	\$0.00		\$417.00

**Fire Science (Wildland)**

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

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)

oc	<b>FRP-110-01 339524 S</b>				<b>8-5:00 PM</b>	
	K. GEARY	\$126.00	\$13.00	\$25.00		\$164.00
	Meets: 3/8.					

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

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

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

**Recommended Prerequisites:** FRP-290 (S-290)

OC LCT	<b>FRP-244-01 334901 MTWTFH</b>				<b>8:30 -3:00 PM</b>	
	M. SNYDER	\$378.00	\$39.00	\$50.00		\$467.00
	Meets: 2/3-2/7.					

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee				Instructor	Tuition	Fee	Crs. Fee			
<b>FRP-246</b>	<b>WILDERNESS IV: BACKCOUNTRY CPR/FIRST AID/AED, 2 CREDITS</b>						OC LCT	<b>FYE-101-01</b>	<b>335294 M</b>			<b>9-10:50 AM</b>	
								T. BOYLE- GALESTIANZ	\$0.00	\$0.00		\$93.00	\$93.00
	Introduction to general medical concepts and basic life support skills. It is targeted to the outdoor enthusiast on day trips or short adventures. Course results in CPR, first aid & AED certification.							Contact: counseling@clackamas.edu.					
							OC LCT	<b>FYE-101-02</b>	<b>335298 MW</b>			<b>11-11:50 AM</b>	
								TBA	\$0.00	\$0.00		\$93.00	\$93.00
								Contact: counseling@clackamas.edu.					
							OC LCT	<b>FYE-101-03</b>	<b>335302 W</b>			<b>9-10:50 AM</b>	
								TBA	\$0.00	\$0.00		\$93.00	\$93.00
								Contact: counseling@clackamas.edu.					
							OC LCT	<b>FYE-101-04</b>	<b>335305 T</b>			<b>2-3:50 PM</b>	
								TBA	\$0.00	\$0.00		\$93.00	\$93.00
								Contact: counseling@clackamas.edu.					
							OC	<b>FYE-101-05</b>	<b>339424 TH</b>			<b>2-3:50 PM</b>	
								TBA	\$0.00	\$0.00		\$93.00	\$93.00
							ONL	<b>FYE-101-06</b>	<b>339425</b>				
								J. CORTES	\$0.00	\$0.00		\$93.00	\$93.00

OC HYB	FRP-246-01	334905 F	5-8:30 PM
		SSU	8:30 -5:00 PM
		SU	8:30 -5:00 PM
	M. ADAMS	\$252.00	\$26.00
		\$50.00	\$328.00
	Meets: 2/7, 2/8, 2/9, & 2/16.		

**FRP-250 WILDERNESS VI: BASIC TOOL USE AND CARE, 1 CREDIT**

Selection, operation, and maintenance of chain saws and hand tools to include shovels, Pulaski, single and double bit axes, hand saws, and various other tools used in forestry, firefighting and survival activities. Class includes a lab component.

oc	FRP-250-01	339525 M	10-12:00 PM
	J. GULLEY	\$126.00	\$13.00
		\$125.00	\$264.00
	Meets: 1/6-3/15.		

**FRP-255 PHYSICAL FITNESS AND NUTRITION FOR FIRST RESPONDERS, 2 CREDITS**

This course will assist the student in meeting the physical fitness requirements for work in firefighting, and emergency medical services. Includes individual conditioning strategies, nutritional guidelines, basic exercise principles, pre-employment and lifelong fitness and conditioning. The course will prepare students for activities like the Candidate Physical Abilities Test (CPAT), work capacity test and other physical ability tests required for first responders. May be repeated for up to 6 credits.

**Required:** Complete a physical performed by a licensed physician prior to attending

**Recommended:** Have adequate outdoor exercise attire and be prepared for arduous physical activity

oc	FRP-255-01	339526 MTH	8-10:00 AM
	J. GULLEY	\$252.00	\$26.00
		\$0.00	\$278.00

**FRP-265 WILDLAND FIRE PREVENTION EDUCATION 1 (P-101), 3 CREDITS**

This course was developed as part of a multi-course national curriculum covering wildfire prevention. It is designed to provide a basic introduction of fire prevention principles and activities for fire prevention specialists, fire managers, public information officers and others who have wildland fire prevention, education, or mitigation responsibilities. Course equivalent to NWCG P-101 Fire Prevention Education 1.

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

oc	FRP-265-01	334907 TH	10-1:30 PM
	J. GULLEY	\$378.00	\$39.00
		\$0.00	\$417.00

**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.

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

Este es el primer curso en la serie de 3 clases diseñadas para ayudar a los estudiantes novatos o que inician apenas su trayectoria estudiantil, con el ajuste a un plantel nuevo, a conectar con otros alumnos, a entender las expectativas del sistema estudiantil, y a familiarizarse con la fuente de servicios al alcance del estudiante. First Year Experience (Experiencia de Primer Año) está diseñada para preparar a los estudiantes a entablar nexos entre estudiante y profesorado, y con el desarrollo de prácticas exitosas para concluir clases y continuar con el estudio hasta la culminación de metas académicas.

REM LCT ESPAÑOL	FYE-101ES-01	335317 M	5:30 -7:20 PM
	L. MARTINEZ	\$0.00	\$0.00
		\$93.00	\$93.00
	Contact: counseling@clackamas.edu.		

**FYE-102 FIRST YEAR EXPERIENCE LEVEL II, 1 CREDIT**

This course is a second in the First Year Experience sequence offered to new CCC students. This course is designed for students who want to continue to delve in depth into future educational and career planning, financial aid and scholarships, applied study skills, and college and community resources.

**Prerequisites:** FYE-101

REM LCT	FYE-102-01	335321 T	9-9:50 AM
	D. GREEN	\$0.00	\$0.00
		\$75.00	\$75.00
	Contact: counseling@clackamas.edu.		

**Food & Nutrition**

**FN-110 PERSONAL NUTRITION, 3 CREDITS**

This course explores how nutrition affects health and fitness for the individual and the family. Students apply knowledge of nutrition guidelines to analyze personal diet and improve current food preparation and habits. It is a basic nutrition course for students with little or no science background.

ONL	FN-110-01	334544				
	T. SCOLLARD	\$378.00	\$39.00	\$82.20	\$499.20	
	Online textbook included in section fees.					

**FN-225 NUTRITION, 4 CREDITS**

<b>Campus Locations:</b> HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location	<b>Distance Education Notification:</b> ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work	<b>Other Coding Translations:</b> TBA: To be arranged: contact department first class VAR: Variable credit class	<b>ESPAÑOL:</b> Enseñado en español LCT: Low-Cost Text
--	---	--	---

Course No	Course Title, Credits	Section No	Crns Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
		Instructor		Tuition Fee	Crns. Fee	
ONL	<b>FN-225-01 334545</b>					
	T. SCOLLARD		\$504.00	\$52.00	\$0.00	\$556.00
ONL	<b>FN-225-02 334546</b>					
	J. PAVLINAC		\$504.00	\$52.00	\$105.84	\$661.84
	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 ESPAÑOL	<b>GED-011-01 335327 MW</b>				<b>5:30 -7:50 PM</b>	
	A. ARISTIZABAL	\$0.00	\$0.00	\$50.00	\$50.00	
	Requerido: petición del estudiante. Contact: Adriana Aristizabal at 503-594-3916.					
HAR ESPAÑOL	<b>GED-011-02 335329 TTH</b>				<b>6-8:50 PM</b>	
	C. SANCHEZ	\$0.00	\$0.00	\$50.00	\$50.00	
	Requerido: petición del estudiante. For registration information contact Camilo Sanchez at 503-594-3029 or register at first class.					

**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	<b>GED-015-17 335334 MW</b>				<b>5:30 -7:50 PM</b>	
	A. WICKERT	\$0.00	\$0.00	\$50.00	\$50.00	
	Required: Student Petition.					
HAR HYB LCT	<b>GED-015-67 335339 MW</b>				<b>10-11:50 AM</b>	
	M. NICKAS	\$0.00	\$0.00	\$55.00	\$55.00	
	Required: Student Petition.					
ONL LCT	<b>GED-015-68 335341</b>					
	S. HATSWELL	\$0.00	\$0.00	\$55.00	\$55.00	
	Required: Student Petition.					
ONL LCT	<b>GED-015-69 335343</b>					
	A. SMITH	\$0.00	\$0.00	\$55.00	\$55.00	
	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

OC LCT	<b>GED-015-80 335344 MTWTH</b>				<b>10-11:50 AM</b>	
	J. NIELSON	\$0.00	\$0.00	\$55.00	\$55.00	
	Required: Student Petition.					

**GED-049 LATINO GED & LIFE SKILLS, 0 CREDIT**

Desarrollo de habilidades académicas básicas, ofrecida en español con énfasis en los requerimientos para presentar el test del GED para obtener el certificado equivalente a la High School. También se enfoca en habilidades básicas de la vida, metas personales e interés de carreras. Se requiere el consentimiento del Instructor para registrarse. Offered in Spanish. Basic academic skill development with emphasis on requirements to take the GED test to obtain a high school equivalency certificate. Also focuses on basic life skills, personal and career goals and interests. Required: Student Petition.

REM ESPAÑOL	<b>GED-049-02 335347 TTH</b>				<b>6-8:50 PM</b>	
	A. ARISTIZABAL	\$0.00	\$0.00	\$50.00	\$50.00	
	Requerido: petición del estudiante.					
HAR ESPAÑOL	<b>GED-049-03 335353 MW</b>				<b>9-11:50 AM</b>	
	C. SANCHEZ	\$0.00	\$0.00	\$50.00	\$50.00	
	Requerido: petición del estudiante. For registration information contact Camilo Sanchez at 503-594-3029 or register at first class.					
HAR ESPAÑOL	<b>GED-049-04 335356 S</b>				<b>9-11:50 AM</b>	
	M. ROSAS DELGADO	\$0.00	\$0.00	\$30.00	\$30.00	
	Requerido: petición del estudiante.					

**General Science**

**GS-105 EARTH SYSTEM SCIENCE, 4 CREDITS**

A lab course examining the chemistry and geology of scientific dating techniques, sedimentary rocks, surface processes, fossils, energy resources and the physics and chemistry of energy resources and mass wasting.

**Corequisites:** GS-105L

**Recommended Prerequisites:** MTH-065 or placement in MTH-095

OC	<b>GS-105-01 339519 TTH</b>				<b>10-11:20 AM</b>	
	A. KOTASH	\$504.00	\$52.00	\$50.00	\$606.00	

**GS-105L EARTH SYSTEM SCIENCE LAB, 0 CREDIT**

Lab course for GS-105

**Corequisites:** GS-105

OC	<b>GS-105L-01 339520 W</b>				<b>1-3:50 PM</b>	
	A. KOTASH	\$0.00	\$0.00	\$0.00	\$0.00	

**GS-107 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.

**Corequisites:** GS-107L

**Prerequisites:** MTH-065 or MTH-098 with a C or better or placement in MTH-095

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

ONL LCT	<b>GS-107-40 335346</b>					
	C. SHARON	\$504.00	\$52.00	\$25.00	\$581.00	
	Corequisite: Take the following GS-107L-40.					
ONL LCT	<b>GS-107-41 335348</b>					
	C. SHARON	\$504.00	\$52.00	\$25.00	\$581.00	
	Corequisite: Take the following GS-107L-41.					

**GS-107L ASTRONOMY LAB, 0 CREDIT**

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

Lab course for GS-107  
**Corequisites:** GS-107

ONL	<b>GS-107L-40</b>	<b>335349</b>				
	C. SHARON	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following GS-107-40.					
ONL	<b>GS-107L-41</b>	<b>335350</b>				
	C. SHARON	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take the following GS-107-41.					

**Geographic Information Systems**

*All degree seeking students should arrange to speak to a faculty advisor prior to registering. Call 503-594-3678 for more information, or contact Advising, 503-594-3475.*

**GIS-201 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS, 3 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	<b>GIS-201-01</b>	<b>339523</b>				
	A. ARMEN	\$378.00	\$39.00	\$40.00	\$457.00	

**GIS-202 INTERMEDIATE GEOGRAPHIC INFORMATION SYSTEMS, 3 CREDITS**

This class follows the introductory course as a continuation of Geographic Information Systems (GIS) principles using the ArcGIS Pro software platform. Topics explored include working with geodatabases, topology, vector and raster analysis, and creating and editing data. Students also practice key GIS project management processes, workflows, and best practices through an analysis project.

**Prerequisites:** GIS-201

ONL	<b>GIS-202-01</b>	<b>334910</b>				
	A. ARMEN	\$378.00	\$39.00	\$40.00	\$457.00	

**GIS-205 CARTOGRAPHY AND MAP MAKING, 3 CREDITS**

Explores basic cartographic design principles and how to apply them to produce high quality maps using ArcGIS Pro software. Introduces cartographic terminology, principles, and map-making tools. Significant themes include visual representation and communication; how to turn geographic data into effective maps for print and the web; how to critique maps; map design and elements; and color, fonts, labels, and symbols for maps.

**Prerequisites:** GIS-201

ONL	<b>GIS-205-01</b>	<b>334911</b>				
	A. ARMEN	\$378.00	\$39.00	\$30.00	\$447.00	

**GIS-236 INTRODUCTION TO PROGRAMMING FOR GIS, 3 CREDITS**

An introduction to computer programming and Object Orientated Programming (OOP) with Python. Covers basic computer programming concepts including data types, loops, control structures, functions, classes, and program development. Use Python for problem solving by creating basic scripts for more advanced object-oriented programs.

**Recommended Prerequisites:** GIS-101

**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		Days (M,T,W,Th,F,S,SU)	Time	Total
	Section No	Crs Reg.			
Instructor	Tuition	Fee	Crs. Fee		

REM	<b>GIS-236-01</b>	<b>334913 MW</b>				
	A. KELLEY	\$378.00	\$39.00	\$30.00	\$447.00	
	<b>5-7:50 PM</b>					

**Geography**

**GEO-100 INTRODUCTION TO PHYSICAL GEOGRAPHY, 4 CREDITS**

Analyzes the physical elements of the Earth's surface and atmosphere. Focuses on natural processes that create physical diversity on the Earth including weather and climate, biosphere, soils and landforms and explores how these influence human cultural settlement activities.

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

ONL	<b>GEO-100-01</b>	<b>335359</b>				
	A. ARMEN	\$504.00	\$52.00	\$94.99	\$650.99	
	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 LCT	<b>GEO-110-01</b>	<b>335360</b>				
	C. FELDMAN	\$504.00	\$52.00	\$0.00	\$556.00	
	Online textbook provided first day of class.					

**GEO-130 INTRODUCTION TO ENVIRONMENTAL GEOGRAPHY, 4 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

ONL	<b>GEO-130-01</b>	<b>335361</b>				
	C. FELDMAN	\$504.00	\$52.00	\$109.99	\$665.99	
	Online textbook included in section fees.					

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

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

**Corequisites:** CWE-281

oc	<b>GEO-280-01</b>	<b>335364</b>				
	C. FELDMAN	\$756.00	\$78.00	\$45.00	\$879.00V	
	D. LOUGEE Required: Student Petition. Corequisite: Take the following CWE-281-06.					

**Geology**

**G-102 GENERAL GEOLOGY, 4 CREDITS**

For non-science majors. An introductory lab course that explores the Earth's systems and surface features. Systems/processes/hazards explored include rivers, mass wasting, glaciers, groundwater, and deserts. Labs focus on geologic and topographic maps and how they are used to understand geologic features and local geology.

**Corequisites:** G-102L

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

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

ONL	<b>G-102-01</b>	<b>335322</b>				
	A. KOTASH		\$504.00	\$52.00	\$50.00	\$606.00
	This section has remote lectures and on-campus exams. Midterm and Final are on campus on February 7th (Wednesday week 5) and March 18th (Monday of final week). Students will need to come to campus to take exams. Corequisite: Take 1 of the following G-102L-01, G-102L-02.					
OC	<b>G-102-02</b>	<b>335324 TTH</b>			<b>10-11:20 AM</b>	
	B. WALKER		\$504.00	\$52.00	\$50.00	\$606.00
	This section has an in-person lab. Corequisite: Take 1 of the following G-102L-01, G-102L-02.					
HAR	<b>G-102-20</b>	<b>335328 T</b>			<b>6-8:50 PM</b>	
	J. WOODCOCK		\$504.00	\$52.00	\$50.00	\$606.00
	Corequisite: Take the following G-102L-20.					

**G-102L GENERAL GEOLOGY LAB, 0 CREDIT**  
 Lab course for G-102  
**Corequisites:** G-102

OC	<b>G-102L-01</b>	<b>335330 T</b>			<b>1-3:50 PM</b>	
	A. KOTASH		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Take 1 of the following G-102-01, G-102-02.					
OC	<b>G-102L-02</b>	<b>335332 TH</b>			<b>1-3:50 PM</b>	
	TBA		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Take 1 of the following G-102-01, G-102-02.					
HAR	<b>G-102L-20</b>	<b>335333 TH</b>			<b>6-8:50 PM</b>	
	TBA		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Take the following G-102-20.					

**G-202 GENERAL GEOLOGY, 4 CREDITS**  
 For science majors. A lab course that explores surface features of the Earth and the systems that form those features. Systems/processes/hazards explored include rivers, mass wasting, glaciers, groundwater and deserts. Topographic/geologic maps are used to understand geologic features and local geology.  
**Prerequisites:** G-201 with a C or better  
**Corequisites:** G-202L

ONL	<b>G-202-01</b>	<b>335335</b>				
	A. KOTASH		\$504.00	\$52.00	\$50.00	\$606.00
	This section has remote lectures and on-campus exams. Midterm and Final are on campus on February 7th (Wednesday week 5) and March 18th (Monday of final week). Students will need to come to campus to take exams. Corequisite: Take 1 of the following G-202L-01, G-202L-02.					
OC	<b>G-202-02</b>	<b>335336 TTH</b>			<b>10-11:20 AM</b>	
	B. WALKER		\$504.00	\$52.00	\$50.00	\$606.00
	This section has an in-person lab. Corequisite: Take 1 of the following G-202L-01, G-202L-02.					
HAR	<b>G-202-20</b>	<b>335338 T</b>			<b>6-8:50 PM</b>	
	J. WOODCOCK		\$504.00	\$52.00	\$50.00	\$606.00
	Corequisite: Take the following G-202L-20.					

**G-202L GENERAL GEOLOGY LAB, 0 CREDIT**  
 Lab course for G-202  
**Corequisites:** G-202

OC	<b>G-202L-01</b>	<b>335340 T</b>			<b>1-3:50 PM</b>	
	A. KOTASH		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Take 1 of the following G-202-01, G-202-02.					
OC	<b>G-202L-02</b>	<b>335342 TH</b>			<b>1-3:50 PM</b>	
	TBA		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Take 1 of the following G-202-01, G-202-02.					

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	
	Instructor		Tuition	Fee	Crs. Fee	

HAR	<b>G-202L-20</b>	<b>335345 TH</b>			<b>6-8:50 PM</b>	
	J. WOODCOCK		\$0.00	\$0.00	\$0.00	\$0.00
	Corequisite: Take the following G-202-20.					

## Gerontology

**GRN-182 AGING AND THE BODY, 3 CREDITS**  
 Focuses on how aging affects physical health and well-being; impact on body systems, illness, disability, longevity research, wellness and health promotion. For students interested in working with the elderly and those in the field.

ONL LCT	<b>GRN-182-01</b>	<b>334523</b>				
	Y. SMITH		\$378.00	\$39.00	\$0.00	\$417.00

**GRN-184 AGING & THE INDIVIDUAL, 3 CREDITS**  
 This course explores the impact of aging on the individual as well as family members, caregivers, and professionals. Topics include: dementia, cognitive issues, stress, coping, life transitions, and intelligence. Course will also discuss the concept of successful aging from cross-cultural perspectives.

ONL LCT	<b>GRN-184-01</b>	<b>334524</b>				
	Y. SMITH		\$378.00	\$39.00	\$0.00	\$417.00

**GRN-280 GERONTOLOGY/CWE, 2-6 CREDITS (VAR)**  
 Cooperative work experience. Acquaint gerontology students with the roles and related activities of organizations serving the elderly. This course provides an opportunity to apply theories and techniques learned in the classroom. May be repeated for up to 6 credits. Required: Student Petition.

HAR	<b>GRN-280-01</b>	<b>334525</b>				
	J. LOVELESS		\$756.00	\$78.00	\$45.00	\$879.00V
	Required: Student Petition. Corequisite: Take the following CWE-281-06.					

**Prerequisite or Corequisite:** HS-170  
**Corequisites:** HS-270

## Health

**HE-163 BODY & DRUGS I: INTRODUCTION TO ABUSE & ADDICTION, 3 CREDITS**  
 The first of a four-course sequence, this course examines the history of the use of addictive drugs, the definition of addiction, psychosocial and neurobiological causes of drug and behavioral addiction, addictive drug classifications, and the history of/introduction to addiction treatment, and access and utilize effective resources to improve and maintain mental and physical wellbeing.

ONL	<b>HE-163-01</b>	<b>335351</b>				
	T. PANTAGES		\$378.00	\$39.00	\$0.00	\$417.00
	ONL	<b>HE-163-02</b>	<b>335352</b>			
T. PANTAGES			\$378.00	\$39.00	\$0.00	\$417.00

**HE-164 BODY & DRUGS II: ALCOHOL, 3 CREDITS**  
 The second of a four-course offering. Covers beverage alcohol as a drug, the history of alcohol use/abuse, physiological and psychological effects of alcohol use on the user, and the impact of that use on those around the user and on society at large, access and utilize effective resources to improve and maintain mental and physical wellbeing.

ONL	<b>HE-164-01</b>	<b>335354</b>				
	T. PANTAGES		\$378.00	\$39.00	\$0.00	\$417.00

**Prerequisites:** HE-163

ONL	<b>HE-164-01</b>	<b>335354</b>				
	T. PANTAGES		\$378.00	\$39.00	\$0.00	\$417.00



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

**HE-201 PERSONAL TRAINING, 3 CREDITS**  
 Students will follow the curriculum for the National Council on Strength and Fitness (NCSF) Certified Personal Trainer certification. The course will guide students through the expectations, requirements, processes and knowledge to prepare to become a certified Personal Trainer through the NCSF. Through videos, lecture and self-study, students will be prepared to take the NCSF Certified Personal Training exam, which is offered through the NCSF and is not included in the course.

**Recommended Prerequisites:** PE-240

ONL	<b>HE-201-01</b>	<b>335355</b>				
	T. NELSON		\$378.00	\$39.00	\$0.00	\$417.00

**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.

ONL	<b>HE-204-01</b>	<b>335357</b>				
	J. BUEL		\$378.00	\$39.00	\$0.00	\$417.00

**HE-207 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	<b>HE-207-01</b>	<b>335362</b>				
	T. NELSON		\$378.00	\$39.00	\$0.00	\$417.00

**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.

ONL	<b>HE-223-01</b>	<b>335363</b>				
	J. BUEL		\$378.00	\$39.00	\$0.00	\$417.00

**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	<b>HE-249-01</b>	<b>335365 MW</b>			<b>1-2:20 PM</b>	
	K. WOODS		\$378.00	\$39.00	\$0.00	\$417.00

**HE-250 PERSONAL HEALTH, 3 CREDITS**  
 This course is designed to help students gain an overall understanding of information basic to the field of health, to help them critically evaluate health information, and to promote positive attitudes, values, and behaviors in regard to personal health.

ONL	<b>HE-250-04</b>	<b>335369</b>				
	J. RHODEN		\$378.00	\$39.00	\$0.00	\$417.00
ONL	<b>HE-250-05</b>	<b>335374</b>				
	J. RHODEN		\$378.00	\$39.00	\$0.00	\$417.00
	Meets: 2/17-3/22.					

**HE-252 FIRST AID/CPR/AED, 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

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

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	<b>HE-252-01</b>	<b>335375</b>				
	K. WOODS		\$378.00	\$39.00	\$35.00	\$452.00
ONL	<b>HE-252-03</b>	<b>335378</b>				
	T. NELSON		\$378.00	\$39.00	\$35.00	\$452.00
ONL	<b>HE-252-05</b>	<b>335379</b>				
	K. ARIZO		\$378.00	\$39.00	\$35.00	\$452.00

**HE-280 HEALTH/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	<b>HE-280-01</b>	<b>335380</b>				
	T. NELSON		\$756.00	\$78.00	\$45.00	\$879.00V
	Required: Student Petition. Review the registration process and complete the online application to the program at <a href="http://www.clackamas.edu/CWE-Students.aspx">http://www.clackamas.edu/CWE-Students.aspx</a> prior to registering. Corequisite: Take the following CWE-281-06.					

**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	<b>HPE-295-01</b>	<b>335433</b>				
	J. RHODEN		\$378.00	\$39.00	\$30.00	\$447.00
ONL	<b>HPE-295-02</b>	<b>335438</b>				
	J. BUEL		\$378.00	\$39.00	\$30.00	\$447.00

**HPE-296 HEALTH AND FITNESS FOR CRIMINAL JUSTICE, 3 CREDITS**  
 This course provides students the knowledge and understanding of the interacting influence of physical fitness and health in all dimensions of wellness. Explores understanding and managing the stressors experienced by law enforcement and corrections personnel. Students will be prepared to complete the Oregon Physical Abilities Test (ORPAT), required by Oregon law enforcement and corrections academies.

ONL	<b>HPE-296-01</b>	<b>335406</b>				
	P. FISKUM		\$378.00	\$39.00	\$0.00	\$417.00

**Health Professions**

**HP-100 HEALTHCARE PROVIDER BLS/CPR, FIRST AID/BLOODBORNE PATHOGENS, 1 CREDIT**

**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	Crns Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor			Tuition	Fee	Crns. Fee

Introduces CPR, first aid, and bloodborne pathogens to individuals working in healthcare environments, home, and community settings. Covers skills to perform CPR and operate an Automatic External Defibrillator (AED) for adults/children/infants. Includes citizen-level first aid for providing initial care to persons injured or stricken by sudden illness where help is not immediately available. Covers how to minimize communicable disease transmission while providing emergency care.

**Recommended:** Computer access with internet capabilities

**Recommended Prerequisites:** WRD-098

HAR HYB	<b>HP-100-01</b>	<b>339460 TBA</b>				
	S. COOPER	\$126.00	\$13.00	\$15.00		\$154.00
Additional costs associated with this course include: \$22 Bloodborne Pathogens Certificate, \$36 CPR Card, \$16.50 First Aid Certificate for a total of \$74.50 additional cost. In-person date and times: Friday, February 21st at 8:30am - 12:00pm or 1:00pm - 4:30pm.						

**HP-110 MEDICAL TERMINOLOGY, 4 CREDITS**

This course provides the foundational principles required for understanding medical terms used to communicate effectively within the healthcare field. This includes word meaning and discerning the difference between look-alike and sound-alike words through correct spelling and pronunciation. Students will develop the ability to read and comprehend the content of medical records and reports. Through the review of body systems this course includes introductions to disease processes, basic anatomy and physiology and associated terminology.

ONL	<b>HP-110-01</b>	<b>337504</b>				
	T. BOYD	\$504.00	\$52.00	\$60.00		\$616.00
ONL	<b>HP-110-02</b>	<b>337505</b>				
	T. BOYD	\$504.00	\$52.00	\$60.00		\$616.00
ONL	<b>HP-110-03</b>	<b>337506</b>				
	T. BOYD	\$504.00	\$52.00	\$60.00		\$616.00

**HP-130 COMMUNICATIONS AND ETHICAL PRACTICES IN HEALTHCARE SETTINGS, 2 CREDITS**

This course will introduce the student to a variety of communications and foundational aspects of patient care of the healthcare professional. Students will be exposed to Electronic Health Records, the importance of documentation and study pertinent laws in a healthcare setting.

**Prerequisites:** WRD-098 or placement into WR-101

REM	<b>HP-130-01</b>	<b>337496 T</b>				<b>6-7:00 PM</b>
	C. GARNER	\$252.00	\$26.00	\$0.00		\$278.00

**High School Diploma (AHSD)**

*The Adult High School Diploma program is designed for students who have earned at least 14 credits. Students who are under 18 years old or whose high school class has not graduated must have an official CCC referral or a release from compulsory attendance to begin the program. Classes are assigned individually. Please contact the Skills Development Department at 503-594-3028.*

**ASE-042 JOB SKILLS COMPETENCY LAB, 0.5 CREDIT**

High school credit only. Provides overview of college and career processes and expectations including cooperative work experience for employed high school students to earn elective credit. Focuses on appropriate work and college behaviors, decision making techniques, communication skills, and teamwork. May be repeated for up to 2 high school credits. Required: Student Petition.

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

HAR HYB	<b>ASE-042-01</b>	<b>334928 W</b>				
	H. PAZ	\$0.00	\$0.00	\$0.00		\$0.00
Required: Student Petition.						

OC LCT	<b>ASE-042-04</b>	<b>334933 W</b>				
	D. BARE	\$0.00	\$0.00	\$0.00		\$0.00
Required: Student Petition.						

**XASE-0001 BASIC ESSENTIAL SKILLS SUPPORT, 0 CREDIT**

Offers students academic assessments, coaching, and support to reach basic essential skills competencies necessary for students' program of study. Students utilize computer based material in a self-paced format to improve academic skills, and work with the instructor to develop future plans and set appropriate goals. Students set attainable goals, apply appropriate strategies, and use college resources to meet the competencies necessary to succeed in their academic programs.

OC	<b>XASE-0001-02</b>	<b>335821 MTWTH</b>				<b>10-11:50 AM</b>
	A. SMITH	\$0.00	\$0.00	\$30.00		\$30.00
Required: Student Petition.						

HAR HYB	<b>XASE-0001-03</b>	<b>335822 MW</b>				<b>10-11:50 AM</b>
	L. NIELSON	\$0.00	\$0.00	\$30.00		\$30.00
Required: Student Petition.						

**History**

**HST-101 HISTORY OF WESTERN CIVILIZATION, 4 CREDITS**

Origins and development of Western Civilization with a primary focus on Europe from ancient times to ca. 1300.

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

ONL LCT	<b>HST-101-01</b>	<b>335427</b>				
	P. MCFARLAND	\$504.00	\$52.00	\$0.00		\$556.00
Online textbook provided first day of class.						

**HST-102 HISTORY OF WESTERN CIVILIZATION, 4 CREDITS**

Origins and development of Western Civilization with an emphasis on Europe from ca. 1300 to 1800.

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

OC HYB LCT	<b>HST-102-01</b>	<b>335428 W</b>				<b>10-11:50 AM</b>
	P. MCFARLAND	\$504.00	\$52.00	\$0.00		\$556.00
Online textbook provided first day of class.						

ONL LCT	<b>HST-102-02</b>	<b>338059</b>				
	P. MCFARLAND	\$504.00	\$52.00	\$0.00		\$556.00
Online textbook provided first day of class.						

**HST-131 HISTORY OF CRIME & PUNISHMENT IN WESTERN CIVILIZATION, 4 CREDITS**

Explores the topics of crime and punishment in western civilization from ancient Greece to the present and relates them to the political, social, economic, intellectual and cultural trends of each time period.

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

ONL LCT	<b>HST-131-01</b>	<b>335432</b>				
	P. MCFARLAND	\$504.00	\$52.00	\$0.00		\$556.00

**HST-201 HISTORY OF THE UNITED STATES, 4 CREDITS**

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

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
oc	<b>HST-201-01</b> 335434 TTH J. FLOWERS Online textbook included in section fees.		\$504.00	\$52.00	1-2:50 PM	\$612.94

**HST-202 HISTORY OF THE UNITED STATES, 4 CREDITS**

Covers the period of United States history from the Age of Jackson to World War I. Recommended that sequence is taken in order.

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

**Recommended Prerequisites:** Sequence of HST-201, HST-202, and HST-203 is taken in order

oc	<b>HST-202-01</b> 335435 TTH J. FLOWERS Online textbook included in section fees.		\$504.00	\$52.00	10-11:50 AM	\$612.94
ONL	<b>HST-202-02</b> 335436 J. FLOWERS Online textbook included in section fees.		\$504.00	\$52.00		\$612.94

**HST-203 HISTORY OF THE UNITED STATES, 4 CREDITS**

Covers the period of United States history since and including WWI.

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

**Recommended Prerequisites:** Sequence of HST-201, HST-202 and HST-203 is taken in order

ONL	<b>HST-203-01</b> 335437 J. FLOWERS Online textbook included in section fees.		\$504.00	\$52.00		\$612.94
-----	---	--	----------	---------	--	----------

**HST-280 HISTORY/CWE, 2-6 CREDITS (VAR)**

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

**Corequisites:** CWE-281

oc	<b>HST-280-01</b> 335442 J. FLOWERS Required: Student Petition. Corequisite: Take the following CWE-281-06.		\$756.00	\$78.00		\$879.00V
----	---	--	----------	---------	--	-----------

**Horticulture/Arboriculture/Landscape/Organic Farming**

For more information call 503-594-3292 or email [horticulture@clackamas.edu](mailto:horticulture@clackamas.edu)

**HOR-122 GREENHOUSE I, 3 CREDITS**

Environmental influences on plant growth, crop scheduling, greenhouse structures and equipment. Emphasis on foliage and flowering potted plant production.

oc	<b>HOR-122-01</b> 335383 TH F. KILDERS		\$378.00	\$39.00	8-11:50 AM	\$467.00
----	---	--	----------	---------	------------	----------

**HOR-131 TREE & SHRUB PRUNING, 3 CREDITS**

Emphasis on dormant pruning of fruiting and ornamental plants. Pruning and training techniques for grapes, fruit trees, and both evergreen and deciduous ornamental trees and shrubs. Basic woody plant anatomy, growth and development.

oc	<b>HOR-131-01</b> 335384 T D. FRANEK		\$378.00	\$39.00	8-11:50 AM	\$457.00
----	---	--	----------	---------	------------	----------

**HOR-133 HORTICULTURE PRACTICUM/WINTER, 2 CREDITS**

Practical experience with seasonal (winter) horticulture activities in the areas of container nurseries, greenhouses, and landscape 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

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
<b>Prerequisites:</b> HOR-111						
oc	<b>HOR-133-01</b> 335387 M F. KILDERS G. LOEFFLER		\$252.00	\$26.00	8-11:50 AM	\$328.00

**HOR-136 ORGANIC FARMING PRACTICUM/WINTER, 3 CREDITS**

Essential organic farming practices, including seasonal activities such as ground preparation and planning for crop production. Also covers farm business structures, financial management, recordkeeping, and marketing and distribution techniques. Field trips to area farms included. Class lecture, field trips, and lab are essential components of this course. This format has been selected to create a hands-on experience for each student in seasonal crop production.

OC HYB LCT	<b>HOR-136-01</b> 335388 T D. ROSTAD		\$378.00	\$39.00	8-11:50 AM	\$477.00
------------	---	--	----------	---------	------------	----------

**HOR-140 SOILS, 3 CREDITS**

Soil characteristics and management, including nutritional elements and the relationship between the soil and plant growth.

OC LCT	<b>HOR-140-01</b> 339506 T D. FRANEK		\$378.00	\$39.00	1-3:50 PM	\$482.00
--------	---	--	----------	---------	-----------	----------

**HOR-216 INTEGRATED PEST MANAGEMENT, 3 CREDITS**

Learn the components of, and develop an Integrated Pest Management (IPM) plan for landscape, nursery, greenhouse or organic farming. The plan will incorporate pest detection, control practices and an evaluation of effectiveness.

OC LCT	<b>HOR-216-01</b> 335391 W F. KILDERS		\$378.00	\$39.00	9-11:50 AM	\$447.00
--------	--	--	----------	---------	------------	----------

**HOR-222 HORTICULTURAL COMPUTER APPLICATIONS, 2 CREDITS**

Utilizes database, spreadsheet, word-processing, PowerPoint, social media and other computer programs for record keeping and management and marketing for horticulture businesses.

**Recommended Prerequisites:** CS-120 or comparable computer skills

OC LCT	<b>HOR-222-01</b> 335394 M A. CHASTAIN		\$252.00	\$26.00	1-2:50 PM	\$303.00
In the event the class fills, we have a large wait list set and may offer a second section if needed. For those that feel your computer skills are equal to the class please contact april.chastain@clackamas.edu to discuss possibly waiving the class.						

**HOR-227 PLANT IDENTIFICATION/WINTER, 4 CREDITS**

Identification of conifers and broadleaf evergreens, shrubs, and groundcovers, including their cultural requirements in the landscape.

OC LCT	<b>HOR-227-01</b> 335396 T F. KILDERS		\$504.00	\$52.00	8-11:50 AM	\$601.00
OC HYB LCT	<b>HOR-227-02</b> 335399 W J. WENTWORTH-PLATO		\$504.00	\$52.00	6-8:30 PM	\$571.00

**HOR-229 INTRODUCTION TO LANDSCAPE DESIGN, 3 CREDITS**

Introduction to landscape planning, including basic drafting skills, grading, drainage, and site planning.

OC HYB	<b>HOR-229-01</b> 335400 T SU		\$378.00	\$39.00	6-9:00 PM 9-1:00 PM	\$462.00
M. MELCO Required field trip Sat 1/25 or Sun 1/26.						

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	

**HOR-230 EQUIPMENT OPERATION & MAINTENANCE, 2 CREDITS**

The selection, safe operation, and maintenance of power driven machines in horticultural operations. Includes hands on experience with mowing equipment, rototillers, chain saws, edgers, shears, tractors, chippers, and skid steer.

**Corequisites:** HOR-230L

ONL	<b>HOR-230-01 335402</b>	J. WENTWORTH-PLATO	\$252.00	\$26.00	\$75.00	\$353.00
-----	--------------------------	--------------------	----------	---------	---------	----------

**HOR-230L EQUIPMENT OPERATION & MAINTENANCE LAB, 0 CREDIT**

Lab course for HOR-230

**Corequisites:** HOR-230

oc	<b>HOR-230L-01 335403 TH</b>	S. CROSSWHITE J. WENTWORTH-PLATO	\$0.00	\$0.00	\$0.00	\$0.00
oc	<b>HOR-230L-02 335405 TH</b>	S. CROSSWHITE J. WENTWORTH-PLATO	\$0.00	\$0.00	\$0.00	\$0.00

**HOR-231 IRRIGATION DESIGN, 3 CREDITS**

Principles of irrigation system design for various situations, including underground, above-ground, residential, commercial, and urban farm systems.

oc HYB	<b>HOR-231-01 339565 W</b>	A. CHASTAIN	\$378.00	\$39.00	\$45.00	\$462.00
--------	----------------------------	-------------	----------	---------	---------	----------

**HOR-237 DISEASE IDENTIFICATION, 2 CREDITS**

Identification of ornamental plant diseases which occur in greenhouses, landscapes, nurseries, and farms.

oc	<b>HOR-237-01 335411 W</b>	E. ROBERTS	\$252.00	\$26.00	\$15.00	\$293.00
----	----------------------------	------------	----------	---------	---------	----------

Meets: 1/8-3/12.

**HOR-239 TREE CLIMBER TRAINING, 1 CREDIT**

The safe use of rope and saddle tree climbing procedures will be covered through lecture, discussion, and field practice. For beginner to moderately experienced climbers. May be repeated for up to 3 credits.

oc LCT	<b>HOR-239-01 335412 S</b>	J. MENDEZ	\$126.00	\$13.00	\$60.00	\$199.00
--------	----------------------------	-----------	----------	---------	---------	----------

Meets: Saturdays 1/11-2/8.

**HOR-251 HERBAL PRODUCTS, 1 CREDIT**

Instruction in making herbal teas, skin lotion, tincture, infused oil, vinegar, spritzers and herbal mixes. Instruction includes the use of specific ingredients, methods for effective usage and storage, and their importance.

oc LCT	<b>HOR-251-01 335414 F</b>	D. ROSTAD	\$126.00	\$13.00	\$60.00	\$199.00
--------	----------------------------	-----------	----------	---------	---------	----------

Meets: Fridays 2/14-3/14.

**HOR-260 ARBORICULTURE II, 3 CREDITS**

Evaluation, assessment and management of trees in the urban environment. Covers monetary and ecosystem values for trees, property development considerations, tree appraisals, tree inventories, risk assessments, and crew management. Together with HOR-225, this class will prepare students for passing the ISA Certified Arborist exam.

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	

**Prerequisites:** HOR-225

oc	<b>HOR-260-01 335415 T</b>	J. WENTWORTH-PLATO	\$378.00	\$39.00	\$40.00	\$457.00
----	----------------------------	--------------------	----------	---------	---------	----------

2-4:50 PM

**HOR-280 HORTICULTURE/CWE, 3 CREDITS**

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 LCT	<b>HOR-280-01 335417</b>	G. LOEFFLER	\$378.00	\$39.00	\$45.00	\$462.00
--------	--------------------------	-------------	----------	---------	---------	----------

Required: Student Petition. Corequisite: Take the following CWE-281-06.

**HOR-281 HORTICULTURE/CWE, 6 CREDITS**

On-the-job experience in the student's major course of study. Students are expected to work a minimum of 180 job site hours. May be repeated for up to 12 credits. Required: Student Petition.

**Corequisites:** CWE-281

oc LCT	<b>HOR-281-01 335423</b>	G. LOEFFLER	\$756.00	\$78.00	\$45.00	\$879.00
--------	--------------------------	-------------	----------	---------	---------	----------

Required: Student Petition. Corequisite: Take the following CWE-281-06.

**HOR-282 HORTICULTURE/CWE, 3 CREDITS**

On-the-job experience in the student's major course of study. Students are expected to work a minimum of 90 job site hours. May be repeated for up to 6 credits. Required: Student Petition.

**Corequisites:** CWE-281

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

oc LCT	<b>HOR-282-01 335426</b>	G. LOEFFLER	\$378.00	\$39.00	\$45.00	\$462.00
--------	--------------------------	-------------	----------	---------	---------	----------

Required: Student Petition.

**HOR-285 ORGANIC FARMING/CWE, 3 CREDITS**

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 LCT	<b>HOR-285-01 335429</b>	G. LOEFFLER	\$378.00	\$39.00	\$45.00	\$462.00
--------	--------------------------	-------------	----------	---------	---------	----------

Required: Student Petition.

**HOR-290 SPECIAL TOPICS IN HORTICULTURE, 1 CREDIT**

This course gives students an opportunity to gain knowledge in a specific area relevant to the field of horticulture, landscaping, arboriculture or organic farming. This topic will be pulled from a comprehensive list of areas identified by horticulture professionals as having importance for students pursuing work in the field. May be repeated for up to 6 credits. Required: Student Petition.

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor	Tuition	Fee	Crs. Fee				Instructor	Tuition	Fee	Crs. Fee		
OC HYB LCT	<b>HOR-290-01</b>	<b>335430</b>	<b>TWTHFS</b>										
		<b>M</b>			<b>3-4:50 PM</b>								
	J. WENTWORTH-PLATO	\$126.00	\$13.00	\$200.00	\$339.00								
	Required: Student Petition. Hybrid. Meets: Mondays 1/6, 1/13, 2/3, 3/10; plus additional hours online. Special Topic: Prepare for National Collegiate Landscape Competition held at Colorado State University, Fort Collins, CO, traveling March 18-22, 2025.												
<b>XHOR-0004</b>	<b>BEEKEEPING SCHOOL, 0 CREDIT</b>												
	Beekeeping is growing in popularity because of its importance in pollination, honey production, and as a relaxing hobby. This 2 day workshop is intended to prepare new and beginner beekeepers with knowledge, demonstrations, and lists of resources. Topics will include; basic bee biology, proper equipment, handling of bees, hive pest and disease control, feeding, and more. Co-sponsored by the Portland Metro Beekeepers Association.												
oc	<b>XHOR-0004-01</b>	<b>335767</b>	<b>S</b>		<b>9-3:00 PM</b>								
	TBA												
	Required: Student Petition. Meets: Saturdays 2/1 & 2/8. Register at <a href="https://bit.ly/horteventbrite">https://bit.ly/horteventbrite</a> Fee \$50. Contact Loretta at <a href="mailto:lorettam@clackamas.edu">lorettam@clackamas.edu</a> with questions.												
<b>XHOR-C007S</b>	<b>LEYES Y SEGURIDAD DE PLAGUICIDAS, ESPAÑOL/PESTICIDE LAWS &amp; SAFETY, SPANISH, 2.00 CEUS</b>												
	Leyes y regulaciones relacionadas con la seguridad, manejo y mantenimiento de registros y almacenamiento de plaguicidas. Técnicas de selección de productos, incluyendo opciones químicas y no químicas, seguridad de aplicador y protección del medio ambiente incluido. Prepárese para las leyes de pesticidas de Oregon y Examen de seguridad. Laws and regulations related to safety, handling, recordkeeping and storage of pesticides. Techniques for product selection, including chemical and non-chemical options, applicator safety and environmental protection included. Prepare for the Oregon Pesticide Laws & Safety exam.												
oc	<b>XHOR-C007S-01</b>	<b>335770</b>	<b>F</b>		<b>1-4:50 PM</b>								
	L. CERVANTES												
	Required: Student Petition. Meets Fridays 2/7-3/14 Viernes 2/7-3/14. Fee: \$189, does not include ODA test fee. Register at <a href="https://bit.ly/horteventbrite">https://bit.ly/horteventbrite</a> Contact Loretta Mills at <a href="mailto:lorettam@clackamas.edu">lorettam@clackamas.edu</a> with questions.												
<b>XHOR-C010</b>	<b>JAPANESE-STYLE PRUNING, 0.40 CEUS</b>												
	Learn the art of Japanese Pruning with Masa Mizuno, a highly-respected master of Japanese garden cultivation. He has worked for decades with established Japanese gardens throughout the Pacific Northwest, and has led his own landscape design/install firm for over 30 years. This is a hands-on class, so please bring your own gloves and pruning tools.												
oc	<b>XHOR-C010-01</b>	<b>335772</b>	<b>F</b>		<b>1-4:50 PM</b>								
	M. MIZUNO												
	Required: Student Petition. Meets: 3/14. Fee: \$40. Eventbrite registration at <a href="https://bit.ly/horteventbrite">https://bit.ly/horteventbrite</a> Contact Loretta Mills at <a href="mailto:lorettam@clackamas.edu">lorettam@clackamas.edu</a> with questions.												
<b>XHOR-C026S</b>	<b>INSTALACIÓN Y MANTENIMIENTO DEL SISTEMA DE RIEGO PAISAJÍSTICO EN ESPAÑOL, 1.20 CEUS</b>												
	Aprende los conceptos básicos de la instalación y el mantenimiento de hidráulicos y sistemas de riego. Esta sesión de aprendizaje de día completo cubre una visión general de los componentes del sistema de riego y cómo funcionan. Obtenga información sobre la soldadura y reparación de tuberías de PVC con disolventes, la instalación de boquillas y el ajuste de cabezas, la configuración y reparación de válvulas eléctricas, y las técnicas de cableado de campo y controlador. Combinada con la experiencia de la industria, esta clase sirve como una repaso para aquellos que planean tomar el examen de Técnico de Riego Certificado de la Asociación de Riego (IA). Este taller incluye apoyo matemático suplementario para los conceptos y ecuaciones que se tratan en clase.												
oc	<b>XHOR-C026S-01</b>	<b>335776</b>	<b>F</b>		<b>1-5:00 PM</b>							<b>8-4:50 PM</b>	
ESPAÑOL	J. RODRIGUEZ CRUZ												
	Requerido: petición del estudiante. Encuentros: 3/7, 1pm-5pm y 3/8, 8pm-5pm. Regístrese a <a href="https://bit.ly/horteventbrite">https://bit.ly/horteventbrite</a> Tarifa: \$120. Póngase en contacto con April en <a href="mailto:april.chastain@clackamas.edu">april.chastain@clackamas.edu</a> si tiene preguntas.												
<b>XHOR-C038</b>	<b>CONIFEROUS TREE IDENTIFICATION, 0.30 CEUS</b>												
	Join us for a morning of plant awareness. We'll start in the classroom, discussing features of some major plant families and locally grown genera and species of plants. We'll enjoy a stroll around the Oregon City campus looking at coniferous trees and how they're used in our landscape. We'll finish with a low-stakes quiz to see if you can identify all 30 samples we've talked about in the last few hours. You'll be provided with an internet link to the walk we took, showing the location and names of the plants we discussed.												
oc	<b>XHOR-C038-01</b>	<b>335779</b>	<b>S</b>		<b>9-12:00 PM</b>								
	J. WENTWORTH-PLATO												
	Required: Student Petition. Meets: Saturday March 8. Register at <a href="https://bit.ly/horteventbrite">https://bit.ly/horteventbrite</a> Fee: \$20. Contact Loretta at <a href="mailto:lorettam@clackamas.edu">lorettam@clackamas.edu</a> with questions.												
<b>XHOR-C066</b>	<b>PESTICIDE CORE TRAINING/WINTER, 0.40 CEUS</b>												
	This training qualifies for 4 CORE recertification credits as required by Oregon Department of Agriculture. Fulfills yearly recertification requirement for Private Pesticide license holders, and can be used towards total needed for Public and Commercial license requirements. Our Fall and Winter courses are different, so both will count towards recertification in the same year.												
oc	<b>XHOR-C066-01</b>	<b>335782</b>	<b>F</b>		<b>1-4:50 PM</b>								
	G. COOKE												
	Required: Student Petition. Meets: 2/7. Fee: \$40. Register at <a href="https://bit.ly/horteventbrite">https://bit.ly/horteventbrite</a> Contact Loretta Mills at <a href="mailto:lorettam@clackamas.edu">lorettam@clackamas.edu</a> with questions.												

Human Services

**HS-103 ETHICS FOR HUMAN SERVICE WORKERS, 2 CREDITS**

Explores the professional issues students will face when in a helping relationship. Introduces the professional codes of ethics associated with the helping professions. Addresses solving ethical dilemmas using professional guidelines. Topics include client rights, confidentiality, professional boundaries, legal issues in helping, competence, and cultural diversity.

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee			Instructor		Tuition	Fee	Crs. Fee	
ONL LCT	<b>HS-103-01</b> 335407 M. MANEWAL		\$252.00	\$26.00	\$0.00	\$278.00		This course is designed to help human service students further develop and deepen their skills and understanding of interviewing in the human service field. Course will build on skills learned in HS-156, incorporating the use of behavior change theories to guide the helping process. <b>Prerequisites:</b> HS-156 with a C or better					
<b>HS-104</b>	<b>USING DIAGNOSTIC CRITERIA IN SUBSTANCE USE TREATMENT, 2 CREDITS</b>												
	This course will present an overview of The American Society of Addiction Medicine (ASAM) Criteria and the Diagnostic and Statistical Manual (DSM) criteria related to addiction and substance use. Students will gain familiarity with the use of the ASAM Criteria to enhance the use of multidimensional assessments to develop patient-centered service plans. Students will also gain knowledge about the use of the DSM Manual to guide diagnosis and treatment of Substance Use Disorders.												
ONL LCT	<b>HS-104-01</b> 335409 M. MANEWAL		\$252.00	\$26.00	\$0.00	\$278.00							
<b>HS-154</b>	<b>COMMUNITY RESOURCES, 3 CREDITS</b>												
	Explores local community social service resources. Focuses on local agencies and programs, including services provided, eligibility criteria, mission, and policies of these agencies. Includes instruction in identifying client needs, various referral processes, and historical, political and social trends.												
OC HYB LCT	<b>HS-154-01</b> 335410 W Y. SMITH		\$378.00	\$39.00	\$0.00	\$417.00							
ONL	<b>HS-154-02</b> 335413 Y. SMITH		\$378.00	\$39.00	\$0.00	\$417.00							
<b>HS-156</b>	<b>CONDUCTING HUMAN SERVICE INTERVIEWS, 3 CREDITS</b>												
	Provides the specific techniques required for entry-level interviewing in human service settings. Addresses issues raised in working with clients from diverse backgrounds.												
OC HYB LCT	<b>HS-156-01</b> 335416 W Y. SMITH		\$378.00	\$39.00	\$0.00	\$417.00							
<b>HS-211</b>	<b>INFECTIOUS DISEASES AND HARM REDUCTION, 1 CREDIT</b>												
	This course will explore the relationship between substance use and infectious diseases, and discuss methods for reducing transmission of these diseases. Diseases will include HIV/AIDS, tuberculosis, hepatitis, and sexually transmitted infections. This course will provide students with techniques for assisting clients with assessing risk, practicing harm reduction, and evaluating treatment options.												
ONL LCT	<b>HS-211-01</b> 335419 Y. SMITH		\$126.00	\$13.00	\$0.00	\$139.00							
<b>HS-216</b>	<b>GROUP COUNSELING SKILLS, 3 CREDITS</b>												
	This course provides students with strategies and skills for group work with a variety of clients. Explores leadership styles and skills, group formation and stages, and the ethics of working with groups. The course will address the knowledge needed to develop, run, and evaluate groups for a variety of human service topics, including substance use treatment. Theories of therapeutic group work will also be discussed. <b>Prerequisites:</b> HS-156 with a C or better												
OC HYB LCT	<b>HS-216-01</b> 335420 T C. BAKER		\$378.00	\$39.00	\$0.00	\$417.00							
	This class will meet on five Tuesdays from 10:00am-11:50am. (1/7, 1/21, 2/4, 2/18, 3/4).												
<b>HS-256</b>	<b>ADVANCED INTERVIEWING SKILLS WITH THEORY, 3 CREDITS</b>												
	This course is designed to help human service students further develop and deepen their skills and understanding of interviewing in the human service field. Course will build on skills learned in HS-156, incorporating the use of behavior change theories to guide the helping process. <b>Prerequisites:</b> HS-156 with a C or better												
OC HYB	<b>HS-256-01</b> 335421 TH C. BAKER		\$378.00	\$39.00	\$0.00	\$417.00							
	This section will meet on five Thursdays from 10:00am-11:50am. (1/9, 1/23, 2/6, 2/20, 3/6).												
<b>HS-270</b>	<b>HUMAN SERVICES PRACTICUM SEMINAR, 2 CREDITS</b>												
	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: Student Petition. <b>Corequisites:</b> GRN-280, HS-280, HS-281, or HS-282												
OC HYB	<b>HS-270-01</b> 339527 T C. BAKER		\$252.00	\$26.00	\$0.00	\$278.00							
	Required: Student Petition. This section will meet on five Tuesdays from 1-2:50pm. (1/7, 1/21, 2/4, 2/18, 3/4).												
<b>HS-280</b>	<b>HUMAN SERVICES GENERALIST I: CWE/PRACTICUM, 2-6 CREDITS (VAR)</b>												
	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. <b>Prerequisites:</b> HS-170 <b>Corequisites:</b> HS-270												
oc	<b>HS-280-01</b> 335422 J. LOVELESS		\$756.00	\$78.00	\$45.00	\$879.00V							
	Required: Student Petition.												
<b>HS-281</b>	<b>HUMAN SERVICES GENERALIST II: CWE/PRACTICUM, 2-6 CREDITS (VAR)</b>												
	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. <b>Prerequisites:</b> HS-170 <b>Corequisites:</b> HS-270												
oc	<b>HS-281-01</b> 335424 J. LOVELESS		\$756.00	\$78.00	\$45.00	\$879.00V							
	Required: Student Petition.												
<b>HS-282</b>	<b>HUMAN SERVICES GENERALIST III: CWE/PRACTICUM, 2-6 CREDITS (VAR)</b>												
	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. <b>Corequisites:</b> CWE-281 <b>Prerequisites:</b> HS-170. HS-280 or HS-281												
oc	<b>HS-282-01</b> 335425 J. LOVELESS		\$756.00	\$78.00	\$45.00	\$879.00V							
	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

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

**Humanities**

**HUM-160 FAITH & REASON, 4 CREDITS**

An introduction of how personal concepts of faith & reason and institutions of science & religion shape personal intellectual landscapes. Examines classical philosophy, sacred texts, worldviews, modern fiction, poetry, theology, cosmology, and evolutionary biology.

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

ONL	<b>HUM-160-01</b>	<b>335445</b>				
	J. SHELTON		\$504.00	\$52.00	\$0.00	\$556.00

**Industrial Maintenance Technology**

**IMT-120 INDUSTRIAL MACHINERY I, 3 CREDITS**

This course will introduce students to industrial machinery and power equipment with respect to industrial maintenance. Students will learn the fundamentals of electro-mechanical machinery repair, assembly and disassembly and how to work safely around mechanical equipment and power tools. Topics discussed will include hand and power tools, preventative maintenance, power transmission systems, fasteners and torque.

**Recommended Prerequisites:** MTH-050 or higher

oc	<b>IMT-120-01</b>	<b>335441 TTH</b>			<b>5:30 -8:20 PM</b>	
	C. CONNORS		\$378.00	\$39.00	\$153.75	\$570.75

**IMT-230 INTRODUCTION TO HEATING, VENTILATION, AND AIR CONDITIONING, 3 CREDITS**

This course will introduce students to commercial and residential Heating, Ventilation, and Air Conditioning (HVAC) systems. Students will study HVAC terminology, heating systems, the refrigeration cycle, low voltage controls, basics of air flow and ventilation as well as safety practices while working on these systems. There will be many opportunities for hands-on experience using trainer devices in a lab setting that will include exercises for troubleshooting, understanding controls, and basic system performance and function.

oc	<b>IMT-230-01</b>	<b>335443 TTH</b>			<b>2-4:50 PM</b>	
	C. CONNORS		\$378.00	\$39.00	\$131.25	\$548.25

**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

ONL	<b>J-211-01</b>	<b>334701</b>				
	K. DOSS		\$504.00	\$52.00	\$10.00	\$566.00

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

Students work as writers, photographers and editors on The Clackamas Print, the college's student-run news website, newspaper and social media sites. Students study and produce journalism stories and photos. In doing so, they learn different writing styles, photography rules, ethical standards of news gathering and the rights of a free press in a democracy. May be repeated for up to 8 credits.

**Recommended Prerequisites:** Placement in WR-121Z

**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,F,S,SU)	Tuition	Fee	Time Crs. Fee	Total

OC LCT	<b>J-215-01</b>	<b>334703 MW</b>			<b>1-2:50 PM</b>	
	M. JONES		\$504.00	\$52.00	\$10.00	\$566.00

**J-216 WRITING FOR MEDIA, 4 CREDITS**

Introduces students to the fundamentals of writing for various media including journalism, public relations and other communications-related fields. Topics include news gathering, interviewing and media law, with an emphasis on writing for the web, print, broadcast and social media.

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

OC HYB LCT	<b>J-216-01</b>	<b>334707 W</b>			<b>10-11:50 AM</b>	
	M. JONES		\$504.00	\$52.00	\$10.00	\$566.00

**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

OC LCT	<b>J-225-01</b>	<b>334709 MW</b>			<b>1-2:50 PM</b>	
	M. JONES		\$504.00	\$52.00	\$0.00	\$556.00

**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

OC LCT	<b>J-226-01</b>	<b>334712 T</b>			<b>1-4:50 PM</b>	
	M. JONES		\$504.00	\$52.00	\$10.00	\$566.00

**J-227 INTERMEDIATE COLLEGE NEWS: DESIGN & PRODUCTION, 4 CREDITS**

Offers students intermediate work as designers and media creators for The Clackamas Print, the college's award-winning student newspaper, website and social media sites. Students design the student newspaper, create social media posts and produce related multimedia journalism content using Adobe software and other products. May be repeated for up to 8 credits.

**Prerequisites:** J-226

OC LCT	<b>J-227-01</b>	<b>334716 T</b>			<b>1-4:50 PM</b>	
	M. JONES		\$504.00	\$52.00	\$0.00	\$556.00

**J-228 ADVANCED COLLEGE NEWS: DESIGN & PRODUCTION, 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

OC LCT	<b>J-228-01</b>	<b>334719 T</b>			<b>1-4:50 PM</b>	
	M. JONES		\$504.00	\$52.00	\$0.00	\$556.00

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

**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  
**Recommended Prerequisites:** Placement in WR-121Z

OC LCT	<b>J-235-01</b>	<b>334723 MW</b>			<b>1-2:50 PM</b>	
	M. JONES	\$504.00	\$52.00	\$0.00		\$556.00

**J-280 JOURNALISM/CWE, 2-6 CREDITS**  
 Cooperative work experience. Provides the student with on-the-job experience and training related to journalism. Required: Student Petition.  
**Corequisites:** CWE-281

ONL	<b>J-280-01</b>	<b>334726</b>				
	M. JONES	\$756.00	\$78.00	\$45.00		\$879.00V

Required: Student Petition.

**J-280A PUBLIC RELATIONS/CWE, 2-6 CREDITS**  
 Cooperative work experience. Provides the student with on-the-job experience and training related to public relations. Required: Student Petition.

ONL	<b>J-280A-01</b>	<b>334736</b>				
	M. JONES	\$756.00	\$78.00	\$45.00		\$879.00V

Required: Student 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 research-based college assignments and real-life research needs.

ONL LCT	<b>LIB-101-01</b>	<b>335444</b>				
	TBA	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 1/6-3/8.					
ONL LCT	<b>LIB-101-02</b>	<b>335447</b>				
	TBA	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 1/6-3/8.					
ONL LCT	<b>LIB-101-03</b>	<b>335448</b>				
	TBA	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 1/13-3/15.					

**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

oc	<b>MTT-111-01</b>	<b>335491 MW</b>			<b>5-8:50 PM</b>	
	J. TRAVER	\$504.00	\$52.00	\$205.00		\$761.00

**MTT-112 MANUAL MACHINING II, 4 CREDITS**  
 This course is a continuation of machine tool operations. It covers set-up and operation of the vertical milling machine, lathe boring techniques, surface grinding and screw thread nomenclature.

**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

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

**Prerequisites:** MTT-111  
 oc **MTT-112-01** **335493 MW** **8-11:50 AM**  
 J. TRAVER \$504.00 \$52.00 \$205.00 \$761.00

**MTT-121 CNC I: SET-UP AND OPERATION, 4 CREDITS**  
 This is the first course in the CNC sequence. Students will learn basic skills including how to properly set-up and operate both CNC milling and turning centers. Students will also learn G & M codes related to basic machine set-up and operation. Designed for persons with little or no previous CNC experience.

oc	<b>MTT-121-01</b>	<b>335495 TTH</b>			<b>5:30 -9:20 PM</b>	
	J. CARLSTON	\$504.00	\$52.00	\$205.00		\$761.00

**MTT-122 CNC II: PROGRAMMING AND OPERATION, 4 CREDITS**  
 This is the second course in the CNC sequence. Students will learn G&M-code programming for milling and turning while they build their set-up and operation skills. There will also be an introduction to set-up probing, 4-axis mill programming and machining, sub-programming and process documentation.

**Prerequisites:** MTT-111, MTT-121, MTH-050  
 oc **MTT-122-01** **335501 TTH** **8-11:50 AM**  
 J. CARLSTON \$504.00 \$52.00 \$205.00 \$761.00

**MTT-242 CAD/CAM III, 4 CREDITS**  
 This course is the third in the Computer-Aided Machining (CAM) series and will build on the previous course. Students will use CAD/CAM software to produce CNC parts. There will be an emphasis on multiple operations on both CNC milling and turning machines. An introduction to five-axis and mill/turn machining will be included.

**Prerequisites:** MTT-241  
 oc **MTT-242-01** **335503 TTH** **12-3:50 PM**  
 C. LETTENMAIER \$504.00 \$52.00 \$205.00 \$761.00

**MTT-253 5-AXIS MACHINING, 3 CREDITS**  
 This class will introduce students to 5-axis CNC milling machines, their programming, and setup procedures. The course will explore limitations, advantages, and configurations of typical 5-axis machines including rotation style and set-up orientation. Post processing and virtual machine simulation will also be discussed.

**Prerequisites:** MTT-122  
 oc **MTT-253-01** **335504 MW** **1-3:50 PM**  
 C. LETTENMAIER \$378.00 \$39.00 \$153.75 \$570.75

**MTT-268 CAPSTONE MACHINING I, 3 CREDITS**  
 This is the first of the capstone project series and will allow students to demonstrate mastery of core skills that are learned in the machining program including: CNC setup and operation, manual machining, CAM programming, and surface grinding. This class will focus on importing models, process development, and programming components to be run on a CNC machine tool.

**Prerequisites:** MTT-113, MTT-122, and MTT-141  
**Recommended Corequisite:** MTT-242  
 oc **MTT-268-01** **335506 MW** **5:30 -8:20 PM**  
 C. LETTENMAIER \$378.00 \$39.00 \$153.75 \$570.75

**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.*

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	

**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

oc	<b>MFG-103-01</b>	<b>335453 MW</b>			<b>2-4:50 PM</b>	
	J. CARLSTON	\$378.00	\$39.00	\$153.75		\$570.75

**MFG-104 PRINT READING, 3 CREDITS**

Introduction to basic print reading. Students will use the principles of orthographic projection and current industry standards as they apply this knowledge to interpreting manufacturing prints.

oc HYB	<b>MFG-104-01</b>	<b>335455 TTH</b>			<b>3-4:15 PM</b>	
	J. CARLSTON	\$378.00	\$39.00	\$153.75		\$570.75

**MFG-107 INDUSTRIAL SAFETY & FIRST AID, 3 CREDITS**

This course is designed to provide the student with a basic understanding of safety hazards and first aid in the workplace. Includes eye safety, grinding wheel hazards, electrical/chemical hazards, slips, falls and back injuries. Instruction in first aid, AED and CPR and OSHA 10.

oc HYB	<b>MFG-107-01</b>	<b>335457 F</b>			<b>2-4:50 PM</b>	
	L. HILLYARD	\$378.00	\$39.00	\$153.75		\$570.75

**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.

REM	<b>MFG-109-01</b>	<b>335465 F</b>			<b>8-10:50 AM</b>	
	A. ARISTIZABAL	\$378.00	\$39.00	\$270.13		\$687.13
	Online textbook included in section fees.					

**MFG-110 MANUFACTURING SPECIAL PROJECTS, 1-3 CREDITS (VAR)**

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	<b>MFG-110-01</b>	<b>335467 TBA</b>				
	TBA	\$378.00	\$39.00	\$153.75		\$570.75V
	Required: Student Petition.					

**MFG-131 BASIC ELECTRICITY II, 3 CREDITS**

Covers application of several theories learned in previous term. Additional topics will include: motors, controls, alignment, pulleys and gears, troubleshooting theory, power distribution and lighting, electrical wiring and schematics.

**Recommended Prerequisites:** MFG-130 and MTH-050

oc	<b>MFG-131-01</b>	<b>335472 F</b>			<b>5-7:50 PM</b>	
	B. KARM	\$378.00	\$39.00	\$153.75		\$570.75

**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

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

**MFG-140 PRINCIPLES OF FLUID POWER, 3 CREDITS**

Course provides students with instruction in the use of hydraulics and pneumatics in industry, covering the fundamentals of hydraulics, basic components (valves, cylinders, pumps, motors, piping, fluid, fluid conditions, and accessories).

**Recommended Prerequisites:** MTH-050

oc HYB	<b>MFG-140-01</b>	<b>335474 MW</b>			<b>5-7:50 PM</b>	
	C. CONNORS	\$378.00	\$39.00	\$153.75		\$570.75

**MFG-209 PROGRAMMING & AUTOMATION FOR MANUFACTURING, 3 CREDITS**

A high-level computer literacy course for technologists. The focus of this course is on structured computer programming in the Visual Basic language and the application of programming industrial automation. Basic knowledge of the PC required.

**Recommended Prerequisites:** MFG-109

REM	<b>MFG-209-01</b>	<b>335477 TTH</b>			<b>3-4:50 PM</b>	
	M. MATTSO	\$378.00	\$39.00	\$153.75		\$570.75

**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

oc HYB	<b>MFG-221-01</b>	<b>335479 TTH</b>			<b>1-3:50 PM</b>	
	M. MATTSO	\$378.00	\$39.00	\$153.75		\$570.75

**MFG-264 CMM SET-UP AND OPERATION, 2 CREDITS**

In this last course of the precision measurement sequence, students will learn to properly set-up and operate a Coordinate Measuring Machine (CMM) and design measurement plans for optimal metrology output.

**Prerequisites:** MFG-104

oc	<b>MFG-264-01</b>	<b>335480 TTH</b>			<b>5-6:50 PM</b>	
	P. WANNER	\$252.00	\$26.00	\$103.00		\$381.00

**MFG-272 MASTERCAM MILL II, 4 CREDITS**

Students construct three-dimensional geometric models using solids and surface modeling techniques. Students program models using advanced multi-axis programming techniques utilizing all aspects of roughing and finishing. Projects verified with solids toolpath verification.

**Recommended Prerequisites:** MFG-271 or prior experience

REM	<b>MFG-272-01</b>	<b>335482 TTH</b>			<b>4:30 -8:20 PM</b>	
	C. LETTENMAIER	\$504.00	\$52.00	\$205.00		\$761.00

**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	<b>MFG-280-01</b>	<b>335484</b>				
	C. CONNORS	\$756.00	\$78.00	\$75.00		\$909.00V
	Required: Student Petition. Corequisite: Take the following CWE-281-06.					

**Mathematics**

**MTH-010 FUNDAMENTALS OF ARITHMETIC I, 4 CREDITS**

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	
		Instructor		Tuition	Fee	Crs. Fee	Total

This first course in arithmetic reviews operations on whole numbers, basic fractions, decimals, measurement, and basic geometry.

OC LCT	<b>MTH-010-01</b>	<b>335446 MW</b>			<b>1-2:50 PM</b>		
	TBA	\$504.00	\$52.00	\$20.00	\$576.00		

### MTH-020 FUNDAMENTALS OF ARITHMETIC II, 4 CREDITS

This second course in arithmetic is a prerequisite for the three math pathways. It reviews mathematical foundations such as fractions, percents, geometry, and effective study skills.

**Prerequisites:** MTH-010 with a C or better, or placement in MTH-020

HAR LCT	<b>MTH-020-01</b>	<b>335454 TTH</b>			<b>10-11:50 AM</b>		
	M. NICKAS	\$504.00	\$52.00	\$20.00	\$576.00		
ONL LCT	<b>MTH-020-02</b>	<b>335459</b>					
	M. NICKAS	\$504.00	\$52.00	\$20.00	\$576.00		
	Meets: 1/21-3/22.						

### 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 HYB LCT	<b>MTH-050-01</b>	<b>335462 TTH</b>			<b>10-11:20 AM</b>		
	M. CHASE	\$504.00	\$52.00	\$20.00	\$576.00		
OC HYB LCT	<b>MTH-050-02</b>	<b>335466 MW</b>			<b>3-4:20 PM</b>		
	A. ARISTIZABAL	\$504.00	\$52.00	\$20.00	\$576.00		
OC HYB LCT	<b>MTH-050-03</b>	<b>335469 TTH</b>			<b>1-2:20 PM</b>		
	M. CHASE	\$504.00	\$52.00	\$20.00	\$576.00		

### MTH-050ES MATEMÁTICAS TÉCNICAS I, 4 CREDITS

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 LCT ESPAÑOL	<b>MTH-050ES-01</b>	<b>335475 F</b>			<b>5-8:50 PM</b>		
	A. ARISTIZABAL	\$504.00	\$52.00	\$20.00	\$576.00		

### MTH-060 ALGEBRA I, 4 CREDITS

Designed for review or for the beginner, this course is an introduction to topics in Algebra. Expressions, equations, inequalities, graphing, and functions are explored.

**Prerequisites:** MTH-020 with a C or better, or placement in MTH-060

OC HYB LCT	<b>MTH-060-01</b>	<b>335478 TTH</b>			<b>10-11:20 AM</b>		
	E. MEUSER	\$504.00	\$52.00	\$20.00	\$576.00		
OC HYB LCT	<b>MTH-060-10</b>	<b>335485 TBA</b>					
	E. KELLY	\$504.00	\$52.00	\$20.00	\$576.00		
	This is an online/asynchronous class that meets for in-person testing dates only.						
HAR LCT	<b>MTH-060-15</b>	<b>335486 TTH</b>			<b>9-10:50 AM</b>		
	A. ARISTIZABAL	\$504.00	\$52.00	\$20.00	\$576.00		
HAR LCT	<b>MTH-060-16</b>	<b>335487 TTH</b>			<b>6-7:50 PM</b>		
	B. WEBBER	\$504.00	\$52.00	\$20.00	\$576.00		

### MTH-065 ALGEBRA II, 4 CREDITS

#### Campus Locations:

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

#### Distance Education Notification:

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

#### Other Coding Translations:

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

#### ESPAÑOL: Enseñado en español

**LCT:** Low-Cost Text

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

The second term of topics in algebra using the rule-of-four approach: graphs, tables, words, and equations. This course emphasizes algebraic skills, as well as problem solving and graphical techniques with the use of a graphing utility.

**Prerequisites:** MTH-060 with a C or better, or placement in MTH-065

OC HYB LCT	<b>MTH-065-01</b>	<b>335494 MW</b>			<b>1-2:20 PM</b>		
	A. HALL	\$504.00	\$52.00	\$20.00	\$576.00		
OC HYB LCT	<b>MTH-065-02</b>	<b>335496 TTH</b>			<b>10-11:20 AM</b>		
	A. HALL	\$504.00	\$52.00	\$20.00	\$576.00		
OC HYB LCT	<b>MTH-065-10</b>	<b>335497 TBA</b>					
	A. ARISTIZABAL	\$504.00	\$52.00	\$20.00	\$576.00		
	This is an online/asynchronous class that meets for in-person testing dates only.						
HAR LCT	<b>MTH-065-15</b>	<b>335498 TTH</b>			<b>9-10:50 AM</b>		
	A. ARISTIZABAL	\$504.00	\$52.00	\$20.00	\$576.00		
HAR LCT	<b>MTH-065-16</b>	<b>335500 TTH</b>			<b>6-7:50 PM</b>		
	B. WEBBER	\$504.00	\$52.00	\$20.00	\$576.00		

### MTH-080 TECHNICAL MATHEMATICS II, 3 CREDITS

This course is the second in a sequence designed for career-technical students. The topics focus on critical thinking, problem solving, and mathematical communication using applications in arithmetic, algebra, geometry, and trigonometry.

**Prerequisites:** MTH-050 with a C or better

OC LCT	<b>MTH-080-01</b>	<b>335502 MW</b>			<b>3-4:20 PM</b>		
	T. BIEBER	\$378.00	\$39.00	\$20.00	\$437.00		

### MTH-082C WASTEWATER MATH II, 1 CREDIT

Quantitative component to understanding analysis and operations of secondary wastewater systems. Flow rate, chemical dosage, treatment plant loading, treatment process efficiency, unit conversion and process control.

**Prerequisites:** MTH-082A and MTH-082B

**Corequisites:** WET-120

OC	<b>MTH-082C-01</b>	<b>335488 M</b>			<b>5-5:50 PM</b>		
	M. LAFORCE	\$126.00	\$13.00	\$10.00	\$149.00		
	Remote options available with this section.						

### MTH-082D WATERWORKS MATH II, 1 CREDIT

Problem solving for waterworks applications. Introduction to contact-time (CT) calculations, how to determine chemical concentrations, the pounds formula, and basic hydraulics.

**Prerequisites:** MTH-082A and MTH-082B

**Corequisites:** WET-121

OC	<b>MTH-082D-01</b>	<b>335490 T</b>			<b>5-5:50 PM</b>		
	J. NURMI	\$126.00	\$13.00	\$10.00	\$149.00		
	Remote options available with this section.						

### MTH-095 ALGEBRA III, 4 CREDITS

The third term of topics in algebra using the rule-of-four approach is designed to prepare students for transfer-level math courses. This course emphasizes problem-solving and graphical techniques with the use of a graphing utility.

**Prerequisites:** MTH-065 with a C or better, or placement in MTH-095

OC HYB LCT	<b>MTH-095-01</b>	<b>335507 MW</b>			<b>8-9:20 AM</b>		
	J. HEVEL	\$504.00	\$52.00	\$20.00	\$576.00		
OC HYB LCT	<b>MTH-095-02</b>	<b>335512 MW</b>			<b>10-11:20 AM</b>		
	J. HEVEL	\$504.00	\$52.00	\$20.00	\$576.00		
OC HYB LCT	<b>MTH-095-03</b>	<b>335514 TTH</b>			<b>1-2:20 PM</b>		
	E. MEUSER	\$504.00	\$52.00	\$20.00	\$576.00		

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
OC HYB LCT	<b>MTH-095-04</b> 335515 MW	B. WEBBER	\$504.00	\$52.00	\$20.00	\$576.00
OC HYB LCT	<b>MTH-095-10</b> 335518 TBA	M. JOSI	\$504.00	\$52.00	\$20.00	\$576.00
	This is an online/asynchronous class that meets for in-person testing dates only.					
HAR HYB LCT	<b>MTH-095-15</b> 335521 MW	B. WEBBER	\$504.00	\$52.00	\$20.00	\$576.00
	This is an online section that meets for in-person testing dates only.					

**MTH-098 COLLEGE MATH FOUNDATIONS, 4 CREDITS**

In our society, we see and hear about important topics and trends that involve numbers. In this class, participants work to understand and communicate what these numbers mean. Students will explore ways they interact with quantitative information in daily life, learn to effectively interpret and communicate quantitative information, and apply their own knowledge and experience to quantitative reasoning. Learning happens in small student groups, with technology, and through reflective writing. The class is project-based, meaning that students complete projects to demonstrate what they have learned.

**Prerequisites:** MTH-020 with a C or better, or placement in MTH-050, MTH-060, or MTH-098

OC HYB LCT	<b>MTH-098-01</b> 335522 MW	M. YANNOTTA	\$504.00	\$52.00	\$20.00	\$576.00
OC HYB LCT	<b>MTH-098-02</b> 335524 TTH	B. WEBBER	\$504.00	\$52.00	\$20.00	\$576.00
OC HYB LCT	<b>MTH-098-10</b> 335528 TBA	K. PHILLIPS	\$504.00	\$52.00	\$20.00	\$576.00

**MTH-105Z MATH IN SOCIETY, 4 CREDITS**

An exploration of present-day applications of mathematics focused on developing numeracy. Major topics include quantitative reasoning and problem-solving strategies, probability and statistics, and financial mathematics; these topics are to be weighted approximately equally. This course emphasizes mathematical literacy and communication, relevant everyday applications, and the appropriate use of current technology.

**Prerequisites:** MTH-095 or MTH-098 with a C or better, or placement in MTH-111Z

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

OC HYB LCT	<b>MTH-105Z-01</b> 335532 MW	S. VALDES-FERNANDEZ	\$504.00	\$52.00	\$20.00	\$576.00
OC HYB LCT	<b>MTH-105Z-02</b> 335536 TTH	S. VALDES-FERNANDEZ	\$504.00	\$52.00	\$20.00	\$576.00
OC HYB LCT	<b>MTH-105Z-03</b> 338053 MW	S. VALDES-FERNANDEZ	\$504.00	\$52.00	\$20.00	\$576.00
ONL LCT	<b>MTH-105Z-10</b> 335537	M. YANNOTTA	\$504.00	\$52.00	\$20.00	\$576.00
ONL LCT	<b>MTH-105Z-11</b> 335538	M. YANNOTTA	\$504.00	\$52.00	\$20.00	\$576.00
ONL LCT	<b>MTH-105Z-12</b> 339535	M. NICKAS	\$504.00	\$52.00	\$20.00	\$576.00

**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 LCT	<b>MTH-111Z-01</b> 335541 MW	M. PRICE	\$504.00	\$52.00	\$20.00	\$576.00
OC LCT	<b>MTH-111Z-03</b> 335545 MW	S. PRUYN	\$504.00	\$52.00	\$20.00	\$576.00
OC LCT	<b>MTH-111Z-04</b> 335546 TTH	M. PRICE	\$504.00	\$52.00	\$20.00	\$576.00
OC LCT	<b>MTH-111Z-05</b> 335547 TTH	K. AMREIN	\$504.00	\$52.00	\$20.00	\$576.00
OC HYB LCT	<b>MTH-111Z-10</b> 335549 TBA	C. WARNER	\$504.00	\$52.00	\$20.00	\$576.00
	This is an online/asynchronous class that meets for in-person testing dates only.					
HAR LCT	<b>MTH-111Z-15</b> 335551 MW	K. PHILLIPS	\$504.00	\$52.00	\$20.00	\$576.00

**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 LCT	<b>MTH-112Z-01</b> 335553 MW	S. PRUYN	\$504.00	\$52.00	\$20.00	\$576.00
OC LCT	<b>MTH-112Z-02</b> 335557 TTH	F. CARTER	\$504.00	\$52.00	\$20.00	\$576.00
OC HYB LCT	<b>MTH-112Z-10</b> 335559 TBA	M. HAUGEN	\$504.00	\$52.00	\$20.00	\$576.00
	This is an online/asynchronous class that meets for in-person testing dates only.					
HAR LCT	<b>MTH-112Z-15</b> 335560 TTH	F. CARTER	\$504.00	\$52.00	\$20.00	\$576.00

**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

HAR LCT	<b>MTH-211-15</b> 335561 TTH	S. VALDES-FERNANDEZ	\$504.00	\$52.00	\$20.00	\$576.00
---------	------------------------------	---------------------	----------	---------	---------	----------

**MTH-212 FUNDAMENTALS OF ELEMENTARY MATH II, 4 CREDITS**

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

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

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

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

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

A course designed to teach students to understand the basic concepts of mathematics and provide ideas for teaching these concepts to elementary school children. Focuses on modeling and working with integers, fractions, decimals, ratios, percents, and the real numbers. Introduces elementary algebra and statistics. MTH-212 and MTH-213 can be taken in any order.

**Prerequisites:** MTH-211

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

OC LCT	<b>MTH-212-01</b>	<b>335563 MW</b>		<b>10-11:50 AM</b>		
	E. KELLY	\$504.00	\$52.00	\$20.00	\$576.00	

This section will have three in-person, proctored exams.

**MTH-231 ELEMENTS OF DISCRETE MATHEMATICS, 4 CREDITS**

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

**Prerequisites:** MTH-251

oc	<b>MTH-231-01</b>	<b>334791 TTH</b>		<b>3-4:50 PM</b>		
	J. MILLER	\$504.00	\$52.00	\$20.00	\$576.00	

**MTH-244 STATISTICS II, 4 CREDITS**

The tools learned in Statistics I are purposed for inference of data via the use of hypothesis tests and confidence intervals for both one and two populations, linear regression, and chi-square tests.

**Prerequisites:** STAT-243Z with a C or better

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

OC LCT	<b>MTH-244-01</b>	<b>335566 MW</b>		<b>1-2:50 PM</b>		
	T. BIEBER	\$504.00	\$52.00	\$20.00	\$576.00	

**MTH-251 CALCULUS I, 5 CREDITS**

For science, engineering, and mathematics students, this is the first course in the four-term Calculus sequence. Focuses on the analysis of functions using limits and differential calculus. Emphasis on applying calculus concepts and techniques to model and solve appropriate real-world applications.

**Prerequisites:** MTH-112Z with a C or better, or placement in MTH-251

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

OC HYB LCT	<b>MTH-251-01</b>	<b>335569 TTH</b>		<b>8-9:50 AM</b>		
	B. HSIAO	\$630.00	\$65.00	\$20.00	\$715.00	

OC HYB LCT	<b>MTH-251-02</b>	<b>335577 MW</b>		<b>1-2:50 PM</b>		
	M. PARTNOF	\$630.00	\$65.00	\$20.00	\$715.00	

OC HYB LCT	<b>MTH-251-10</b>	<b>335581 TBA</b>				
	E. KELLY	\$630.00	\$65.00	\$20.00	\$715.00	

This is an online/asynchronous class that meets for in-person testing dates only.

**MTH-252 CALCULUS II, 5 CREDITS**

For science, engineering, and mathematics students, this is the second course in the four-term Calculus sequence. Focuses on understanding integral calculus and using anti-differentiation techniques. Emphasis on applying the calculus to model and solve appropriate real-world applications.

**Prerequisites:** MTH-251 with a C or better

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

OC HYB LCT	<b>MTH-252-01</b>	<b>335582 TTH</b>		<b>10-11:50 AM</b>		
	M. PARTNOF	\$630.00	\$65.00	\$20.00	\$715.00	

**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	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
		Instructor		Tuition	Fee	Crs. Fee

OC HYB LCT	<b>MTH-252-02</b>	<b>335587 MW</b>		<b>3-4:50 PM</b>		
	M. PARTNOF	\$630.00	\$65.00	\$20.00	\$715.00	

**MTH-256 DIFFERENTIAL EQUATIONS, 4 CREDITS**

This course is an introduction to the study of first-order differential equations, first-order systems of differential equations, linear systems of differential equations, and applications of these topics.

**Prerequisites:** MTH-252 with a C or better

OC HYB LCT	<b>MTH-256-01</b>	<b>335593 W</b>		<b>9-11:50 AM</b>		
	A. HALL	\$504.00	\$52.00	\$20.00	\$576.00	

**MTH-275 A BRIDGE TO UNIVERSITY MATHEMATICS, 3 CREDITS**

This is a bridge course designed to help students transition from computation-based mathematics to the more proof-based curriculum typical of junior and senior collegiate-level mathematics courses. Students will construct and validate proofs, explore the nature of mathematics, and navigate some of the systems and conventions used within the mathematics community. May be repeated for up to 6 credits.

**Prerequisites:** MTH-251

REM LCT	<b>MTH-275-01</b>	<b>339455 S</b>		<b>1-2:50 PM</b>		
	M. YANNOTTA	\$0.00	\$0.00	\$0.00	\$0.00	

Required: Student Petition.

**Medical Assistant**

For more information, contact Health Sciences at [healthsciences@clackamas.edu](mailto:healthsciences@clackamas.edu)

**MA-100 INTRODUCTION TO MEDICAL ASSISTING, 2 CREDITS**

Introduces the knowledge, skills, and attributes of a successful Medical Assistant while exploring the connection between patient experience and patient outcomes. Summarizes the clinical and employability skills required for providing clinical care while introducing content for career exploration.

ONL	<b>MA-100-01</b>	<b>334547</b>				
	S. DAVENPORT	\$252.00	\$26.00	\$0.00	\$278.00	

**MA-156 PHLEBOTOMY I, 1 CREDIT**

This course is designed to introduce students to the fundamental skills required for phlebotomy as a medical assistant. Students will become familiar with phlebotomy equipment and learn about basic blood collection procedures. The course will focus on the basic skills needed for patient interactions, documentation, and various phlebotomy techniques.

**Prerequisites:** MA-150, MA-152, MA-152L, MA-154, and MA-158

**Corequisites:** MA-156L, MA-160, MA-162, MA-162L, MA-164, MA-164L, and MA-168

**Required:** Student must be enrolled in current Medical Assistant cohort

ONL	<b>MA-156-01</b>	<b>334553</b>				
	T. BOYD	\$126.00	\$13.00	\$0.00	\$139.00	

Required: Student Petition.

**MA-156L PHLEBOTOMY I LAB, 1 CREDIT**

This lab is designed to apply the hands-on skills that were introduced to students in the lecture class. This lab is designed to introduce students to the fundamental skills required for phlebotomy as a medical assistant. Students will become familiar with phlebotomy equipment and learn about basic blood collection procedures. The course will focus on the basic skills needed for patient interactions, documentation, capillary punctures and various phlebotomy techniques.

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor	Tuition	Fee		Crs. Fee			Instructor	Tuition	Fee	Crs. Fee		
<b>Prerequisites:</b> MA-150, MA-152, MA-152L, MA-154, and MA-158 <b>Corequisites:</b> MA-156, MA-160, MA-162, MA-162L, MA-164, MA-164L, and MA-168 <b>Required:</b> Student must be enrolled in current Medical Assistant cohort							HAR HYB	<b>MA-162L-02</b>	<b>334559 TH</b>			<b>9-12:00 PM</b>	
	S. DAVENPORT	\$126.00	\$13.00	\$160.00	\$299.00			S. PARKER					
	Required: Student Petition.												
HAR	<b>MA-156L-01</b>	<b>334554 T</b>			<b>9-12:00 PM</b>		<b>MA-164</b>	<b>CLINICAL LAB PROCEDURES I, 1 CREDIT</b>					
	T. BOYD	\$126.00	\$13.00	\$100.00	\$239.00		This theory course is designed to instill a basic understanding of common laboratory terminology and procedures used in a general medical office laboratory to aid the physician in the diagnosis and treatment of disease. Laboratory safety, the prevention of bloodborne disease transmission and scope of practice will be emphasized. First course in the Clinical Laboratory Procedures series.						
	Required: Student Petition.												
HAR	<b>MA-156L-02</b>	<b>334555 TH</b>			<b>9-12:00 PM</b>		<b>Prerequisites:</b> MA-150, MA-152, MA-152L, MA-154, and MA-158 <b>Corequisites:</b> MA-156, MA-156L, MA-160, MA-162, MA-162L, MA-164L, and MA-168 <b>Required:</b> Student must be enrolled in current Medical Assistant cohort						
	T. BOYD	\$126.00	\$13.00	\$100.00	\$239.00		ONL	<b>MA-164-01</b>	<b>334560</b>				
	Required: Student Petition.												
<b>MA-160</b>	<b>INSURANCE &amp; HEALTH INFORMATION MANAGEMENT, 3 CREDITS</b>												
This course introduces medical assisting students to practical applications for billing medical insurance both manually and electronically. The course is designed to instruct the student in all phases of billing and insurance procedures and entry-level Electronic Health Record software for the management of medical records. The students are also introduced to basic ICD-10 Diagnosis and Procedural coding skills. This course is required for medical assistant students. This course does not meet the requirements for Insurance Coder certification.													
<b>Prerequisites:</b> MA-150, MA-152, MA-152L, MA-154, and MA-158 <b>Corequisites:</b> MA-156, MA-156L, MA-162, MA-162L, MA-164, MA-164L, and MA-168 <b>Required:</b> Student must be enrolled in current Medical Assistant cohort													
ONL	<b>MA-160-01</b>	<b>334556</b>					S. DAVENPORT	\$126.00	\$13.00	\$40.00	\$179.00		
	Required: Student Petition.												
<b>MA-162</b>	<b>EXAMINATION ROOM TECHNIQUES II, 3 CREDITS</b>												
This course builds upon the foundational skills introduced in Examination Room Techniques I. The course will focus on advanced medical assisting skills such as medication administration, patient care interactions, immunization, special exam procedures, EKGs, and assisting providers. This course will incorporate specialty clinics and advanced procedures.													
<b>Prerequisites:</b> MA-150, MA-152, MA-152L, MA-154, and MA-158 <b>Corequisites:</b> MA-156, MA-156L, MA-160, MA-162L, MA-164, MA-164L, and MA-168 <b>Required:</b> Student must be enrolled in current Medical Assistant cohort													
ONL	<b>MA-160-01</b>	<b>334556</b>					S. PARKER	\$378.00	\$39.00	\$55.00	\$472.00		
	Required: Student Petition. Restricted to current MA cohort students.												
HAR	<b>MA-164L-01</b>	<b>334561 T</b>					<b>MA-164L</b>	<b>CLINICAL LAB PROCEDURES I LAB, 1 CREDIT</b>					
	S. DAVENPORT	\$126.00	\$13.00	\$170.00	\$309.00		This laboratory course is designed to instill a basic understanding of common laboratory terminology and procedures used in a general medical office laboratory to aid the physician in the diagnosis and treatment of disease. Laboratory safety, the prevention of bloodborne disease transmission and scope of practice will be emphasized. This is the first lab course in the Clinical Laboratory Procedures series.						
	Required: Student Petition.												
HAR	<b>MA-164L-02</b>	<b>334562 T</b>					<b>Prerequisites:</b> MA-150, MA-152, MA-152L, MA-154, and MA-158 <b>Corequisites:</b> MA-156, MA-156L, MA-160, MA-162, MA-162L, MA-164, and MA-168 <b>Required:</b> Student must be enrolled in current Medical Assistant cohort						
							TH						
	S. DAVENPORT	\$126.00	\$13.00	\$170.00	\$309.00		Required: Student Petition. Restricted to current MA cohort students.						
<b>MA-168</b>	<b>SEMINAR II, 2 CREDITS</b>												
This course will expand on professionalism within the healthcare setting and students will interview and obtain clinical practicum placement.													
<b>Prerequisites:</b> MA-150, MA-152, MA-152L, MA-154, and MA-158 <b>Corequisites:</b> MA-156, MA-156L, MA-160, MA-162, MA-162L, MA-164, and MA-164L <b>Required:</b> Student must be enrolled in current Medical Assistant cohort													
HAR	<b>MA-168-01</b>	<b>334563 W</b>					<b>MA-168-01</b>	<b>334563 W</b>			<b>9-11:00 AM</b>		
	S. PARKER	\$252.00	\$26.00	\$0.00	\$278.00		Required: Student Petition.						

**Medical Billing and Coding**

<b>MBC-115</b>	<b>INSURANCE BILLING AND REIMBURSEMENT I, 4 CREDITS</b>												
First course of a two part series. This course introduces the student to health insurance, insurance billing and reimbursement. Students will study the health insurance industry, legal and regulatory issues, and differences in reimbursement methods. The principles of medical billing will be covered, including proper claim form preparation. Required: Student Petition.													

<b>Campus Locations:</b> HAR: Harmony Community Campus OC: Oregon City Campus WILS: Wilsonville Training Center OFF: Other Off-Campus Location	<b>Distance Education Notification:</b> ONL: Online Only REM: Remote (w/ scheduled meetings) HYB: In-person plus online work	<b>Other Coding Translations:</b> TBA: To be arranged: contact department first class VAR: Variable credit class	<b>ESPAÑOL:</b> Enseñado en español LCT: Low-Cost Text
--	---	--	---

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

**Required:** Medical Billing and Coding students only

REM	<b>MBC-115-01</b>	<b>334564 M</b>			<b>6-9:00 PM</b>	
	C. GARNER	\$504.00	\$52.00	\$200.00		\$756.00

Required: Student Petition.

**MBC-120 INTRODUCTION TO MEDICAL CODING, 3 CREDITS**

This course will explore the fundamental medical coding skills for professional services, such as physicians, mid-level providers, etc. Students will investigate the fundamentals of Diagnostic and Procedural medical coding. Required: Student Petition.

**Required:** Medical Billing and Coding students only

REM	<b>MBC-120-01</b>	<b>334565 W</b>			<b>6-9:00 PM</b>	
	C. GARNER	\$378.00	\$39.00	\$200.00		\$617.00

Required: Student Petition.

**MBC-135 LAW AND ETHICS FOR HEALTHCARE PROFESSIONS, 3 CREDITS**

This course introduces legislation affecting healthcare, along with a review of issues such as professional liability, informed consent, privacy and security laws, electronic health records and workplace legalities. A variety of ethical issues in health care are explored, as well as an examination of future trends in health care. Required: Student Petition.

**Required:** Medical Billing and Coding students only

ONL	<b>MBC-135-01</b>	<b>334566</b>				
	C. GARNER	\$378.00	\$39.00	\$77.86		\$494.86

Required: Student Petition. Online textbook included in section fees.

**Music**

**MUP-102 WIND ENSEMBLE, 2 CREDITS**

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 6 credits.

**Required:** Completion of high school or high school performance level. Ability to read music and play a band instrument

OC LCT	<b>MUP-102-01</b>	<b>334585 TTH</b>			<b>3-4:50 PM</b>	
	L. CAMPBELL	\$252.00	\$26.00	\$0.00		\$278.00

**MUP-104 PEP BAND/COMBO-IMPROV, 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 or MUP-125

OC LCT	<b>MUP-104-01</b>	<b>334587 M</b>			<b>12-12:50 PM</b>	
	C. DOGGETT	\$126.00	\$13.00	\$0.00		\$139.00

**MUP-105 JAZZ ENSEMBLE, 2 CREDITS**

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 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

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

**Recommended Prerequisites:** MUP-102

OC LCT	<b>MUP-105-01</b>	<b>334591 MW</b>			<b>3-4:50 PM</b>	
	L. CAMPBELL	\$252.00	\$26.00	\$0.00		\$278.00

**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	<b>MUP-122-01</b>	<b>334594 TTH</b>			<b>3-4:50 PM</b>	
	K. HOLLINGSWORTH	\$252.00	\$26.00	\$52.00		\$330.00

Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 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	<b>MUP-125-01</b>	<b>334597 MW</b>			<b>3-4:50 PM</b>	
	K. HOLLINGSWORTH	\$252.00	\$26.00	\$52.00		\$330.00

Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.

**MUP-141 COLLEGE ORCHESTRA, 1 CREDIT**

Performance and study of orchestral literature. College students may earn credit for playing in one of several approved orchestral groups. Minimum of one performance per term. May be repeated for up to 8 credits. Required: Student Petition.

OC LCT	<b>MUP-141-01</b>	<b>334600 TBA</b>				
	L. CAMPBELL	\$126.00	\$13.00	\$0.00		\$139.00

Required: Student Petition.

**MUP-150 CONTEMPORARY MUSIC ENSEMBLE, 2 CREDITS**

Studies the development and performance of original compositions through intensive musical collaboration and creation. May be repeated for up to 12 credits.

**Required:** Pass proficiency audition

OC LCT	<b>MUP-150-01</b>	<b>334603 MW</b>			<b>1-2:50 PM</b>	
	K. DEITZ	\$252.00	\$26.00	\$50.00		\$328.00

K. HOLLINGSWORTH  
 Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 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. May be repeated for up to 8 credits. First of a two-part series.

OC LCT	<b>MUP-158-01</b>	<b>334605 TH</b>			<b>1-2:50 PM</b>	
	D. TUTMARK	\$126.00	\$13.00	\$85.00		\$224.00

Guitar Ensemble.

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
	Instructor	Tuition	Fee	Crs. Fee		
OC LCT	<b>MUP-158-02 334607 TBA</b> G. HARRIS Saxophone Quartet.	\$126.00	\$13.00	\$85.00		\$224.00
OC	<b>MUP-158-03 339413 TBA</b> TBA Brass Quintet.	\$126.00	\$13.00	\$85.00		\$224.00
OC	<b>MUP-158-04 339414 TBA</b> TBA Woodwind Quintet.	\$126.00	\$13.00	\$85.00		\$224.00
OC	<b>MUP-158-05 339415 TBA</b> Y. MIYAMA Piano Chamber Ensemble.	\$126.00	\$13.00	\$85.00		\$224.00

**MUP-202 WIND ENSEMBLE, 2 CREDITS**

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 (6 credits)

OC LCT	<b>MUP-202-01 334681 TTH</b> L. CAMPBELL	\$252.00	\$26.00	\$0.00	<b>3-4:50 PM</b>	\$278.00
--------	---	----------	---------	--------	------------------	----------

**MUP-204 PEP BAND/COMBO-IMPROV, 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 or MUP-125

OC LCT	<b>MUP-204-01 334683 M</b> C. DOGGETT	\$126.00	\$13.00	\$0.00	<b>12-12:50 PM</b>	\$139.00
--------	--	----------	---------	--------	--------------------	----------

**MUP-205 JAZZ ENSEMBLE, 2 CREDITS**

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 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 6 credits.

**Prerequisites:** MUP-105 (6 credits)

OC LCT	<b>MUP-205-01 334688 MW</b> L. CAMPBELL	\$252.00	\$26.00	\$0.00	<b>3-4:50 PM</b>	\$278.00
--------	--	----------	---------	--------	------------------	----------

**MUP-222 CHAMBER CHOIR, 2 CREDITS**

Advanced vocal ensemble which rehearses and performs choral music from the Renaissance to the 21st century. Provides preparation for entering professional fields of music and performance. Emphasis on a cappella singing applied to appropriate chamber music. Recommended for vocal music majors. Enrollment by audition. May be repeated for up to 6 credits.

**Prerequisites:** MUP-122 (6 credits)

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
	Instructor	Tuition	Fee	Crs. Fee		
OC LCT	<b>MUP-222-01 334690 TTH</b> K. HOLLINGSWORTH	\$252.00	\$26.00	\$52.00	<b>3-4:50 PM</b>	\$330.00
	Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.					
	<b>MUP-225 ADVANCED VOCAL ENSEMBLE, 2 CREDITS</b>	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.				
	<b>Prerequisites:</b> MUP-125 (6 credits)					

OC LCT	<b>MUP-225-01 334693 MW</b> K. HOLLINGSWORTH	\$252.00	\$26.00	\$52.00	<b>3-4:50 PM</b>	\$330.00
	Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 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 8 credits. Required: Student Petition.

OC LCT	<b>MUP-241-01 334697 TBA</b> L. CAMPBELL	\$126.00	\$13.00	\$0.00		\$139.00
	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.

ONL	<b>MUS-101-01 334788</b> J. HEDBERG	\$378.00	\$39.00	\$10.00		\$427.00
-----	--	----------	---------	---------	--	----------

**MUS-103 APPLIED MUSIC FUNDAMENTALS, 3 CREDITS**

A continuation of an introduction to fundamentals of music theory. Designed for MPT/MT or AS Transfer students who need substantial preparation for MUS-111 and interested non-majors.

**Prerequisites:** MUS-102

OC	<b>MUS-103-01 339420 T</b> K. HOLLINGSWORTH	\$378.00	\$39.00	\$10.00	<b>10-11:20 AM</b> <b>TH</b> <b>10-11:20 AM</b>	\$427.00
----	--	----------	---------	---------	---	----------

**MUS-105 MUSIC APPRECIATION, 3 CREDITS**

For non-majors and music majors. Emphasis on engaging in the study of instrumental and vocal musical genres from the ancient period through the contemporary music of our time. Includes critical analysis, study of elements, forms, styles, composers, performers, cultural, and historical issues and events.

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

ONL	<b>MUS-105-01 334792</b> J. HEDBERG	\$378.00	\$39.00	\$0.00		\$417.00
-----	--	----------	---------	--------	--	----------

**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.

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
OC LCT	<b>MUS-106-01</b>	<b>334794 F</b>			<b>6:30 -8:20 PM</b>	
		<b>S</b>			<b>9-5:20 PM</b>	
	B. ROSE		\$126.00	\$13.00	\$99.00	\$238.00
	Meets: 2/7 & 2/8.					

**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	<b>MUS-107-01</b>	<b>334796 M</b>			<b>6:30 -9:20 PM</b>	
	D. BADSTUBNER		\$378.00	\$39.00	\$99.00	\$516.00

**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	<b>MUS-108-01</b>	<b>334798 T</b>			<b>6:30 -9:20 PM</b>	
	D. BADSTUBNER		\$378.00	\$39.00	\$99.00	\$516.00
OC LCT	<b>MUS-108-02</b>	<b>334800 M</b>			<b>1-3:50 PM</b>	
	D. BADSTUBNER		\$378.00	\$39.00	\$99.00	\$516.00

**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	<b>MUS-109-01</b>	<b>334801 T</b>			<b>6:30 -9:20 PM</b>	
	D. BADSTUBNER		\$378.00	\$39.00	\$99.00	\$516.00
OC LCT	<b>MUS-109-02</b>	<b>334802 M</b>			<b>1-3:50 PM</b>	
	D. BADSTUBNER		\$378.00	\$39.00	\$99.00	\$516.00

**MUS-112 MUSIC THEORY I, 3 CREDITS**

For non-majors and music majors. Presents functional harmony through written exercises, listening, and analysis. This is the second term of a three-term sequence, which includes voice leading, nonharmonic tones, three-voice and four-voice chorale writing, figured bass, and small melodic structures. Provides a thorough groundwork in the melodic, harmonic, and rhythmic elements of music.

**Prerequisites:** MUS-111

**Corequisites:** MUS-112L, MUS-115, and MUS-128 for AS in music degree seekers. This requirement does not affect non-music majors or MPT Majors

OC LCT	<b>MUS-112-01</b>	<b>334803 TTH</b>			<b>10-11:20 AM</b>	
	R. OLASON		\$378.00	\$39.00	\$0.00	\$417.00

**MUS-112L MUSIC NOTATION SOFTWARE I, 1 CREDIT**

Continues an introduction to Finale (music notation software) on Macintosh computers.

OC LCT	<b>MUS-112L-01</b>	<b>334805 M</b>			<b>10-11:50 AM</b>	
	D. FLECHNER		\$126.00	\$13.00	\$44.00	\$183.00

**MUS-115 AURAL SKILLS I, 2 CREDITS**

Second of three courses in a year-long sequence. Diatonic sight singing in major keys using solfège syllables and moveable 'do'. Melodic dictation and aural recognition of intervals, triads, and 7th chords.

**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	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
<b>Corequisites:</b> MUS-112						
<b>Prerequisites:</b> MUS-114						
oc	<b>MUS-115-01</b>	<b>334807 TTH</b>			<b>1-1:50 PM</b>	
	R. OLASON		\$252.00	\$26.00	\$0.00	\$278.00

**MUS-128 KEYBOARD SKILLS I, 2 CREDITS**

Develops basic keyboard skills required for study of tonal harmony and various musical activities such as vocal and instrumental rehearsals, music education and composition.

**Corequisites:** MUS-112, MUS-112L, and MUS-115

**Prerequisites:** MUS-127

OC LCT	<b>MUS-128-01</b>	<b>334808 TTH</b>			<b>2-2:50 PM</b>	
	R. OLASON		\$252.00	\$26.00	\$10.00	\$288.00

**MUS-132 GROUP PIANO: PIANO FOR PLEASURE, 1 CREDIT**

Second of three courses in a year-long sequence. Beginning classroom piano instruction for non-music majors. Includes reading, theory, technical exercises, and the opportunity to share your music with others. Beginning to intermediate level.

OC LCT	<b>MUS-132-01</b>	<b>334809 TTH</b>			<b>9-9:50 AM</b>	
	T. STOJANOVIC		\$126.00	\$13.00	\$85.00	\$224.00

**MUS-135 GROUP VOICE: ANYONE CAN SING, 1 CREDIT**

Vocal techniques for the solo and ensemble singer. For music and non-music majors, voice and music education majors, and/or students who received a low rating on MUP-174 audition.

OC LCT	<b>MUS-135-01</b>	<b>334811 T</b>			<b>1-2:50 PM</b>	
	B. MICHAEL		\$126.00	\$13.00	\$85.00	\$224.00

**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	<b>MUS-137-01</b>	<b>334813 TH</b>			<b>10-11:50 AM</b>	
	D. TUTMARK		\$126.00	\$13.00	\$85.00	\$224.00

**MUS-138 GROUP GUITAR II, 1 CREDIT**

For intermediate to advanced players. Covers finger picking, lead guitar, rock and popular styles, music reading, and music theory. Students provide their own instrument.

**Prerequisites:** MUS-137

oc	<b>MUS-138-01</b>	<b>334815 TH</b>			<b>10-11:50 AM</b>	
	D. TUTMARK		\$126.00	\$13.00	\$85.00	\$224.00

**MUS-140 CAREERS IN MUSIC, 3 CREDITS**

An overview of the music industry career opportunities. Studies include recording studio management/engineering, music merchandising, promotion, music contracting, agent/personal manager, live performing, teaching, technical support, record business, video and film production/editing, retailing, and instrument repair.

REM LCT	<b>MUS-140-01</b>	<b>334818 W</b>			<b>6:30 -9:20 PM</b>	
	D. FLECHNER		\$378.00	\$39.00	\$0.00	\$417.00

**MUS-142 INTRODUCTION TO ELECTRONIC MUSIC I: MIDI, 3 CREDITS**

Introduction to synthesis, MIDI sequencing, basic musical elements, and the basics of production. Learn how to make beats, songs, etc. Uses common production software/hardware.



Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
OC LCT	<b>MUS-142-01</b> 334819 T D. BADSTUBNER		\$378.00	\$39.00	\$99.00	\$516.00

**MUS-143 INTRODUCTION TO ELECTRONIC MUSIC II: SEQUENCING, AUDIO LOOPING, SOUND EFX, 3 CREDITS**

An introduction to digital audio in the MIDI environment. This course continues MIDI sequencing, and integrates audio into the MIDI environment with audio looping, and spotting sound effects. Uses common production software/hardware.

**Prerequisites:** MUS-142

OC LCT	<b>MUS-143-01</b> 334820 TH A. HAAK		\$378.00	\$39.00	\$99.00	\$516.00
--------	--	--	----------	---------	---------	----------

**MUS-144 INTRODUCTION TO ELECTRONIC MUSIC III: DIGITAL AUDIO, 3 CREDITS**

Exploration of digital music recording and editing, synthesis, sampling, and sequencing. Presents CD/audio file production techniques integrating digital audio with the MIDI sequence. Uses Pro Tools, and other common production software/hardware.

**Prerequisites:** MUS-143

OC LCT	<b>MUS-144-01</b> 334822 TH A. HAAK		\$378.00	\$39.00	\$99.00	\$516.00
--------	--	--	----------	---------	---------	----------

**MUS-147 MUSIC, SOUND & MOVIE MAKING, 1 CREDIT**

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

OC LCT	<b>MUS-147-01</b> 334509 F S B. ROSE		\$126.00	\$13.00	\$99.00	\$238.00
	Meets: 1/31 & 2/1.					

**MUS-160 SONGWRITING I, 2 CREDITS**

Studies the techniques of a working songwriter, including use of form, lyrics, harmonic progressions and symbolism in the creative aspect of songwriting. Solo writing as well as the concept of collaboration are introduced. Participants will work individually and/or in small groups to record original songs. May be repeated for up to 4 credits.

**Required:** Working proficiency at playing an instrument such as piano, guitar, voice, or equivalent. Computer generated music is also acceptable

OC LCT	<b>MUS-160-01</b> 334826 T L. POLLARD		\$252.00	\$26.00	\$50.00	\$328.00
--------	--	--	----------	---------	---------	----------

**MUS-171 SOUND DESIGN, 2 CREDITS**

This course introduces students to the fundamentals of sound design through a series of practical, hands-on activities. Students will gain an understanding of the skills, tools, and concepts used in the creation and synchronization of sound effects in modern visual media. Through a thorough introduction to sound recording, editing and mixing, audio manipulation, and electronic synthesis, this course will provide students with the knowledge and skills to create unique sound effects using industry standard software like Pro Tools, Propellerhead's Reason, Ableton Live, Native Instrument's Reaktor, and other sound design-specific software.

OC LCT	<b>MUS-171-01</b> 334827 W S. MOFIDI		\$252.00	\$26.00	\$0.00	\$278.00
--------	---	--	----------	---------	--------	----------

**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.

**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

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
OC	<b>MUS-188-01</b> 339421 TBA L. CAMPBELL		\$0.00	\$0.00	\$0.00	\$0.00

**MUS-189 PERFORMANCE & REPERTOIRE, 1 CREDIT**

A performance forum required for all students studying a classical instrument or voice at the MUP-171 to MUP-191 and MUP-271 to MUP-291 levels. Through weekly performance and critique, each student will develop proper stage manners and prepare for the end of term performance jury, and will also study the work to be performed through academic research. Students will have an opportunity to work with a professional accompanist. May be repeated for up to 6 credits. Required: Student Petition.

OC LCT	<b>MUS-189-01</b> 334829 W J. ISRAELS B. MICHAEL		\$126.00	\$13.00	\$0.00	\$139.00
--------	--	--	----------	---------	--------	----------

OC LCT	<b>MUS-189-02</b> 334833 W J. ISRAELS B. MICHAEL		\$126.00	\$13.00	\$0.00	\$139.00
--------	--	--	----------	---------	--------	----------

**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	<b>MUS-206-01</b> 334834 MW K. DEITZ		\$504.00	\$52.00	\$0.00	\$556.00
----	---	--	----------	---------	--------	----------

ONL	<b>MUS-206-02</b> 334839 J. HEDBERG		\$504.00	\$52.00	\$0.00	\$556.00
-----	--	--	----------	---------	--------	----------

**MUS-212 MUSIC THEORY II, 3 CREDITS**

For non-majors and music majors. Continuation of the study of harmony and period styles through written exercises, compositions, listening, and analysis. This is the second term of a three-term sequence, which includes the classical style, extended, and chromatic harmony.

**Required:** Ability to read music

**Prerequisites:** MUS-211

**Corequisites:** MUS-215 and MUS-225

OC LCT	<b>MUS-212-01</b> 334840 MW R. OLASON		\$378.00	\$39.00	\$269.00	\$686.00
--------	--	--	----------	---------	----------	----------

**MUS-215 KEYBOARD SKILLS II, 2 CREDITS**

Second course in the sequential second year of advanced keyboard applications covering the materials of diatonic and chromatic music.

**Corequisites:** MUS-212

**Prerequisites:** MUS-214

OC LCT	<b>MUS-215-01</b> 334841 MW R. OLASON		\$252.00	\$26.00	\$85.00	\$363.00
--------	--	--	----------	---------	---------	----------

**MUS-219 MPT SEMINAR II, 1 CREDIT**

Second in a three-part series. For second year MPT students only. Seminar will cover writing, arranging, production, performance and music theory through experiential learning. Students will produce, write and arrange for each CWE/Songwriters concert and will produce the Annual MPT festival each spring.

**Prerequisites:** MUS-218

OC LCT	<b>MUS-219-01</b> 334843 M K. HOLLINGSWORTH		\$126.00	\$13.00	\$0.00	\$139.00
	Field trip TBA.					

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee			Instructor		Tuition	Fee	Crs. Fee	
<b>MUS-225</b>	<b>AURAL SKILLS II, 2 CREDITS</b>						OC LCT	<b>MUP-100-04</b>	<b>334572 TBA</b>				
Second 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.								J. ISRAELS		\$126.00	\$13.00	\$225.00	\$364.00
<b>Corequisites:</b> MUS-212 <b>Prerequisites:</b> MUS-224								Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.					
oc	<b>MUS-225-01</b>	<b>334847 MW</b>			<b>1-1:50 PM</b>		OC LCT	<b>MUP-100-05</b>	<b>334573 TBA</b>				
	R. OLASON		\$252.00	\$26.00	\$85.00	\$363.00		B. MICHAEL		\$126.00	\$13.00	\$225.00	\$364.00
<b>MUS-280</b>	<b>MUSIC/CWE, 2-6 CREDITS</b>						OC LCT	<b>MUP-100-06</b>	<b>334575 TBA</b>				
Cooperative work experience. Provides students with on-the-job work experience in the field of music. Required: Student Petition.								C. AVERILL		\$126.00	\$13.00	\$225.00	\$364.00
<b>Corequisites:</b> CWE-281 <b>Prerequisites:</b> MUS-107, MUS-140, and MUS-142								Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.					
ONL LCT	<b>MUS-280-01</b>	<b>334849</b>					OC LCT	<b>MUP-100-07</b>	<b>334576 TBA</b>				
	C. DOGGETT		\$756.00	\$78.00	\$144.00	\$978.00V		K. DEITZ		\$126.00	\$13.00	\$225.00	\$364.00
	Required: Student Petition. Corequisite: Take the following CWE-281-06.							Required: Student Petition. Bass Lessons.					
ONL LCT	<b>MUS-280-02</b>	<b>334851</b>					OC LCT	<b>MUP-100-08</b>	<b>334577 TBA</b>				
	G. HARRIS		\$756.00	\$78.00	\$144.00	\$978.00V		D. TUTMARK		\$126.00	\$13.00	\$225.00	\$364.00
	Required: Student Petition. Corequisite: Take the following CWE-281-06.							Required: Student Petition. Guitar Lessons.					
<b>XMUP-0001</b>	<b>UNISTUS CHOIR, 0 CREDIT</b>						OC LCT	<b>MUP-100-09</b>	<b>334578 TBA</b>				
Select vocal ensemble which rehearses and performs choral music from the Renaissance to the 20th century, including the music of Estonia. Provides preparation for entering professional fields of music and performance. Emphasis on a cappella singing applied to appropriate chamber music. Provides an environment whereby individual students, selected according to their talents and attitudes, may assist the group at large in achieving its full potential which is that of excellence in choral expression. The achievement of this potential is our goal. By audition.								C. WOITACH		\$126.00	\$13.00	\$225.00	\$364.00
oc	<b>XMUP-0001-01</b>	<b>334881 M</b>			<b>6-9:30 PM</b>		OC LCT	<b>MUP-100-10</b>	<b>334579 TBA</b>				
	L. CLINE		\$0.00	\$0.00	\$0.00	\$0.00		G. HARRIS		\$126.00	\$13.00	\$225.00	\$364.00
	By audition only.							Required: Student Petition. Saxophone Lessons.					

**Music: Individual Lessons - Non-Music Majors**

**MUP-100 INDIVIDUAL LESSONS: NON-MUSIC MAJORS, 1 CREDIT**

Private lessons for beginners, non-music majors, and students who receive a low rating in MUP-171 through MUP-191 auditions. Brass, woodwind, percussion, string and keyboard instruments, and voice. May be repeated for up to 12 credits. Required: Student Petition.

OC LCT	<b>MUP-100-01</b>	<b>334567 TBA</b>					OC	<b>MUP-100-15</b>	<b>339395 TBA</b>				
	K. POLITZER		\$126.00	\$13.00	\$225.00	\$364.00		C. LEE		\$126.00	\$13.00	\$225.00	\$364.00
	Required: Student Petition. Jazz Piano Lessons.							Required: Student Petition. Oboe Lessons.					
OC LCT	<b>MUP-100-02</b>	<b>334569 TBA</b>					OC	<b>MUP-100-16</b>	<b>339396 TBA</b>				
	Y. MIYAMA		\$126.00	\$13.00	\$225.00	\$364.00		B. GARDINER		\$126.00	\$13.00	\$225.00	\$364.00
	Required: Student Petition. Piano Lessons.							Required: Student Petition. Percussion Lessons.					
OC LCT	<b>MUP-100-03</b>	<b>334571 TBA</b>					OC	<b>MUP-100-17</b>	<b>339510 TBA</b>				
	D. FLESCNER		\$126.00	\$13.00	\$225.00	\$364.00		L. CAMPBELL		\$126.00	\$13.00	\$225.00	\$364.00
	Required: Student Petition. Rock, Blues, and Pop Piano Lessons.							Required: Student Petition. Trombone Lessons.					
							OC	<b>MUP-100-21</b>	<b>339397 TBA</b>				
								K. POLITZER		\$252.00	\$26.00	\$450.00	\$728.00
								Required: Student Petition. Jazz Piano Lessons.					
							OC	<b>MUP-100-22</b>	<b>339398 TBA</b>				
								Y. MIYAMA		\$252.00	\$26.00	\$450.00	\$728.00
								Required: Student Petition. Piano Lessons.					
							OC	<b>MUP-100-23</b>	<b>339399 TBA</b>				
								D. FLESCNER		\$252.00	\$26.00	\$450.00	\$728.00
								Required: Student Petition. Rock, Blues, and Pop Piano Lessons.					
							OC	<b>MUP-100-24</b>	<b>339400 TBA</b>				
								J. ISRAELS		\$252.00	\$26.00	\$450.00	\$728.00

**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	Section No	Instructor	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
oc	Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions. <b>MUP-100-25 339508 TBA</b> B. MICHAEL \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions. <b>MUP-100-26 339401 TBA</b> C. AVERILL \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Cello Lessons. <b>MUP-100-27 339403 TBA</b> K. DEITZ \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Bass Lessons. <b>MUP-100-28 339404 TBA</b> D. TUTMARK \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Guitar Lessons. <b>MUP-100-29 339405 TBA</b> C. WOITACH \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Jazz Guitar Lessons. <b>MUP-100-30 339406 TBA</b> G. HARRIS \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Saxophone Lessons. <b>MUP-100-31 339407 TBA</b> J. KLAUSE \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Trumpet Lessons. <b>MUP-100-32 339408 TBA</b> C. DOGGETT \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Percussion & Drumset Lessons. <b>MUP-100-33 339409 TBA</b> K. GIFFORD \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Flute Lessons. <b>MUP-100-34 339410 TBA</b> T. STOJANOVIC \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Piano Lessons. <b>MUP-100-35 339411 TBA</b> C. LEE \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Oboe Lessons. <b>MUP-100-36 339412 TBA</b> B. GARDINER \$252.00 \$26.00 \$450.00 \$728.00									
oc	Required: Student Petition. Percussion Lessons. <b>MUP-100-37 339511 TBA</b> L. CAMPBELL \$252.00 \$26.00 \$450.00 \$728.00									
	Required: Student Petition. Trombone Lessons.									
oc	<b>MUP-171-02 339416 TBA</b> T. STOJANOVIC \$252.00 \$26.00 \$450.00 \$728.00 Required: Student Petition.									
	<b>MUP-171J INDIVIDUAL LESSONS: JAZZ PIANO, 2 CREDITS</b> Required: College-level performance ability									
oc LCT	<b>MUP-171J-01 334612 TBA</b> K. POLITZER \$252.00 \$26.00 \$450.00 \$728.00 Required: Student Petition.									
	<b>MUP-171R INDIVIDUAL LESSONS: ROCK, BLUES, POP PIANO, 2 CREDITS</b> Required: College-level performance ability									
oc LCT	<b>MUP-171R-01 334615 TBA</b> D. FLESCHNER \$252.00 \$26.00 \$450.00 \$728.00 Required: Student Petition.									
	<b>MUP-172 INDIVIDUAL LESSONS: ORGAN, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
oc LCT	<b>MUP-172-01 334616 TBA</b> J. HOLLAND \$252.00 \$26.00 \$450.00 \$728.00 Required: Student Petition.									
	<b>MUP-174 INDIVIDUAL LESSONS: VOICE, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
oc LCT	<b>MUP-174-01 334617 TBA</b> J. ISRAELS \$252.00 \$26.00 \$450.00 \$728.00 Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.									
oc LCT	<b>MUP-174-02 334618 TBA</b> B. MICHAEL \$252.00 \$26.00 \$450.00 \$728.00 Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.									
	<b>MUP-174J INDIVIDUAL LESSONS: JAZZ VOICE, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
oc LCT	<b>MUP-174J-01 334619 TBA</b> J. ISRAELS \$252.00 \$26.00 \$450.00 \$728.00 Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.									
oc LCT	<b>MUP-174J-02 334621 TBA</b> B. MICHAEL \$252.00 \$26.00 \$450.00 \$728.00 Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.									
	<b>MUP-174R INDIVIDUAL LESSONS: ROCK, BLUES, POP VOICE, 2 CREDITS</b>									

**Music: Individual Lessons - Year 1**

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

oc LCT	<b>MUP-171-01 334609 TBA</b> Y. MIYAMA \$252.00 \$26.00 \$450.00 \$728.00 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

Course No	Course Title, Credits	Section No	Instructor	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
<b>Required:</b> College-level performance ability										
oc	<b>MUP-174R-01 337955 TBA</b> J. ISRAELS			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.										
oc	<b>MUP-174R-02 337956 TBA</b> B. MICHAEL			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition. Voice Lessons. Vocal placement required for private lessons and vocal ensembles. New students attend in Room N114 on 1/6 from 3-5 pm to demonstrate vocal range. Contact kathleen.hollingsworth@clackamas.edu with questions.										
<b>MUP-175 INDIVIDUAL LESSONS: VIOLIN, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability <b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-175-01 334622 TBA</b> TBA			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-176 INDIVIDUAL LESSONS: VIOLA, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability <b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-176-01 334623 TBA</b> H. OSEAS			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-177 INDIVIDUAL LESSONS: CELLO, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability <b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-177-01 334624 TBA</b> C. AVERILL			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-178 INDIVIDUAL LESSONS: BASS, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability <b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-178-01 334626 TBA</b> K. DEITZ			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-178J INDIVIDUAL LESSONS: JAZZ BASS, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability										
oc LCT	<b>MUP-178J-01 334627 TBA</b> K. DEITZ			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
oc LCT	<b>MUP-178J-02 334628 TBA</b> T. WAKELING			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-178R INDIVIDUAL LESSONS: ROCK, BLUES, POP BASS, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability										
oc	<b>MUP-178R-01 337957 TBA</b> K. DEITZ			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-179 INDIVIDUAL LESSONS: HARP, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability										
<b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-179-01 334629 TBA</b> TBA			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-180 INDIVIDUAL LESSONS: GUITAR, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability <b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-180-01 334630 TBA</b> D. TUTMARK			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-180J INDIVIDUAL LESSONS: JAZZ GUITAR, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability										
oc LCT	<b>MUP-180J-01 334633 TBA</b> C. WOITACH			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-180R INDIVIDUAL LESSONS: ROCK, BLUES, POP GUITAR, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability										
oc LCT	<b>MUP-180R-01 334634 TBA</b> A. CSIKOS			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-181 INDIVIDUAL LESSONS: FLUTE, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability <b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-181-01 334636 TBA</b> K. GIFFORD			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
oc	<b>MUP-181-02 339512 TBA</b> S. TIEDEMANN			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-181J INDIVIDUAL LESSONS: JAZZ FLUTE, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability										
oc LCT	<b>MUP-181J-01 334638 TBA</b> G. HARRIS			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-182 INDIVIDUAL LESSONS: OBOE, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability <b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-182-01 334639 TBA</b> C. LEE			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-183 INDIVIDUAL LESSONS: CLARINET, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability <b>Corequisites:</b> MUS-189										
oc LCT	<b>MUP-183-01 334641 TBA</b> L. DE MARTINO			\$252.00	\$26.00	\$450.00	\$728.00			
Required: Student Petition.										
<b>MUP-183J INDIVIDUAL LESSONS: JAZZ CLARINET, 2 CREDITS</b>										
<b>Required:</b> College-level performance ability										

**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,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
OC LCT	<b>MUP-183J-01 334643 TBA</b> TBA Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-184 INDIVIDUAL LESSONS: SAXOPHONE, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
OC LCT	<b>MUP-184-01 334645 TBA</b> G. HARRIS Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-184J INDIVIDUAL LESSONS: JAZZ SAXOPHONE, 2 CREDITS</b> Required: College-level performance ability									
OC LCT	<b>MUP-184J-01 334650 TBA</b> G. HARRIS Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-185 INDIVIDUAL LESSONS: BASSOON, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
OC LCT	<b>MUP-185-01 334652 TBA</b> N. BUETTI Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-186 INDIVIDUAL LESSONS: TRUMPET, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
OC LCT	<b>MUP-186-01 334656 TBA</b> J. KLAUSE Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-186J INDIVIDUAL LESSONS: JAZZ TRUMPET, 2 CREDITS</b> Required: College-level performance ability									
OC LCT	<b>MUP-186J-01 334658 TBA</b> Q. WALKER Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-187 INDIVIDUAL LESSONS: FRENCH HORN, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
OC LCT	<b>MUP-187-01 334662 TBA</b> R. OLASON Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-188 INDIVIDUAL LESSONS: TROMBONE, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
OC LCT	<b>MUP-188-01 334664 TBA</b> L. CAMPBELL Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
OC	<b>MUP-188-02 339417 TBA</b> C. RENEAU Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-188J INDIVIDUAL LESSONS: JAZZ TROMBONE, 2 CREDITS</b> Required: College-level performance ability									
OC LCT	<b>MUP-188J-01 334668 TBA</b> L. CAMPBELL Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-189 INDIVIDUAL LESSONS: EUPHONIUM, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
OC LCT	<b>MUP-189-01 334671 TBA</b> G. MIDDLETON Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-190 INDIVIDUAL LESSONS: TUBA, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
OC LCT	<b>MUP-190-01 334673 TBA</b> TBA Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-191 INDIVIDUAL LESSONS: PERCUSSION, 2 CREDITS</b> Required: College-level performance ability Corequisites: MUS-189									
OC LCT	<b>MUP-191-01 334676 TBA</b> B. GARDINER Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-191J INDIVIDUAL LESSONS: JAZZ PERCUSSION, 2 CREDITS</b> Required: College-level performance ability									
OC LCT	<b>MUP-191J-01 334678 TBA</b> C. DOGGETT Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-191R INDIVIDUAL LESSONS: ROCK, BLUES, POP DRUMSET, 2 CREDITS</b> Required: College-level performance ability									
OC	<b>MUP-191R-01 337958 TBA</b> C. DOGGETT Required: Student Petition.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-192T INDIVIDUAL LESSONS: AUDIO TECH, 2 CREDITS</b> Required: College-level performance ability									
OC	<b>MUP-192T-01 337959 TBA</b> M. BAIRD Required: Student Petition. Electronic Music Lessons.					\$252.00	\$26.00	\$450.00		\$728.00
OC	<b>MUP-192T-02 337960 TBA</b> D. BADSTUBNER Required: Student Petition. Audio Recording Lessons.					\$252.00	\$26.00	\$450.00		\$728.00
OC	<b>MUP-192T-03 337961 TBA</b> R. SOMMERS Required: Student Petition. Live Sound Lessons.					\$252.00	\$26.00	\$450.00		\$728.00
	<b>MUP-271 INDIVIDUAL LESSONS: PIANO, 2 CREDITS</b> Prerequisites: MUP-171 (6 credits) Corequisites: MUS-189 Required: Sophomore-level performance ability									
OC LCT	<b>MUP-271-01 334705 TBA</b> Y. MIYAMA					\$252.00	\$26.00	\$450.00		\$728.00
OC	<b>MUP-271-02 339418 TBA</b> T. STOJANOVIC					\$252.00	\$26.00	\$450.00		\$728.00

**Music: Individual Lessons - Year 2**

*Second-year 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.*

**MUP-271 INDIVIDUAL LESSONS: PIANO, 2 CREDITS**  
Prerequisites: MUP-171 (6 credits)  
Corequisites: MUS-189  
Required: Sophomore-level performance ability

OC LCT	<b>MUP-271-01 334705 TBA</b> Y. MIYAMA					\$252.00	\$26.00	\$450.00		\$728.00
OC	<b>MUP-271-02 339418 TBA</b> T. STOJANOVIC					\$252.00	\$26.00	\$450.00		\$728.00

**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	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee			Instructor		Tuition	Fee	Crs. Fee	
<b>MUP-271J</b>	<b>INDIVIDUAL LESSONS: JAZZ PIANO, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-276-01</b>	<b>334728 TBA</b>				
	<b>Prerequisites:</b> MUP-171J (6 credits)							H. OSEAS		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-271R</b>	<b>INDIVIDUAL LESSONS: ROCK, BLUES, POP PIANO, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-277-01</b>	<b>334730 TBA</b>				
	<b>Prerequisites:</b> MUP-171R (6 credits)							C. AVERILL		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-272</b>	<b>INDIVIDUAL LESSONS: ORGAN, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-278-01</b>	<b>334732 TBA</b>				
	<b>Prerequisites:</b> MUP-172 (6 credits)							K. DEITZ		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Corequisites:</b> MUS-189												
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-274</b>	<b>INDIVIDUAL LESSONS: VOICE, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-278J-01</b>	<b>334734 TBA</b>				
	<b>Prerequisites:</b> MUP-174 (6 credits)							K. DEITZ		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Corequisites:</b> MUS-189												
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-274J</b>	<b>INDIVIDUAL LESSONS: JAZZ VOICE, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-278J-02</b>	<b>334737 TBA</b>				
	<b>Prerequisites:</b> MUP-174J (6 credits)							T. WAKELING		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Corequisites:</b> MUS-189												
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-274R</b>	<b>INDIVIDUAL LESSONS: ROCK, BLUES, POP VOICE, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-279-01</b>	<b>334738 TBA</b>				
	<b>Prerequisites:</b> MUP-174R (6 credits)							TBA		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-275</b>	<b>INDIVIDUAL LESSONS: VIOLIN, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-280-01</b>	<b>334741 TBA</b>				
	<b>Prerequisites:</b> MUP-175 (6 credits)							D. TUTMARK		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Corequisites:</b> MUS-189												
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-276</b>	<b>INDIVIDUAL LESSONS: VIOLA, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-280J-01</b>	<b>334743 TBA</b>				
	<b>Prerequisites:</b> MUP-176 (6 credits)							C. WOITACH		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Corequisites:</b> MUS-189												
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-277</b>	<b>INDIVIDUAL LESSONS: CELLO, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-280R</b>	<b>INDIVIDUAL LESSONS: ROCK, BLUES, POP GUITAR, 2 CREDITS</b>				
	<b>Prerequisites:</b> MUP-177 (6 credits)								<b>Prerequisites:</b> MUP-180R (6 credits)				
	<b>Corequisites:</b> MUS-189								<b>Required:</b> Sophomore-level performance ability				
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-278</b>	<b>INDIVIDUAL LESSONS: BASS, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-280J-01</b>	<b>334743 TBA</b>				
	<b>Prerequisites:</b> MUP-178 (6 credits)							C. WOITACH		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Corequisites:</b> MUS-189												
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-278J</b>	<b>INDIVIDUAL LESSONS: JAZZ BASS, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-280R-01</b>	<b>337964 TBA</b>				
	<b>Prerequisites:</b> MUP-178J (6 credits)							K. DEITZ		\$252.00	\$26.00	\$450.00	\$728.00
	<b>Required:</b> Sophomore-level performance ability												
<b>MUP-278R</b>	<b>INDIVIDUAL LESSONS: ROCK, BLUES, POP BASS, 2 CREDITS</b>						<b>OC LCT</b>	<b>MUP-281</b>	<b>INDIVIDUAL LESSONS: FLUTE, 2 CREDITS</b>				
	<b>Prerequisites:</b> MUP-178R (6 credits)												
	<b>Required:</b> Sophomore-level performance ability												

**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,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
<b>Prerequisites:</b> MUP-181 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-281-01</b>	<b>334750</b>	<b>TBA</b>							
	K. GIFFORD	\$252.00	\$26.00	\$450.00	\$728.00					
OC	<b>MUP-281-02</b>	<b>339513</b>	<b>TBA</b>							
	S. TIEDEMANN	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-281J INDIVIDUAL LESSONS: JAZZ FLUTE, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-181J (6 credits)										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-281J-01</b>	<b>334751</b>	<b>TBA</b>							
	G. HARRIS	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-282 INDIVIDUAL LESSONS: OBOE, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-182 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-282-01</b>	<b>334754</b>	<b>TBA</b>							
	C. LEE	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-283 INDIVIDUAL LESSONS: CLARINET, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-183 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-283-01</b>	<b>334757</b>	<b>TBA</b>							
	L. DE MARTINO	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-283J INDIVIDUAL LESSONS: JAZZ CLARINET, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-183J (6 credits)										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-283J-01</b>	<b>334759</b>	<b>TBA</b>							
	TBA	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-284 INDIVIDUAL LESSONS: SAXOPHONE, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-184 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-284-01</b>	<b>334760</b>	<b>TBA</b>							
	G. HARRIS	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-284J INDIVIDUAL LESSONS: JAZZ SAXOPHONE, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-184J (6 credits)										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-284J-01</b>	<b>334762</b>	<b>TBA</b>							
	G. HARRIS	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-285 INDIVIDUAL LESSONS: BASSOON, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-185 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-285-01</b>	<b>334764</b>	<b>TBA</b>							
	N. BUETTI	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-286 INDIVIDUAL LESSONS: TRUMPET, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-186 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-286-01</b>	<b>334766</b>	<b>TBA</b>							
	J. KLAUSE	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-286J INDIVIDUAL LESSONS: JAZZ TRUMPET, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-186J (6 credits)										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-286J-01</b>	<b>334769</b>	<b>TBA</b>							
	Q. WALKER	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-287 INDIVIDUAL LESSONS: FRENCH HORN, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-187 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-287-01</b>	<b>334772</b>	<b>TBA</b>							
	R. OLASON	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-288 INDIVIDUAL LESSONS: TROMBONE, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-188 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-288-01</b>	<b>334773</b>	<b>TBA</b>							
	L. CAMPBELL	\$252.00	\$26.00	\$450.00	\$728.00					
OC	<b>MUP-288-02</b>	<b>339509</b>	<b>TBA</b>							
	C. RENEAU	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-288J INDIVIDUAL LESSONS: JAZZ TROMBONE, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-188J (6 credits)										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-288J-01</b>	<b>334776</b>	<b>TBA</b>							
	L. CAMPBELL	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-289 INDIVIDUAL LESSONS: EUPHONIUM, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-189 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-289-01</b>	<b>334779</b>	<b>TBA</b>							
	G. MIDDLETON	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-290 INDIVIDUAL LESSONS: TUBA, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-190 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-290-01</b>	<b>334781</b>	<b>TBA</b>							
	TBA	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-291 INDIVIDUAL LESSONS: PERCUSSION, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-191 (6 credits)										
<b>Corequisites:</b> MUS-189										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-291-01</b>	<b>334784</b>	<b>TBA</b>							
	B. GARDINER	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-291J INDIVIDUAL LESSONS: JAZZ PERCUSSION, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-191J (6 credits)										
<b>Required:</b> Sophomore-level performance ability										
OC LCT	<b>MUP-291J-01</b>	<b>334786</b>	<b>TBA</b>							
	C. DOGGETT	\$252.00	\$26.00	\$450.00	\$728.00					
<b>MUP-291R INDIVIDUAL LESSONS: ROCK, BLUES, POP DRUMSET, 2 CREDITS</b>										
<b>Prerequisites:</b> MUP-191R (6 credits)										
<b>Required:</b> Sophomore-level performance ability										

**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,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
OC	<b>MUP-291R-01 337965 TBA</b> C. DOGGETT					\$252.00	\$26.00	\$450.00		\$728.00
HAR	<b>NRS-111-01 334853 M</b> C. BURT B. ELLISON R. TARTER					\$378.00	\$39.00	\$400.00		\$817.00

**MUP-292T INDIVIDUAL LESSONS: AUDIO TECH, 2 CREDITS**

**Prerequisites:** MUP-192T (6 credits)

**Required:** Sophomore-level performance ability

OC	<b>MUP-292T-01 337966 TBA</b> M. BAIRD					\$252.00	\$26.00	\$450.00		\$728.00
Electronic Music Lessons.										
OC	<b>MUP-292T-02 337967 TBA</b> D. BADSTUBNER					\$252.00	\$26.00	\$450.00		\$728.00
Audio Recording Lessons.										
OC	<b>MUP-292T-03 337968 TBA</b> R. SOMMERS					\$252.00	\$26.00	\$450.00		\$728.00
Live Sound Lessons.										

**Nursing**

*The Nursing program at Clackamas Community College is a full partner in the Oregon Consortium for Nursing Education (OCNE). The curriculum in OCNE nursing programs is a competency-based curriculum developed in collaboration with Oregon Health & Science University (OHSU) and other community colleges around the state. This curriculum, which has been approved by the Oregon State Board of Education as well as the Oregon State Board of Nursing, can ultimately culminate in a Baccalaureate of Science Degree with a focus in Nursing on the community college campus offered by OHSU.*

*Admission into the nursing program is by special application only. Acceptance to the nursing program allows for co-enrollment 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-111 FOUNDATIONS OF NURSING IN CHRONIC ILLNESS I, 3 CREDITS**

This course introduces assessment and common interventions (including technical procedures) for patients with chronic illnesses common across the life span in multiple ethnic groups. The patient's and family's lived experience of the condition is explored. Clinical practice guidelines and research evidence are used to guide clinical judgments in care of individuals with chronic conditions. Multidisciplinary team roles and responsibilities are explored in the context of delivering safe, high quality health care to individuals with chronic conditions (includes practical and legal aspects of delegation). Cultural, ethical, legal and health care delivery issues are explored through case scenarios and clinical practice. Case exemplars include children with asthma, adolescents with a mood disorder, adults with type 2 diabetes, and older adults with dementia. The course includes classroom and clinical learning experiences.

**Required:** Acceptance into the CCC nursing program

**Prerequisites:** NRS-110, NRS-110C, and NRS-230

**Corequisites:** NRS-111C, NRS-231, and NRS-232

**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

**NRS-111C FOUNDATIONS OF NURSING IN CHRONIC ILLNESS I CLINICAL, 3 CREDITS**

This course introduces assessment and common interventions (including technical procedures) for clients with chronic illnesses common across the life span in major ethnic groups within Oregon. The client's and family's lived experience of the condition is explored. Clinical practice guidelines and research evidence are used to guide clinical judgments in care of individuals with chronic conditions. Multidisciplinary team roles and responsibilities are considered in the context of delivering safe, high quality health care to individuals with chronic conditions (includes practical and legal aspects of delegation). Cultural, ethical, legal and health care delivery issues are explored through case scenarios and clinical practice. Case exemplars include children with asthma, adolescents with a mood disorder, adults with type 2 diabetes, and older adults with dementia. The course includes classroom and clinical learning experiences with simulation experience as part of total clinical hours.

**Required:** Acceptance into the CCC nursing program

**Prerequisites:** NRS-110, NRS-110C, and NRS-230

**Corequisites:** NRS-111, NRS-231, and NRS-232

HAR	<b>NRS-111C-01 334856 T</b> C. BURT B. ELLISON R. TARTER					\$378.00	\$39.00	\$350.00		\$767.00
9-10:50 AM 9-1:00 PM										
HAR	<b>NRS-111C-02 334857 T</b> C. BURT B. ELLISON R. TARTER					\$378.00	\$39.00	\$350.00		\$767.00
11-12:50 PM 1:30 -5:30 PM										
HAR	<b>NRS-111C-03 334859 T</b> C. BURT B. ELLISON R. TARTER					\$378.00	\$39.00	\$350.00		\$767.00
1:30 -3:20 PM 9-1:00 PM										

**NRS-221 CHRONIC ILLNESS II AND END OF LIFE, 4 CREDITS**

This course builds on NRS-111 and expands the student's knowledge related to family care giving, symptom management and end of life concepts. These concepts are a major focus and basis for nursing interventions with patients and families. Ethical issues related to advocacy, self-determination, and autonomy are explored. Complex skills associated with the assessment and management of concurrent illnesses and conditions are developed within the context of patient and family preferences and needs. Skills related to enhancing communication and collaboration as a member of an interprofessional team and across health care settings are further explored. Exemplars include patients with chronic mental illness and addictions as well as other chronic conditions and disabilities affecting functional status and family relationships. The course includes classroom and clinical learning experiences.

**Required:** Acceptance into the CCC nursing program

**Corequisites:** NRS-221C

**Prerequisites:** NRS-222 and NRS-222C

HAR	<b>NRS-221-01 334860 M</b> G. CONNELL K. RICHARDS					\$504.00	\$52.00	\$312.00		\$868.00
8:30 -10:20 AM 11-12:50 PM										



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

**NRS-221C CHRONIC ILLNESS II AND END OF LIFE CLINICAL, 5 CREDITS**

This course builds on NRS-111 and expands the student's knowledge related to family care giving, symptom management and end of life concepts. These concepts are a major focus and basis for nursing interventions with patients and families. Ethical issues related to advocacy, self determination, and autonomy are explored. Complex skills associated with the assessment and management of concurrent illnesses and conditions are developed within the context of patient and family preferences and needs. Skills related to enhancing communication and collaboration as a member of an interdisciplinary team are further explored. Exemplars include patients with chronic mental illness and addictions as well as other chronic conditions and disabilities affecting functional status and family relationships. The course includes classroom and clinical learning experiences.

**Required:** Acceptance into the CCC nursing program

**Corequisites:** NRS-221

**Prerequisites:** NRS-222 and NRS-222C

HAR	<b>NRS-221C-01 334862 TBA</b>	G. CONNELL K. RICHARDS		\$630.00	\$65.00	\$175.00	\$870.00
HAR	<b>NRS-221C-02 334864 TBA</b>	G. CONNELL K. RICHARDS		\$630.00	\$65.00	\$175.00	\$870.00
HAR	<b>NRS-221C-03 334866 TBA</b>	G. CONNELL K. RICHARDS		\$630.00	\$65.00	\$175.00	\$870.00
HAR	<b>NRS-221C-04 339464 TBA</b>	G. CONNELL K. RICHARDS		\$630.00	\$65.00	\$175.00	\$870.00
HAR	<b>NRS-221C-05 339465 TBA</b>	G. CONNELL K. RICHARDS		\$630.00	\$65.00	\$175.00	\$870.00

**NRS-231 CLINICAL PHARMACOLOGY II, 3 CREDITS**

This sequel to NRS-230 continues to provide the theoretical background that enables students to provide safe and effective nursing care related to drugs and natural products to persons throughout the lifespan. Students will learn to make selected clinical decisions in the context of nursing regarding using current, reliable sources of information, monitoring and evaluating the effectiveness of drug therapy, teaching persons from diverse populations regarding safe and effective use of drugs and natural products, intervening to increase therapeutic benefits and reduce potential negative effects, and communicating appropriately with other health professionals regarding drug therapy. The course addresses additional classes of drugs and related natural products not contained in NRS-230.

**Required:** Acceptance into the CCC nursing program

**Prerequisites:** NRS-110, NRS-110C, and NRS-230

**Corequisites:** NRS-111, NRS-111C, and NRS-232

HAR HYB	<b>NRS-231-01 334867 F</b>	K. RICHARDS		\$378.00	\$39.00	\$90.00	\$507.00
---------	----------------------------	-------------	--	----------	---------	---------	----------

**NRS-232 PATHOPHYSIOLOGICAL PROCESSES I, 3 CREDITS**

**Campus Locations:**

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

**Distance Education Notification:**

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

**Other Coding Translations:**

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

**ESPAÑOL:** Enseñado en español

**LCT:** Low-Cost Text

This course introduces pathophysiological processes that contribute to many different disease states across the lifespan and human responses to those processes. It includes the foundational concepts of cellular adaptation, injury, and death; inflammation and tissue healing; fluid and electrolyte imbalances; and physiologic response to stressors, as well as additional pathophysiological processes. Students will learn to make selective clinical decisions in the context of nursing regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused nursing assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes.

**Required:** Acceptance into the CCC nursing program

**Prerequisites:** NRS-110, NRS-110C, and NRS-230

**Corequisites:** NRS-111, NRS-111C, and NRS-231

HAR HYB	<b>NRS-232-01 334868 M</b>	G. CONNELL		\$378.00	\$39.00	\$170.00	\$587.00
---------	----------------------------	------------	--	----------	---------	----------	----------

**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

HAR HYB	<b>NUR-100-01 334872 TW</b>	M. BAKER S. ELLSBERG K. STIPE		\$819.00	\$84.50	\$300.00	\$1,203.50
---------	-----------------------------	-------------------------------------	--	----------	---------	----------	------------

**Required:** Student Petition. Information session details will be posted to the nursing assistant website. Please see website for application & orientation information.

HAR HYB	<b>NUR-100-02 339461 TW</b>	M. BAKER S. ELLSBERG K. STIPE		\$819.00	\$84.50	\$300.00	\$1,203.50
---------	-----------------------------	-------------------------------------	--	----------	---------	----------	------------

**Required:** Student Petition. Information session details will be posted to the nursing assistant website. Please see website for application & orientation information.

**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.

Course No	Course Title, Credits	Section No	Instructor	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
<b>Corequisites:</b> NUR-100										
HAR	<b>NUR-100C-01 334876 TWTH</b>		K. STIPE	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00
Required: Student Petition.										
HAR	<b>NUR-100C-02 339462 TWTH</b>		K. STIPE	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00
Required: Student Petition.										
HAR	<b>NUR-100C-03 339463 TWTH</b>		K. STIPE	\$0.00		\$0.00	\$0.00		\$0.00	\$0.00
Required: Student Petition.										

Provide hands-on experience in a supervised and accredited laboratory or clinical environment, providing the opportunity for students to apply practical skills and knowledge learned in previous courses and gain professional experience in a healthcare environment.

**Required:** Compliance with the Oregon Health Authority rules for students. Vaccination records for Tdap, MMR, Varicella, Hep B, COVID-19. Completed criminal background check, drug screen, and BLS CPR card through the American Heart Association

**Prerequisites:** PHB-110, PHB-112, and PHB-115

**Corequisites:** PHB-125

## 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 LCT	<b>PHL-101-01 335595 TH</b>		K. SEVERSON	\$504.00	\$52.00	\$0.00	\$556.00	<b>10-11:50 AM</b>		
No textbook required.										
ONL LCT	<b>PHL-101-02 338060</b>		K. HADDIX	\$504.00	\$52.00	\$0.00	\$556.00			

### PHL-102 ETHICS, 4 CREDITS

Introduces the study of morality with concepts of good, harm, habits, character, perception, behavior and action. Also considers the different theories of human capacity for responsibility.

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

ONL LCT	<b>PHL-102-01 335596</b>		M. BAILEY	\$504.00	\$52.00	\$0.00	\$556.00			
No textbook required.										

### PHL-103 CRITICAL REASONING, 4 CREDITS

Helps students identify and understand the process by which they themselves and others arrive at conclusions; improves their critical reasoning skills; introduces basic logical concepts of argument; and gives opportunity for students to apply course skills to relevant matters.

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

ONL LCT	<b>PHL-103-01 335602</b>		K. HADDIX	\$504.00	\$52.00	\$0.00	\$556.00			
HAR HYB LCT	<b>PHL-103-15 338061 W</b>		M. BAILEY	\$504.00	\$52.00	\$0.00	\$556.00	<b>10-11:50 AM</b>		
No textbook required.										

## Phlebotomy

### PHB-125 PROFESSIONALISM IN HEALTHCARE, 1 CREDIT

This course is designed to support the transition from practicum to employment by exploring nationally recognized credentialing options, summarizing essential skills related to phlebotomy, and finalizing professional portfolio for employment.

**Prerequisites:** PHB-110, PHB-112, and PHB-115

**Corequisites:** PHB-130

ONL	<b>PHB-125-01 334878</b>		E. ZUNIGA	\$126.00	\$13.00	\$100.00	\$239.00			
Required: Student Petition.										

### PHB-130 PHLEBOTOMY PRACTICUM, 5 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

## Physical Education

### PE-185 PHYSICAL ACTIVITY CLASSES, 1 CREDIT

**Recommended:** Current physical examination before enrolling

<b>BASEBALL CONDITIONING II, 1 CREDIT</b>										
OC	<b>PE-185-008 339377 MWF</b>		J. HOPPEL	\$126.00	\$13.00	\$30.00	\$169.00	<b>8-8:50 AM</b>		
Required: Student Petition.										
<b>BASEBALL HITTING II, 1 CREDIT</b>										
OC	<b>PE-185-010 339378 MWF</b>		J. HOPPEL	\$126.00	\$13.00	\$30.00	\$169.00	<b>9-9:50 AM</b>		
Required: Student Petition.										
<b>CROSS TRAINING V, 1 CREDIT</b>										
ONL	<b>PE-185-050 339380</b>		B. STAMME	\$126.00	\$13.00	\$30.00	\$169.00			
<b>CROSS TRAINING V, 1 CREDIT</b>										
ONL	<b>PE-185-052 339582</b>		B. STAMME	\$126.00	\$13.00	\$30.00	\$169.00			
<b>SOFTBALL CONDITIONING II, 1 CREDIT</b>										
OC	<b>PE-185-088 339381 TTH</b>		J. BUEL	\$126.00	\$13.00	\$30.00	\$169.00	<b>7:30 -8:50 AM</b>		
Required: Student Petition.										
<b>SOFTBALL HITTING II, 1 CREDIT</b>										
OC	<b>PE-185-090 339382 TTH</b>		J. BUEL	\$126.00	\$13.00	\$30.00	\$169.00	<b>9-10:20 AM</b>		
Required: Student Petition.										
<b>TRACK CONDITIONING II, 1 CREDIT</b>										
OC	<b>PE-185-105 339383 MWF</b>		K. MCHONE	\$126.00	\$13.00	\$30.00	\$169.00	<b>2:30 -5:20 PM</b>		
Required: Student Petition.										
<b>VOLLEYBALL, POWER II, 1 CREDIT</b>										
OC	<b>PE-185-030 339379 T</b>		A. ITAMI	\$126.00	\$13.00	\$30.00	\$169.00	<b>6:30 -9:20 PM</b>		
Required: Student Petition.										
<b>WALK, JOG, FITNESS II, 1 CREDIT</b>										
ONL	<b>PE-185-002 335509</b>		K. MCHONE	\$126.00	\$13.00	\$30.00	\$169.00			
<b>WEIGHT TRAINING II, 1 CREDIT</b>										
ONL	<b>PE-185-064 335525</b>		C. WEGNER	\$126.00	\$13.00	\$30.00	\$169.00			
<b>WEIGHT TRAINING II, 1 CREDIT</b>										
OC	<b>PE-185-063 335520 TTH</b>		C. WEGNER	\$126.00	\$13.00	\$30.00	\$169.00	<b>10-11:20 AM</b>		

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	
	Instructor		Tuition	Fee	Crs. Fee			Instructor		Tuition	Fee	Crs. Fee		
ONL	<b>YOGA II, 1 CREDIT</b> <b>PE-185-001 335508</b> E. HANCOCK		\$126.00	\$13.00	\$30.00	\$169.00		<b>Prerequisites:</b> MTH-065 or MTH-098 with a C or better or placement in MTH-095 <b>Corequisites:</b> PH-121L <b>Prerequisites:</b> WRD-090 or placement in WRD-098						
<b>PE-240</b>	<b>STRENGTH &amp; CONDITIONING THEORY &amp; TECHNIQUES, 3 CREDITS</b>  An overview of introductory exercise physiology, biomechanics, program design, and exercise techniques that prepares students to design and implement physical training programs and exercise for clients and athletes.						ONL LCT	<b>PH-121-40 335552</b> C. SHARON Lab included.		\$504.00	\$52.00	\$25.00	\$581.00	
OC HYB	<b>PE-240-01 335539 W</b> K. MCHONE		\$378.00	\$39.00	\$0.00	\$417.00		<b>PH-121L ASTRONOMY LAB, 0 CREDIT</b> Lab course for PH-121L <b>Corequisites:</b> PH-121						
<b>PE-270</b>	<b>SPORT AND EXERCISE PSYCHOLOGY, 3 CREDITS</b>  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	<b>PH-121L-40 335554</b> C. SHARON Corequisite: Take the following PH-121-40.		\$0.00	\$0.00	\$0.00	\$0.00	
ONL	<b>PE-270-01 335542</b> K. MCHONE		\$378.00	\$39.00	\$0.00	\$417.00		<b>PH-122 GENERAL ASTRONOMY, 4 CREDITS</b> A lab course including the properties of our sun, other stars and stellar evolution. <b>Prerequisites:</b> PH-121 or GS-107 <b>Corequisites:</b> PH-122L						
<b>PE-280</b>	<b>PHYSICAL EDUCATION/CWE, 2-6 CREDITS</b>  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. <b>Corequisites:</b> CWE-281						ONL	<b>PH-122-40 335555</b> C. SHARON		\$504.00	\$52.00	\$20.00	\$576.00	
ONL	<b>PE-280-01 335543</b> T. NELSON Required: Student Petition. Review the registration process and complete the online application to the program at <a href="http://www.clackamas.edu/CWE-Students.aspx">http://www.clackamas.edu/CWE-Students.aspx</a> prior to registering. Corequisite: Take the following CWE-281-06.		\$756.00	\$78.00	\$45.00	\$879.00V		<b>PH-122L GENERAL ASTRONOMY LAB, 0 CREDIT</b> Lab course for PH-122 <b>Corequisites:</b> PH-122						
<b>PE-294</b>	<b>PROFESSIONAL ACTIVITIES, 1 CREDIT</b>  Advanced 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.						OC	<b>PH-122L-40 335556</b> C. SHARON		\$0.00	\$0.00	\$0.00	\$0.00	
OC	<b>BASKETBALL SKILLS &amp; STRATEGIES, 1 CREDIT</b> <b>PE-294-02 339384 MWF</b> C. WEGNER Required: Student Petition.		\$126.00	\$13.00	\$30.00	\$169.00		<b>PH-202 GENERAL PHYSICS, 5 CREDITS</b> A lab course covering electricity, magnetism, DC and AC circuits, and electromagnetic radiation. <b>Prerequisites:</b> PH-201 <b>Corequisites:</b> PH-202L and PH-202S						
OC	<b>BASKETBALL SKILLS &amp; STRATEGIES, 1 CREDIT</b> <b>PE-294-03 339385 MWF</b> K. GUELSDORF Required: Student Petition.		\$126.00	\$13.00	\$30.00	\$169.00		OC	<b>PH-202-01 335558 MW</b> T. STUFFLEBEAM Corequisite: Take 2 of the following PH-202L-01, PH-202L-02, PH-202L-03, PH-202S-01.		\$630.00	\$65.00	\$50.00	\$745.00
								<b>PH-202L GENERAL PHYSICS LAB, 0 CREDIT</b> Lab course for PH-202 <b>Corequisites:</b> PH-202 and PH-202S						
								OC	<b>PH-202L-01 335562 T</b> T. STUFFLEBEAM Corequisite: Take the following PH-202-01, PH-202S-01.		\$0.00	\$0.00	\$0.00	\$0.00
								OC	<b>PH-202L-02 335564 TH</b> G. BOSTROM Corequisite: Take the following PH-202-01, PH-202S-01.		\$0.00	\$0.00	\$0.00	\$0.00
								OC	<b>PH-202L-03 335565 F</b> G. BOSTROM Corequisite: Take the following PH-202-01, PH-202S-01.		\$0.00	\$0.00	\$0.00	\$0.00
								<b>PH-202S GENERAL PHYSICS SEMINAR, 0 CREDIT</b> Seminar course for PH-202 <b>Corequisites:</b> PH-202 and PH-202L						
								OC	<b>PH-202S-01 335567 T</b> T. STUFFLEBEAM Corequisite: Take 2 of the following PH-202-01, PH-202L-01, PH-202L-02, PH-202L-03.		\$0.00	\$0.00	\$0.00	\$0.00

**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.

**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	Cr. Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor			Tuition	Fee	Cr. Fee

**PH-212 GENERAL PHYSICS WITH CALCULUS, 5 CREDITS**  
 A lab course covering electricity, magnetism, DC and AC circuits, and electromagnetic radiation.  
**Prerequisites:** MTH-252 and PH-211  
**Corequisites:** PH-212L and PH-212S  
**Recommended Prerequisites:** MTH-254

oc	<b>PH-212-01</b>	<b>335568 MW</b>				<b>11-12:20 PM</b>
	G. BOSTROM	\$630.00	\$65.00	\$50.00	\$745.00	
	Corequisite: Take 2 of the following PH-212L-01, PH-212L-02, PH-212L-03, PH-212S-01, PH-212S-02, PH-212S-03.					
oc	<b>PH-212-02</b>	<b>335570 MW</b>				<b>1-2:20 PM</b>
	G. BOSTROM	\$630.00	\$65.00	\$50.00	\$745.00	
	Corequisite: Take 2 of the following PH-202L-01, PH-202L-02, PH-202L-03, PH-212S-01, PH-212S-02, PH-212S-03.					

**PH-212L GENERAL PHYSICS WITH CALCULUS LAB, 0 CREDIT**  
 Lab course for PH-212  
**Corequisites:** PH-212 and PH-212S

oc	<b>PH-212L-01</b>	<b>335571 T</b>				<b>9-11:50 AM</b>
	T. STUFFLEBEAM	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2 of the following PH-212-01, PH-212-02, PH-212S-01, PH-212S-02, PH-212S-03.					
oc	<b>PH-212L-02</b>	<b>335572 TH</b>				<b>1-3:50 PM</b>
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2 of the following PH-212-01, PH-212-02, PH-212S-01, PH-212S-02, PH-212S-03.					
oc	<b>PH-212L-03</b>	<b>335573 F</b>				<b>11-1:50 PM</b>
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2 of the following PH-212-01, PH-212-02, PH-212S-01, PH-212S-02, PH-212S-03.					

**PH-212S GENERAL PHYSICS WITH CALCULUS SEMINAR, 0 CREDIT**  
 Seminar course for PH-212  
**Corequisites:** PH-212 and PH-212L

oc	<b>PH-212S-01</b>	<b>335574 TH</b>				<b>11-11:50 AM</b>
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2 of the following PH-212-01, PH-212-02, PH-212L-01, PH-212L-02, PH-212L-03.					
oc	<b>PH-212S-02</b>	<b>335575 TH</b>				<b>4-4:50 PM</b>
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2 of the following PH-212-01, PH-212-02, PH-212L-01, PH-212L-02, PH-212L-03.					
oc	<b>PH-212S-03</b>	<b>335576 F</b>				<b>2-2:50 PM</b>
	G. BOSTROM	\$0.00	\$0.00	\$0.00	\$0.00	
	Corequisite: Take 2 of the following PH-212-01, PH-212-02, PH-212L-01, PH-212L-02, PH-212L-03.					

**Political Science**

**PS-201 AMERICAN GOVERNMENT AND POLITICS, 4 CREDITS**  
 Examines the founding principles of the American government, as well as the Constitution, the separation of powers, and the three branches of government, political parties and elections, and the role of interest groups and the media in the political process. In addition, assesses the growing power of the executive branch, the expansion and reach of the federal bureaucracy, governmental policies, and the civil liberties and civil rights of American citizens.  
**Recommended Prerequisites:** WRD-090 or placement in WRD-098

**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

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

ONL	<b>PS-201-01</b>	<b>335605</b>				
	J. HITE	\$504.00	\$52.00	\$0.00	\$556.00	

**PS-280 POLITICAL SCIENCE/CWE, 2-6 CREDITS (VAR)**  
 Cooperative work experience. Provides students with on-the-job work experience in the field of political science. Required: Student Petition.  
**Corequisites:** CWE-281

oc	<b>PS-280-01</b>	<b>335608</b>				
	J. HITE	\$756.00	\$78.00	\$45.00	\$879.00V	
	D. LOUGEE					
	Required: Student Petition. Corequisite: Take the following CWE-281-06.					

**PS-297 INTRODUCTION TO ENVIRONMENTAL POLITICS, 4 CREDITS**  
 Explores and assesses the politics informing environmental policy; the tension between politics, policy and scientific expertise; the role of the legislative, executive, and judicial branches of government in crafting and implementing environmental policy; and the critical impact non-governmental institutions and pressure groups have on environmental policy development and outcomes.  
**Recommended Prerequisites:** WRD-098 or placement in WR-121Z

oc HYB LCT	<b>PS-297-01</b>	<b>339505 T</b>				<b>1-2:50 PM</b>
	J. HITE	\$504.00	\$52.00	\$0.00	\$556.00	

**Psychology**

**PSY-101 HUMAN RELATIONS, 3 CREDITS**  
 Focuses on developing skills and strategies necessary to build and maintain successful personal and professional relationships. Applies psychological principles to understanding relationships with ourselves and others in social, workplace, and digital contexts. Includes an overview of basic psychology principles in addition to skill development in the following areas: dealing with emotions, interpersonal communication, developing close relationships, resolving conflicts, and managing stress. Includes individual and group activities, lecture, and discussions with an emphasis on student participation.  
**Recommended Prerequisites:** WRD-090 or placement in WRD-098

oc LCT	<b>PSY-101-01</b>	<b>335611 MW</b>				<b>8-9:20 AM</b>
	E. SAUBER	\$378.00	\$39.00	\$0.00	\$417.00	
	Online textbook provided first day of class.					
ONL	<b>PSY-101-02</b>	<b>335617</b>				
	M. MALLATT	\$378.00	\$39.00	\$0.00	\$417.00	
ONL	<b>PSY-101-03</b>	<b>335618</b>				
	M. MALLATT	\$378.00	\$39.00	\$0.00	\$417.00	
HAR	<b>PSY-101-15</b>	<b>335619 W</b>				<b>6-8:50 PM</b>
	J. VELEZ	\$378.00	\$39.00	\$0.00	\$417.00	

**PSY-201Z INTRODUCTION TO PSYCHOLOGY I, 4 CREDITS**  
 Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Research Methods, Behavioral Neuroscience, Consciousness, Sensation/Perception, Learning, Memory, Thinking and Intelligence, and related topics.  
**Recommended Prerequisites:** WRD-090 or placement in WRD-098

oc LCT	<b>PSY-201Z-01</b>	<b>335620 TTH</b>				<b>8-9:50 AM</b>
	J. KISSLER	\$504.00	\$52.00	\$0.00	\$556.00	
	Online textbook provided first day of class.					
oc LCT	<b>PSY-201Z-02</b>	<b>339431 TTH</b>				<b>10-11:50 AM</b>
	J. KISSLER	\$504.00	\$52.00	\$0.00	\$556.00	
	Online textbook provided first day of class.					

**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,W,Th,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total	Section No	Instructor	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Tuition	Fee	Time	Crs. Fee	Total
ONL	<b>PSY-201Z-03</b>	<b>335623</b>							<b>PSY-280</b>	<b>PSYCHOLOGY/CWE, 2-6 CREDITS (VAR)</b>							
	S. TOBIN			\$504.00	\$52.00	\$0.00		\$556.00	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.								
<b>PSY-202Z INTRODUCTION TO PSYCHOLOGY II, 4 CREDITS</b>									<b>Corequisites:</b> CWE-281								
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.									oc <b>PSY-280-01 335643</b>								
<b>Recommended Prerequisites:</b> WRD-090 or placement in WRD-098									J. KISSLER \$756.00 \$78.00 \$45.00 \$879.00V								
									Required: Student Petition. Corequisite: Take the following CWE-281-06.								
OC LCT	<b>PSY-202Z-01</b>	<b>335625 MW</b>				<b>1-2:50 PM</b>			<b>Religion</b>								
	I. MANCINELLI-FRANCONI			\$504.00	\$52.00	\$0.00		\$556.00	<b>R-103 ASIAN RELIGIONS, 4 CREDITS</b>								
Online textbook provided first day of class.									An introduction to the history, ideas, and philosophy of Asian religions including Hinduism, Buddhism, Jainism, Sikhism, Taoism, Confucianism, and Shintoism. Examine Asian religions' impact on contemporary culture.								
ONL LCT	<b>PSY-202Z-02</b>	<b>335629</b>							<b>Recommended Prerequisites:</b> WRD-090 or placement in WRD-098								
	I. MANCINELLI-FRANCONI			\$504.00	\$52.00	\$0.00		\$556.00	ONL <b>R-103-01 338064</b>								
Online textbook provided first day of class.									J. SHELTON \$504.00 \$52.00 \$0.00 \$556.00								
<b>PSY-215 INTRODUCTION TO DEVELOPMENTAL PSYCHOLOGY, 4 CREDITS</b>									<b>R-211 HISTORY OF THE OLD TESTAMENT, 4 CREDITS</b>								
Research and theories regarding the development of the individual from conception to death, including physical, social and cognitive changes.									An introduction to the Old Testament/Tanakh that covers the early developments of the Hebrew community: Patriarchs, Abraham, Moses, and Sinai. Examines Old Testament monarchy, prophets, and wisdom literature. Examines modern theories of biblical interpretation.								
<b>Prerequisite or Corequisite:</b> WRD-098 or placement in WR-121Z									<b>Recommended Prerequisites:</b> WRD-090 or placement in WRD-098								
<b>Recommended Prerequisite or Corequisite:</b> FYE-101									HAR <b>R-211-15 335648 MW 1-2:50 PM</b>								
OC LCT	<b>PSY-215-01</b>	<b>335630 MW</b>				<b>1-2:50 PM</b>			J. SHELTON \$504.00 \$52.00 \$0.00 \$556.00								
	J. KISSLER			\$504.00	\$52.00	\$0.00		\$556.00	Online textbook provided first day of class.								
ONL	<b>PSY-215-02</b>	<b>335633</b>							<b>R-280 RELIGION/CWE, 2-6 CREDITS (VAR)</b>								
	T. THOMAS			\$504.00	\$52.00	\$0.00		\$556.00	Cooperative work experience. Provides students with on-the-job work experience in the field of religion. Required: Student Petition.								
ONL	<b>PSY-215-03</b>	<b>335634</b>							<b>Corequisites:</b> CWE-281								
	K. KRASKA			\$504.00	\$52.00	\$43.75		\$599.75	oc <b>R-280-01 335649</b>								
Online textbook included in section fees.									D. LOUGEE \$756.00 \$78.00 \$45.00 \$879.00V								
HAR	<b>PSY-215-15</b>	<b>335635 MW</b>				<b>3-4:50 PM</b>			J. SHELTON								
	J. VELEZ			\$504.00	\$52.00	\$0.00		\$556.00	Required: Student Petition. Corequisite: Take the following CWE-281-06.								
<b>PSY-219 INTRODUCTION TO ABNORMAL PSYCHOLOGY, 4 CREDITS</b>									<b>Renewable Energy Technology</b>								
Introduction to abnormal psychology, including disorders and approaches to treatment.									<i>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.</i>								
<b>Prerequisite or Corequisite:</b> WRD-098 or placement in WR-121Z									<b>RET-200 RENEWABLE ENERGY SYSTEMS, 2 CREDITS</b>								
OC LCT	<b>PSY-219-01</b>	<b>335636 TTH</b>				<b>1-2:50 PM</b>			This course provides a survey of various renewable energy systems. Participants will learn about the benefits and limitations of each type of energy source as well as their functional principles. Students will participate in several field learning exercises related to energy systems. The intended audiences are technical students wishing to explore the Renewable Energy field and students from the humanities and social sciences wanting a better understanding of this socially important technology.								
	E. SAUBER			\$504.00	\$52.00	\$0.00		\$556.00	oc <b>RET-200-01 335578 M 1-4:50 PM</b>								
Online textbook provided first day of class.									TBA \$252.00 \$26.00 \$87.50 \$365.50								
ONL LCT	<b>PSY-219-02</b>	<b>335639</b>							<b>RET-215 RENEWABLE ENERGY IV: SYSTEMS DESIGN, 3 CREDITS</b>								
	E. SAUBER			\$504.00	\$52.00	\$0.00		\$556.00	Online textbook provided first day of class.								
ONL	<b>PSY-219-03</b>	<b>339432</b>															
	S. KISER			\$504.00	\$52.00	\$0.00		\$556.00									
HAR HYB	<b>PSY-219-15</b>	<b>335640 TH</b>				<b>1-2:50 PM</b>											
	S. KISER			\$504.00	\$52.00	\$0.00		\$556.00									
<b>PSY-231 INTRODUCTION TO HUMAN SEXUALITY, 4 CREDITS</b>																	
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.																	
<b>Prerequisite or Corequisite:</b> WRD-098 or placement in WR-121Z																	
OC LCT	<b>PSY-231-01</b>	<b>335641 MW</b>				<b>10-11:50 AM</b>											
	E. SAUBER			\$504.00	\$52.00	\$0.00		\$556.00									
Online textbook provided first day of class.																	

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

This fourth course in the series will concentrate on systems design for renewable energy applications. Students will work together and apply concepts to evaluate, design and select one or more renewable energy systems for solar, wind or micro-hydro installations. Topics will include site surveys, structural elements, electrical generators, energy storage and electrical inversion.

**Prerequisites:** RET-213

oc	<b>RET-215-01</b>	<b>335579</b>	<b>TTH</b>	<b>3-5:50 PM</b>	
	TBA	\$378.00	\$39.00	\$131.25	\$548.25

**RET-280 RENEWABLE ENERGY/CWE, 1-12 CREDITS**

Cooperative work experience. Major emphasis on work-based learning experience in the renewable energy field. Coordination of instruction and evaluation of student job performance will be provided by college faculty in conjunction with the student's employer/supervisor. Required: Student Petition.

**Corequisites:** CWE-281

ONL	<b>RET-280-01</b>	<b>335583</b>			
	C. CONNORS	\$1,512.00	\$156.00	\$570.00	\$2,238.00
		0			

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](mailto: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](http://www.oregonsbdc.org/clackamas)

**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	<b>SBM-011-01WI</b>	<b>339482</b>	<b>T</b>	<b>6-7:50 PM</b>	
	TBA	\$0.00	\$0.00	\$0.00	\$0.00

**SBM-020 SMALL BUSINESS GREENHOUSE, 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.

REM	<b>SBM-020-05WI</b>	<b>339469</b>	<b>T</b>	<b>6:30 -9:20 PM</b>	
	J. SELBY	\$0.00	\$0.00	\$0.00	\$0.00
REM	<b>SBM-020-06WI</b>	<b>339470</b>	<b>T</b>	<b>6:30 -9:20 PM</b>	
	J. SELBY	\$0.00	\$0.00	\$0.00	\$0.00
REM	<b>SBM-020-07WI</b>	<b>339471</b>	<b>T</b>	<b>6:30 -9:20 PM</b>	
	J. SELBY	\$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  
**LCT:** Low-Cost Text

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

REM	<b>SBM-020-08WI</b>	<b>339472</b>	<b>T</b>	<b>6:30 -9:20 PM</b>	
	J. SELBY	\$0.00	\$0.00	\$0.00	\$0.00

**SBM-021 SMALL BUSINESS MANAGEMENT I, 0 CREDIT**

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.

REM	<b>SBM-021-03WI</b>	<b>339578</b>	<b>T</b>	<b>6:30 -7:50 PM</b>	
	D. TOURNEY	\$0.00	\$0.00	\$0.00	\$0.00

**SBM-021B SMALL BUSINESS MANAGEMENT I, 0 CREDIT**

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. The SBM class will address the challenges of creating an attractive business concept, building lasting customer relations, maintaining profitable operations, and developing strong organizational structure.

HAR	<b>SBM-021B-01WI</b>	<b>339487</b>	<b>TH</b>	<b>1-3:50 PM</b>	
	R. CAMPBELL	\$0.00	\$0.00	\$0.00	\$0.00

**SBM-024B SUCCESSION PLANNING, 0 CREDIT**

Learn how to harvest your small farm business, not just your crops. Succession planning in small farm ownership is a critical and complex 3-10 year process that, when done properly, helps farmers maximize their return on their farm investment so they can reach their long-term goals in retirement. This hands-on, 3 month program is designed to teach farmers and individuals who want to buy a farm, how to make it happen. Course consists of monthly class meetings, individual business counseling, peer networking, and work in/on the business.

HAR HYB	<b>SBM-024B-01WI</b>	<b>339488</b>	<b>TH</b>	<b>1-3:50 PM</b>	
	D. TOURNEY	\$0.00	\$0.00	\$0.00	\$0.00

**SBM-028B SMALL BUSINESS MANAGEMENT I FOR CONSTRUCTION CONTRACTORS, 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	<b>SBM-028B-01WI</b>	<b>339489</b>			
	D. TOURNEY	\$0.00	\$0.00	\$0.00	\$0.00
REM	<b>SBM-028B-02WI</b>	<b>339490</b>	<b>TH</b>	<b>6-7:20 PM</b>	
	D. TOURNEY	\$0.00	\$0.00	\$0.00	\$0.00

**SBM-029B SMALL BUSINESS MANAGEMENT II FOR CONSTRUCTION CONTRACTORS, 0 CREDIT**

Provides information on continuing to grow a successful construction business. Teaches students technology and software options and intermediate marketing techniques and strategies. Discusses construction math and conversions.

REM	<b>SBM-029B-01WI</b>	<b>339491</b>	<b>W</b>	<b>6-7:20 PM</b>	
	D. TOURNEY	\$0.00	\$0.00	\$0.00	\$0.00

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

**SBM-030 BUSINESS RECOVERY SMALL BUSINESS MANAGEMENT I, 0 CREDIT**

Provides education for assessment of existing business model, diagnosis of the business and a prescriptive action plan to improve the business. Teaches students to research, study and apply content learned in class.

REM	SBM-030-01WI	339492	T		6:30 -7:50 PM	
	D. TOURNEY	\$0.00	\$0.00	\$0.00		\$0.00

**XSBM-0003 GOING INTO BUSINESS, 0 CREDIT**

Going Into Business orientation introduces the steps you need to take to start-up and successfully operate a small business in Oregon.

REM	XSBM-0003-01WI	339479	TH		6:30 -9:20 PM	
	J. SELBY	\$0.00	\$0.00	\$0.00		\$0.00
REM	XSBM-0003-02WI	339480	TH		6:30 -9:20 PM	
	J. SELBY	\$0.00	\$0.00	\$0.00		\$0.00
REM	XSBM-0003-03WI	339481	TH		6:30 -9:20 PM	
	J. SELBY	\$0.00	\$0.00	\$0.00		\$0.00

**XSBM-0011 QUICKBOOKS PRO: PART I, 0 CREDIT**

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-0011-21WI	339483	W		6-8:50 PM	
	C. WEESNER	\$0.00	\$0.00	\$0.00		\$0.00

**Social Science**

**SSC-160 FAITH & REASON, 4 CREDITS**

An introduction of how personal concepts of faith & reason and institutions of science & religion shape personal intellectual landscapes. Examines classical philosophy, sacred texts, worldviews, modern fiction, poetry, theology, cosmology, and evolutionary biology.

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

ONL	SSC-160-01	335687				
	J. SHELTON	\$504.00	\$52.00	\$0.00		\$556.00

**Sociology**

**SOC-204 INTRODUCTION TO SOCIOLOGY, 4 CREDITS**

This course offers an introduction to the field of sociology. Sociology is the scientific study of human behavior in society. In this course we will introduce and discuss issues including the sociological imagination, culture, socialization, deviance, authority, religion, science and methods of sociological research. 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

OC HYB	SOC-204-01	335651	TH		10-11:50 AM	
	E. PFEIFER	\$504.00	\$52.00	\$0.00		\$556.00
OC HYB	SOC-204-02	335654	W		1-2:50 PM	
	E. PFEIFER	\$504.00	\$52.00	\$0.00		\$556.00

**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

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

**ONL LCT SOC-204-03 339433**  
 J. LOVELESS \$504.00 \$52.00 \$0.00 \$556.00  
 Online textbook provided first day of class.

**SOC-205 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

OC HYB	SOC-205-01	335656	W		10-11:50 AM	
	E. PFEIFER	\$504.00	\$52.00	\$0.00		\$556.00
OC HYB	SOC-205-02	335659	TH		1-2:50 PM	
	E. PFEIFER	\$504.00	\$52.00	\$0.00		\$556.00

**SOC-206 INSTITUTIONS & SOCIAL CHANGE, 4 CREDITS**

This course explores how people can change their society. Social change is a process that can be used by people in a society, to change and improve the functioning of their society. This course will explore and discuss how people-led social movements, in the past and in the present, can be developed, organized, and implemented to accomplish social change.

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

ONL LCT	SOC-206-01	335661				
	J. LOVELESS	\$504.00	\$52.00	\$0.00		\$556.00

**SOC-210 MARRIAGE, FAMILY, & INTIMATE RELATIONS, 4 CREDITS**

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

ONL	SOC-210-01	335664				
	J. LOVELESS	\$504.00	\$52.00	\$0.00		\$556.00

**SOC-225 SOCIAL PROBLEMS, 4 CREDITS**

Applies the sociological framework to the study of social problems, their identification, analysis of causes and possible solutions. Problems explored may include mental disorders, drug and alcohol addiction, crime and delinquency, group discrimination, inequality, poverty, alienation, domestic and international violence, environment, and energy.

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

ONL	SOC-225-01	335667				
	J. LOVELESS	\$504.00	\$52.00	\$0.00		\$556.00

**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	335669				
	E. PFEIFER	\$756.00	\$78.00	\$45.00		\$879.00V

Required: Student Petition. Corequisite: Take the following CWE-281-06.

**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	Cr. Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
		Instructor		Tuition	Fee	Crs. Fee

**Statistics**

**STAT-243Z ELEMENTARY STATISTICS I, 4 CREDITS**

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 LCT	STAT-243Z-01	335688	MW	10-11:50 AM		
	M. PRICE	\$504.00	\$52.00	\$20.00	\$576.00	
OC LCT	STAT-243Z-02	335691	TTH	10-11:50 AM		
	M. PRICE	\$504.00	\$52.00	\$20.00	\$576.00	
OC HYB LCT	STAT-243Z-03	335692	T	1-2:50 PM		
	K. AMREIN	\$504.00	\$52.00	\$20.00	\$576.00	
OC LCT	STAT-243Z-04	338054	MW	1-2:50 PM		
	K. MERCER	\$504.00	\$52.00	\$20.00	\$576.00	
ONL LCT	STAT-243Z-10	335694				
	K. AMREIN	\$504.00	\$52.00	\$20.00	\$576.00	

**Theatre Arts**

**TA-112 FUNDAMENTALS OF TECHNICAL THEATRE, 4 CREDITS**

Second class of a three-part series. Intermediate study and practice in techniques of mounting various types of productions for presentation. Includes basic principles and techniques in stage design, construction, and lighting. Flexible laboratory sessions available. Students must attend a performance as well as participate in the focus and strike (10 total hours) of a production. Students are required to maintain an independent journal/study (12 total hours) of outside class activity and observations of Technical Theatre applications.

OC LCT	TA-112-01	334744	TTH	1-3:50 PM		
	C. WHITTEN	\$504.00	\$52.00	\$35.00	\$591.00	

**TA-122 COSTUMING II, 3 CREDITS**

Second in a three-part series. Study and practice in theatrical costuming techniques for various types of live theatrical productions. Students will analyze scripts, research historical background, and study period fashion to develop character wardrobes. This is a project-based course where students will construct and tailor costume and prop pieces for cast members. No experience necessary; limited seats.

**Recommended Prerequisites:** TA-121

OC LCT	TA-122-01	334749	MW	10-12:50 PM		
	A. HEMLOCK	\$378.00	\$39.00	\$0.00	\$417.00	

**TA-142 ACTING II, 4 CREDITS**

Further studies the methods, techniques, and theories of acting as an art form. Workshop, discussion, and performance of exercises and monologues/scenes from dramatic literature with written assignments to include response and analysis papers. Intermediate work on vocal, physical, and script analysis skills with special focus on language. Second in a series.

**Recommended Prerequisites:** TA-141 and WRD-098 or placement in WR-121Z

OC LCT	TA-142-01	334753	MW	10-11:50 AM		
	A. MOON	\$504.00	\$52.00	\$35.00	\$591.00	

**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

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

**TA-153 THEATRE REHEARSAL & PERFORMANCE, 1-3 CREDITS (VAR)**

Training in theatre production through intensive study and rehearsal of scenes and plays for public performance. May be repeated for up to 6 credits. Required: Student Petition.

**Required:** Successful audition/interview

**Recommended Prerequisites:** TA-141 and TA-142, or TA-143; or TA-111 and TA-112, or TA-113

OC LCT	TA-153-01	334756	MWF	6-8:50 PM		
	TBA	\$378.00	\$39.00	\$25.00	\$442.00V	

Required: Student Petition.

**TA-195 STUDENT PERFORMANCE SHOWCASE, 1-3 CREDITS (VAR)**

Training in special forms of theatrical presentation through in-class intensive preparation, study, and program development for public presentation, including comedy improvisation, stand-up comedy, and student directed one-act plays. Roles in one-act plays require a successful audition. Other opportunities open to all. May be repeated for up to 6 credits.

OC LCT	TA-195-01	334765	MWF	12-2:50 PM		
	C. WHITTEN	\$378.00	\$39.00	\$35.00	\$452.00V	

Meets: Improv 12-12:50pm, One-Acts 1-1:50pm, Stand-Up 2-2:50pm.

**TA-212 TECHNICAL THEATRE STUDY, 4 CREDITS**

Second class of a three part series. Comprehensive study and practice in presentational graphics, scene design, lighting design and chromatics. The full creative process of staging a production will be explored through aesthetic research and design projects. Includes hands-on participation in CCC's main stage productions. Students must attend a performance as well as participate in the focus and strike (10 total hours) of a production. Students are required to maintain a journal/study (12 total hours) of outside class activities and observing Technical Theatre applications.

**Prerequisites:** TA-111, TA-112, and TA-113

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

OC LCT	TA-212-01	334771	TTH	1-3:50 PM		
	C. WHITTEN	\$504.00	\$52.00	\$35.00	\$591.00	

**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

OC LCT	TA-253-01	334775	MWF	6-8:50 PM		
	TBA	\$378.00	\$39.00	\$25.00	\$442.00V	

Required: Student Petition.

**TA-280 THEATRE/CWE, 2-6 CREDITS (VAR)**

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 Petition.

**Corequisites:** CWE-281

OC LCT	TA-280-01	334782				
	C. WHITTEN	\$756.00	\$78.00	\$45.00	\$879.00V	

Required: Student Petition.

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

**TA-295 STUDENT PERFORMANCE SHOWCASE, 1-3 CREDITS (VAR)**  
 Training in special forms of theatrical presentation through in-class intensive preparation, study, and program development for public presentation, including comedy improvisation, stand-up comedy, and student directed one-act plays. Roles in one-act plays require a successful audition. Other opportunities open to all. May be repeated for up to 6 credits.

OC LCT	<b>TA-295-01</b>	<b>334789</b>	<b>MWF</b>		<b>12-2:50 PM</b>	
	C. WHITTEN	\$378.00	\$39.00	\$35.00	\$452.00V	
	Meets: Improv 12-12:50pm, One-Acts 1-1:50pm, Stand-Up 2-2:50pm.					

**XATH-0001 PLAYS & REHEARSALS, 0 CREDIT**  
 Training in theatre production through intensive study and rehearsal of scenes and plays for public performance.

oc	<b>XATH-0001-01</b>	<b>337972</b>	<b>MWF</b>		<b>3-5:50 PM</b>	
	TBA	\$0.00	\$0.00	\$35.00	\$35.00	

**XATH-0002 STAGECRAFT, 0 CREDIT**  
 Training in special forms of theatrical presentation through in-class intensive preparation, study and program development for public presentation to the community.

oc	<b>XATH-0002-01</b>	<b>337973</b>	<b>MWF</b>		<b>3-5:50 PM</b>	
	TBA	\$0.00	\$0.00	\$35.00	\$35.00	

**Water & Environmental Technology**

**WET-020 WASTEWATER OPERATIONS II, 3 CREDITS**  
 For professional upgrade only. Does not meet the requirements for the certificate or degree. Secondary wastewater treatment alternatives with municipal application. Fixed and suspended film systems and clarification process. Includes biological sludge treatment.

**Prerequisites:** WET-010

oc	<b>WET-020-01</b>	<b>335589</b>	<b>M</b>		<b>6-8:50 PM</b>	
	M. LAFORCE	\$378.00	\$39.00	\$15.00	\$432.00	
	Remote options available with this section.					

**WET-021 WATERWORKS OPERATIONS II, 3 CREDITS**  
 For professional upgrade only. Does not meet the requirements for the certificate or degree. Basic hydrology, ground water and surface water sources, well construction and operation, introduction to water chemistry, waterworks hydraulics, and fundamentals of pumps and pumping.

oc	<b>WET-021-01</b>	<b>335591</b>	<b>T</b>		<b>6-8:50 PM</b>	
	J. NURMI	\$378.00	\$39.00	\$15.00	\$432.00	
	Remote options available with this section.					

**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.

oc	<b>WET-108-01</b>	<b>335592</b>	<b>MTWTH</b>		<b>8-4:50 PM</b>	
	J. NURMI	\$378.00	\$39.00	\$0.00	\$417.00	
	Meets: 3/17-3/20.					

**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

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

**WET-109 BACKFLOW ASSEMBLY OPERATION AND TESTING, 4 CREDITS**  
 Lecture course with lab component that focuses on backflow assembly hydraulics, operations, installation, and testing.

oc	<b>WET-109-01</b>	<b>335594</b>	<b>MTWTHF</b>		<b>8-4:50 PM</b>	
	M. LAFORCE	\$504.00	\$52.00	\$400.00	\$956.00	
	Required: Student Petition. Meets: 3/17-3/21.					

**WET-120 WASTEWATER OPERATIONS II, 3 CREDITS**  
 Secondary wastewater treatment alternatives with municipal application. Fixed and suspended film systems with the associated clarification process will be presented.

**Corequisites:** MTH-082C  
**Prerequisites:** WET-110

oc	<b>WET-120-01</b>	<b>335597</b>	<b>M</b>		<b>6-8:50 PM</b>	
	M. LAFORCE	\$378.00	\$39.00	\$15.00	\$432.00	
	Remote options available with this section.					

**WET-121 WATERWORKS OPERATIONS II, 3 CREDITS**  
 An introduction to water distribution, with a focus on water regulations, operator math, water chemistry, and specific water distribution processes. Also examines distribution system design, water mains, hydrants and valves, water pumps, water system supply security, and public relations. Everything you need to know to pass the water distribution grade 1 state certification.

**Corequisites:** MTH-082D  
**Prerequisites:** WET-111

oc	<b>WET-121-01</b>	<b>335598</b>	<b>T</b>		<b>6-8:50 PM</b>	
	J. NURMI	\$378.00	\$39.00	\$15.00	\$432.00	
	Remote options available with this section.					

**WET-122 WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS, 3 CREDITS**  
 Elementary engineering aspects of water distribution and wastewater collection systems. System components, construction materials, pump station design, maintenance, operations, and other related topics.

**Prerequisites:** WET-110  
**Corequisites:** WET-120

oc	<b>WET-122-01</b>	<b>335599</b>	<b>T</b>		<b>12:30 -3:20 PM</b>	
	M. LAFORCE	\$378.00	\$39.00	\$15.00	\$432.00	
	Remote options available with this section.					

**WET-123 ENVIRONMENTAL CHEMISTRY I, 3 CREDITS**  
 Theory and applied laboratory techniques for testing water and wastewater. Students will test wastewater for NPDES required tests.

**Corequisites:** WET-123L

oc LCT	<b>WET-123-01</b>	<b>335601</b>	<b>M</b>		<b>12-1:50 PM</b>	
	M. LAFORCE	\$378.00	\$39.00	\$50.00	\$467.00	
oc	<b>WET-123-02</b>	<b>335603</b>	<b>W</b>		<b>12-1:50 PM</b>	
	M. LAFORCE	\$378.00	\$39.00	\$50.00	\$467.00	

**WET-123L ENVIRONMENTAL CHEMISTRY LAB, 0 CREDIT**  
 Lab course for WET-123

**Corequisites:** WET-123

oc LCT	<b>WET-123L-01</b>	<b>335604</b>	<b>M</b>		<b>2-4:50 PM</b>	
	M. LAFORCE	\$0.00	\$0.00	\$28.00	\$28.00	
oc	<b>WET-123L-02</b>	<b>335606</b>	<b>W</b>		<b>2-4:50 PM</b>	
	M. LAFORCE	\$0.00	\$0.00	\$28.00	\$28.00	

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

**WET-135 HIGH PURITY WATER PRODUCTION II, 4 CREDITS**  
 A lab course focusing on the operation of equipment and unit processes in the production of high purity water. Emphasis on process equipment sizing and design, process control and troubleshooting.

**Prerequisites:** WET-125 and MTH-082E

<b>REM</b>	<b>WET-135-01</b>	<b>335607 M</b>			<b>1-3:50 PM</b>	
		<b>M</b>			<b>4-6:50 PM</b>	
	G. CARR	\$504.00	\$52.00	\$0.00		\$556.00

**WET-180 WATER & ENVIRONMENTAL PROJECTS I, 5 CREDITS**  
 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

<b>ONL LCT</b>	<b>WET-180-01</b>	<b>335609</b>				
	M. LAFORCE	\$630.00	\$65.00	\$45.00		\$740.00
	Required: Student Petition.					

**WET-280 WATER & ENVIRONMENTAL PROJECTS II, 5 CREDITS**  
 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 & trend charting, and relevant sanitary process strategies will be addressed.

**Corequisites:** CWE-281

<b>ONL LCT</b>	<b>WET-280-01</b>	<b>335612</b>				
	M. LAFORCE	\$630.00	\$65.00	\$45.00		\$740.00
	Required: Student Petition.					

**XWET-C001 1-DAY CROSS CONNECTION SPECIALIST UPDATE, 0.60 CEUS**

Update on code information or any changes in the program.

<b>OC LCT</b>	<b>XWET-C001-31</b>	<b>335784 F</b>			<b>8-3:50 PM</b>	
	J. NURMI	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 3/7. Register on <a href="https://ccc-wet.eventbrite.com">www.ccc-wet.eventbrite.com</a> .					

**XWET-C002 1-DAY TESTER RENEWAL, 0.60 CEUS**

Update on OARs and hands on testing to recertify student for backflow assembly certification through the State of Oregon.

<b>OC LCT</b>	<b>XWET-C002-11</b>	<b>335786 F</b>			<b>8-4:50 PM</b>	
	M. LAFORCE	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 2/7. Register at <a href="https://ccc-wet.eventbrite.com/">https://ccc-wet.eventbrite.com/</a> .					
<b>OC</b>	<b>XWET-C002-13</b>	<b>335789 F</b>			<b>8-4:50 PM</b>	
	M. LAFORCE	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 3/7. Register at <a href="https://ccc-wet.eventbrite.com/">https://ccc-wet.eventbrite.com/</a> .					

**XWET-C003 2-DAY TESTER RETRAIN/RENEWAL, 1.20 CEUS**

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			

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 transcribed for appropriate number of CEUs. Students will be able to apply to Oregon Health Department for recertification by that agency.

<b>OC</b>	<b>XWET-C003-21</b>	<b>335790 THF</b>			<b>8-4:50 PM</b>	
	M. LAFORCE	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 1/16 & 1/17. Register at <a href="https://ccc-wet.eventbrite.com/">https://ccc-wet.eventbrite.com/</a> .					
<b>OC</b>	<b>XWET-C003-22</b>	<b>335792 THF</b>			<b>8-4:50 PM</b>	
	M. LAFORCE	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 2/20-2/21. Register at <a href="https://ccc-wet.eventbrite.com/">https://ccc-wet.eventbrite.com/</a> .					

**XWET-C005 5-DAY BACKFLOW TESTER COURSE, 4.00 CEUS**

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.

<b>OC</b>	<b>XWET-C005-51</b>	<b>335798 MTWTHF</b>			<b>8-4:50 PM</b>	
	M. LAFORCE	\$0.00	\$0.00	\$0.00		\$0.00
	Meets: 3/17-3/21. Register at <a href="https://ccc-wet.eventbrite.com/">https://ccc-wet.eventbrite.com/</a> .					

**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.

<b>OC</b>	<b>WLD-100-01</b>	<b>335613 W</b>			<b>2-4:50 PM</b>	
	D. PODKOWA	\$378.00	\$39.00	\$219.00		\$636.00
<b>OC</b>	<b>WLD-100-02</b>	<b>335614 T</b>			<b>6-8:50 PM</b>	
	M. TIZO	\$378.00	\$39.00	\$219.00		\$636.00

**WLD-102 INTRODUCTION TO WELDING, 2 CREDITS**

Designed for the beginner and experimental welder. Includes: oxy-acetylene cutting and welding, SMAW (Shielded Metal Arc Welding), GMAW & FCAW (Gas Metal Arc Welding & Flux Core Arc Welding) and GTAW (Gas Tungsten Arc Welding) and plasma arc cutting.

<b>OC</b>	<b>WLD-102-01</b>	<b>335615 F</b>			<b>6-9:50 PM</b>	
	A. TOWN	\$252.00	\$26.00	\$146.00		\$424.00

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
oc	<b>WLD-102-02</b> 335621 S K. DRURY		\$252.00	\$26.00	9-12:50 PM	\$424.00
oc	<b>WLD-102-03</b> 335622 S K. DRURY		\$252.00	\$26.00	2-5:50 PM	\$424.00

**WLD-102ES INTRODUCCIÓN A LA SOLDADURA, 2 CREDITS**

Diseñado para soldaderos principiantes y experimental. Incluye corte y soldadura oxiacetileno, soldadura por arco de metal blindado (SMAW), la soldadura 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	<b>WLD-102ES-01</b> 335624 S F. PAXTOR		\$252.00	\$26.00	6-9:50 PM	\$424.00
----	---	--	----------	---------	-----------	----------

**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	<b>WLD-103-01</b> 335627 F TBA		\$252.00	\$26.00	6-9:50 PM	\$424.00
oc	<b>WLD-103-02</b> 335628 SU TBA		\$252.00	\$26.00	10-1:50 PM	\$424.00

**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	<b>WLD-110-01</b> 335632 MW D. PODKOWA		\$504.00	\$52.00	8-11:50 AM	\$988.00
Required: Student Petition.						
oc	<b>WLD-110-02</b> 335637 MW D. PODKOWA		\$504.00	\$52.00	1-4:50 PM	\$988.00
Required: Student Petition.						
oc	<b>WLD-110-03</b> 335638 MW M. TIZO		\$504.00	\$52.00	6-9:50 PM	\$988.00
Required: Student Petition.						
oc	<b>WLD-110-04</b> 335642 TTH D. BATES		\$504.00	\$52.00	8-11:50 AM	\$988.00
Required: Student Petition.						
oc	<b>WLD-110-05</b> 335644 TTH B. MULLIGAN		\$504.00	\$52.00	6-9:50 PM	\$988.00
Required: Student Petition.						
oc	<b>WLD-110-06</b> 335646 TTH B. MULLIGAN		\$504.00	\$52.00	1-4:50 PM	\$988.00
Required: Student Petition.						

**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.

**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

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
oc	<b>WLD-113-01</b> 335647 MTWTH J. PHELPS		\$1,008.00	\$104.00	6-9:50 PM	\$1,696.00

**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.

oc	<b>WLD-113A-01</b> 335650 MW J. PHELPS		\$504.00	\$52.00	6-9:50 PM	\$848.00
oc	<b>WLD-113A-02</b> 335652 MTWTH R. ABBOTT		\$504.00	\$52.00	7:30 -9:20 AM	\$848.00
oc	<b>WLD-113A-03</b> 335655 MTWTH R. ABBOTT		\$504.00	\$52.00	1:15 -3:05 PM	\$848.00
oc	<b>WLD-113A-04</b> 335658 MTWTH R. ABBOTT		\$504.00	\$52.00	3:30 -5:20 PM	\$848.00

**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	<b>WLD-113B-01</b> 335662 TTH J. PHELPS		\$504.00	\$52.00	6-9:50 PM	\$848.00
oc	<b>WLD-113B-02</b> 335663 MTWTH R. ABBOTT		\$504.00	\$52.00	7:30 -9:20 AM	\$848.00
oc	<b>WLD-113B-03</b> 335666 MTWTH R. ABBOTT		\$504.00	\$52.00	1:15 -3:05 PM	\$848.00
oc	<b>WLD-113B-04</b> 335670 MTWTH R. ABBOTT		\$504.00	\$52.00	3:30 -5:20 PM	\$848.00

**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.

oc	<b>WLD-115-01</b> 335673 MTWTH R. THOMAS		\$1,008.00	\$104.00	8-11:50 AM	\$1,696.00
----	---	--	------------	----------	------------	------------

**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.

oc	<b>WLD-115A-01</b> 335675 MW R. THOMAS		\$504.00	\$52.00	8-11:50 AM	\$848.00
----	---	--	----------	---------	------------	----------

**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

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

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

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
oc	<b>WLD-115B-01 335677 TTH</b> R. THOMAS		\$504.00	\$52.00	8-11:50 AM	\$292.00 \$848.00

**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	<b>WLD-150-01 335681 MW</b> M. TIZO		\$504.00	\$52.00	6-9:50 PM	\$292.00 \$848.00
oc	<b>WLD-150-02 335685 MW</b> D. PODKOWA		\$504.00	\$52.00	8-11:50 AM	\$292.00 \$848.00

**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

oc	<b>WLD-200-01 335686 M</b> D. PODKOWA		\$378.00	\$39.00	2-4:50 PM	\$219.00 \$636.00
oc	<b>WLD-200-02 335689 TH</b> M. TIZO		\$378.00	\$39.00	6-8:50 PM	\$219.00 \$636.00

**WLD-203 BLACKSMITHING & TRADITIONAL IRON WORKING II, 2 CREDITS**

This course builds on the WLD-103 course and expands on the process of forged metal work. Instruction includes power hammer use, tooling design, traditional joinery, and intermediate projects. Welding experience helpful, but not required.

oc	<b>WLD-203-01 335690 SU</b> TBA		\$252.00	\$26.00	2-5:50 PM	\$146.00 \$424.00
----	------------------------------------	--	----------	---------	-----------	-------------------

**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	<b>WLD-210-01 335693 MW</b> D. PODKOWA		\$504.00	\$52.00	1-4:50 PM	\$292.00 \$848.00
----	---	--	----------	---------	-----------	-------------------

Required: Student Petition.

**WLD-212 SHIELDED METAL ARC WELDING PIPE WELDING, 4 CREDITS**

This class is designed to teach students the fundamentals of open root pipe welding. Theory and practical instruction in open root V groove pipe welding using E6010 and E7018 electrodes will be provided. Oxy-fuel pipe cutting is also included. Required: Student Petition.

**Prerequisites:** WLD-211

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,TH,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee	
oc	<b>WLD-212-01 335696 MW</b> D. PODKOWA		\$504.00	\$52.00	1-4:50 PM	\$292.00 \$848.00

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	<b>WLD-213-01 335699 TTH</b> B. MULLIGAN		\$504.00	\$52.00	6-9:50 PM	\$292.00 \$848.00
----	---	--	----------	---------	-----------	-------------------

**WLD-215 ADVANCED GAS TUNGSTEN ARC WELDING, 4 CREDITS**

This course provides the opportunity for students to acquire the knowledge and skills needed to perform quality fillet and groove welds in all positions using the Gas Tungsten Arc Welding (GTAW) process. Advanced welding theory and procedures will also be included.

**Prerequisites:** WLD-115; or WLD-115A and WLD-115B

oc	<b>WLD-215-01 335700 TTH</b> D. BATES		\$504.00	\$52.00	8-11:50 AM	\$292.00 \$848.00
----	--	--	----------	---------	------------	-------------------

**WLD-250 WELDING FABRICATION I BEGINNING PROJECT, 4 CREDITS**

This course consists of lecture and lab and provides instruction in fabrication techniques including blueprint reading, layout, sketching, bills of material, job cost calculations, measuring, fitting, cutting and welding. Students will be assigned beginning fabrication projects. The student will be responsible for all aspects of managing the project to successful completion.

**Prerequisites:** WLD-111, WLD-113, or WLD-115

oc	<b>WLD-250-01 335701 TTH</b> B. MULLIGAN		\$504.00	\$52.00	1-4:50 PM	\$292.00 \$848.00
----	---	--	----------	---------	-----------	-------------------

**WLD-251 WELDING FABRICATION II INTERMEDIATE PROJECT, 4 CREDITS**

This course consists of lecture and lab. Students will use the skills learned in WLD-250, such as blueprint reading, layout, sketching, bills of materials, job cost calculations, measuring, fitting, cutting and welding, and apply them to more challenging projects. Students will be assigned intermediate fabrication projects. The student will be responsible for all aspects of managing the project to successful completion.

**Prerequisites:** WLD-250

oc	<b>WLD-251-01 335705 TTH</b> B. MULLIGAN		\$504.00	\$52.00	1-4:50 PM	\$292.00 \$848.00
----	---	--	----------	---------	-----------	-------------------

**WLD-252 WELDING FABRICATION III ADVANCED PROJECT, 4 CREDITS**

This course consists of lecture and lab. Students will use the skills learned in WLD-250 and WLD-251, such as blueprint reading, layout, sketching, bills of materials, job cost calculations, measuring, fitting, cutting and welding, and apply them to advanced projects. Students will be assigned advanced fabrication projects. The student will be responsible for all aspects of managing the project to successful completion.

**Prerequisites:** WLD-251

oc	<b>WLD-252-01 335707 TTH</b> B. MULLIGAN		\$504.00	\$52.00	1-4:50 PM	\$292.00 \$848.00
----	---	--	----------	---------	-----------	-------------------

**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	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
<b>WLD-261</b>	<b>WELDING SPECIAL PROJECTS, 1-2 CREDITS (VAR)</b>	Allows students to improve their welding skills while working on instructor-approved projects. May be repeated for up to 12 credits.				
oc	<b>WLD-261-01 335719 M</b>				<b>8-11:50 AM</b>	
	R. THOMAS	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-02 335727 M</b>				<b>1-4:50 PM</b>	
	D. PODKOWA	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-03 335728 M</b>				<b>6-9:50 PM</b>	
	J. PHELPS	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-04 335729 T</b>				<b>6-9:50 PM</b>	
	J. PHELPS	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-05 335731 W</b>				<b>8-11:50 AM</b>	
	R. THOMAS	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-06 335733 W</b>				<b>1-4:50 PM</b>	
	D. PODKOWA	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-07 335735 W</b>				<b>6-9:50 PM</b>	
	J. PHELPS	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-08 335736 TH</b>				<b>6-9:50 PM</b>	
	J. PHELPS	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-09 335737 F</b>				<b>6-9:50 PM</b>	
	M. TIZO	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-10 335738 S</b>				<b>9-12:50 PM</b>	
	K. DRURY	\$252.00	\$26.00	\$146.00	\$424.00V	
oc	<b>WLD-261-11 339466 S</b>				<b>2-5:50 PM</b>	
	K. DRURY	\$252.00	\$26.00	\$146.00	\$424.00V	
oc	<b>WLD-261-12 335739 SU</b>				<b>10-1:50 PM</b>	
	TBA	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-13 335740 SU</b>				<b>2-5:50 PM</b>	
	TBA	\$252.00	\$26.00	\$146.00	\$424.00V	
	Required: Student Petition.					
oc	<b>WLD-261-15 335741 T</b>				<b>8-11:50 AM</b>	
	R. THOMAS	\$252.00	\$26.00	\$146.00	\$424.00V	
oc	<b>WLD-261-16 335743 TH</b>				<b>8-11:50 AM</b>	
	R. THOMAS	\$252.00	\$26.00	\$146.00	\$424.00V	

**XWLD-0001 AMERICAN WELDING SOCIETY (WLD) CERTIFICATION 1 PLATE TEST, 0 CREDIT**

Welder certification in accordance with AWS D1.1 for one position for students enrolled in any CCC welding course.

oc	<b>XWLD-0001-01 335807 TBA</b>					
	B. MULLIGAN	\$0.00	\$0.00	\$140.00	\$140.00	
	Required: Student Petition.					

**XWLD-0002 AMERICAN WELDING SOCIETY CERTIFICATION 2 PLATE OR 1 PIPE TEST, 0 CREDIT**

Welder certification in any two positions, in accordance with AWS D1.1 for students enrolled in any CCC welding course.

Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
oc	<b>XWLD-0002-01 335809 TBA</b>					
	B. MULLIGAN	\$0.00	\$0.00	\$280.00	\$280.00	
	Required: Student Petition.					
<b>XWLD-0003</b>	<b>AMERICAN WELDING SOCIETY CERTIFICATION RETAKE TEST, 0 CREDIT</b>	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	<b>XWLD-0003-01 335812 TBA</b>					
	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	HYB LCT	<b>WS-101-01 335817 M</b>			<b>10-11:50 AM</b>	
		K. SEVERSON	\$504.00	\$52.00	\$0.00	\$556.00
	Online textbook provided first day of class.					
ONL	LCT	<b>WS-101-02 335819</b>				
		T. BOYLE- GALESTIANTZ	\$504.00	\$52.00	\$0.00	\$556.00
	No textbook required.					

**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		<b>ASL-101-01 335020 MW</b>			<b>1-2:50 PM</b>	
		A. ELLIS	\$504.00	\$52.00	\$10.00	\$566.00
	One-time textbook purchase for ASL-101 - ASL-102.					
ONL		<b>ASL-101-02 335025</b>				
		A. ELLIS	\$504.00	\$52.00	\$10.00	\$566.00
	One-time textbook 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

oc		<b>ASL-102-01 335026 MW</b>			<b>10-11:50 AM</b>	
		A. ELLIS	\$504.00	\$52.00	\$10.00	\$566.00
	One-time textbook purchase for ASL-101 - ASL-102.					

**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	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total	Course No	Course Title, Credits	Section No	Crs Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
	Instructor		Tuition	Fee	Crs. Fee			Instructor		Tuition	Fee	Crs. Fee	
ONL	<b>ASL-102-02 335031</b> A. ELLIS One-time textbook purchase for ASL-101 & ASL-102.		\$504.00	\$52.00	\$10.00	\$566.00	OC LCT	<b>SPN-102-01 335674 TTH</b> A. METHADZOVIC All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00
	<b>ASL-202 SECOND-YEAR AMERICAN SIGN LANGUAGE II, 4 CREDITS</b> Continuation of ASL-201. Emphasizes active communication in sign language. Increased emphasis on exploring, analyzing the rules, and presenting stories and literature in sign language. <b>Prerequisites:</b> ASL-201 with a C or better						ONL LCT	<b>SPN-102-02 335676</b> E. HERNANDEZ All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00
REM	<b>ASL-202-01 335033 TTH</b> A. ELLIS One-time textbook purchase for ASL-202 - ASL-203.		\$504.00	\$52.00	\$10.00	\$566.00	ONL LCT	<b>SPN-102-03 335678</b> V. SHORT All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00
	<b>FR-102 FIRST-YEAR FRENCH II, 4 CREDITS</b> Second term of a three-term foundational, multimedia course in beginning French designed to give students basic communicative proficiency in the target language. Students will practice all four skills: listening, speaking, reading, and writing. Special attention will be paid to pronunciation, essential grammar structures, and attendant cultural elements. Student learning is assessed through a variety of guided exercises and assignments, interactive activities, homework, tests and quizzes, and other class projects and participation. <b>Prerequisites:</b> FR-101						<b>SPN-202 SECOND-YEAR SPANISH II, 4 CREDITS</b> Second of a three-term intermediate, multimedia course. Focus is on speaking, listening comprehension, reading and writing. Explores cultural differences among Spanish-speaking countries and between the latter and European-American culture. <b>Prerequisites:</b> SPN-201						
OC LCT	<b>FR-102-01 335288 TTH</b> E. HERNANDEZ All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00	ONL LCT	<b>SPN-202-01 335684</b> V. SHORT All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00
	<b>GER-102 FIRST-YEAR GERMAN II, 4 CREDITS</b> Second term of a three-term foundational sequence in beginning German designed to give students basic communicative proficiency in the target language. Students will practice all four skills: listening, speaking, reading, and writing. Special attention is paid to pronunciation, essential grammar structures, and cross-cultural discussion and analysis. <b>Prerequisites:</b> GER-101 or Student Petition						<b>WR-101 WORKPLACE WRITING, 4 CREDITS</b> Students in this course learn and practice basic modes of technical writing, including summaries, process analysis, instructions, and reports. <b>Prerequisites:</b> WRD-098 or placement in WR-101 or WR-121Z						
OC LCT	<b>GER-102-01 335366 MW</b> T. NIKOLOPOULOS All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00	OC HYB LCT	<b>WR-101-01 335698 T</b> C. ZIMMERLY-BECK \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
	<b>SPN-101 FIRST-YEAR SPANISH I, 4 CREDITS</b> 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. <b>Recommended Prerequisites:</b> WRD-098 or placement in WR-121Z						ONL LCT	<b>WR-101-02 335702</b> P. CRUMRINE \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
OC LCT	<b>SPN-101-01 335671 TTH</b> E. RONICK All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00	<b>WR-121Z COMPOSITION I, 4 CREDITS</b> 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. <b>Prerequisites:</b> WRD-098 or placement in WR-121Z						
ONL LCT	<b>SPN-101-02 338065</b> V. SHORT All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00	OC LCT	<b>WR-121Z-01 335704 MW</b> J. BRYANT-TRERISE \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
	<b>SPN-102 FIRST-YEAR SPANISH II, 4 CREDITS</b> Second of a three-term foundational, multimedia course for beginners. Initial emphasis is on speaking and listening comprehension, with secondary emphasis on reading and writing. Various cultural themes are presented. <b>Prerequisites:</b> SPN-101 <b>Recommended Prerequisites:</b> WRD-098 or placement in WR-121Z						OC LCT	<b>WR-121Z-02 335706 MW</b> C. BURNELL \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
OC LCT	<b>SPN-102-01 335671 TTH</b> E. RONICK All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00	OC LCT	<b>WR-121Z-03 335708 MW</b> C. BURNELL \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>SPN-102-02 338065</b> V. SHORT All materials provided first day of class.		\$504.00	\$52.00	\$10.00	\$566.00	OC LCT	<b>WR-121Z-04 335709 TTH</b> R. DAVIS \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
	<b>ESPAÑOL: Enseñado en español</b>						OC LCT	<b>WR-121Z-05 335710 TTH</b> R. DAVIS \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
	<b>LCT: Low-Cost Text</b>						OC HYB LCT	<b>WR-121Z-06 335711 M</b> R. MURPHY \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
							OC HYB LCT	<b>WR-121Z-07 335712 M</b> M. SCHUMACHER \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
							OC HYB LCT	<b>WR-121Z-08 335713 T</b> T. DONNELLY \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
							OC HYB LCT	<b>WR-121Z-09 335714 T</b> S. NIZIOLEK \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
							OC HYB LCT	<b>WR-121Z-10 335715 W</b> W. DAWKINS \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00
							ONL LCT	<b>WR-121Z-11 335716</b> B. EHLERS \$504.00 \$52.00 \$19.00 \$575.00		\$504.00	\$52.00	\$19.00	\$575.00

**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 Reg.	Days (M,T,W,Th,F,S,SU)	Time	Total
Instructor	Tuition	Fee	Crs. Fee			
ONL LCT	<b>WR-121Z-12 335717</b>	R. DAVIS	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-121Z-13 335718</b>	T. DODGE	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-121Z-14 335720</b>	T. DODGE	\$504.00	\$52.00	\$19.00	\$575.00
HAR	<b>WR-121Z-15 339556 MW</b>	J. PONS	\$504.00	\$52.00	\$19.00	\$575.00
HAR HYB	<b>WR-121Z-16 339557 W</b>	M. SCHUMACHER	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-121Z-17 335721</b>	T. DODGE	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-121Z-18 335722</b>	A. WARREN	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-121Z-19 335723</b>	M. WARREN	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-121Z-20 335724</b>	N. ROSEVEAR	\$504.00	\$52.00	\$19.00	\$575.00
ONL	<b>WR-121Z-21 339558</b>	N. ROSEVEAR	\$504.00	\$52.00	\$19.00	\$575.00

**WR-122Z COMPOSITION II, 4 CREDITS**

WR-122Z builds on concepts and processes emphasized in WR-121Z, engaging with inquiry, research, and argumentation in support of students' development as writers. The course focuses on composing and revising in research-based genres through the intentional use of rhetorical strategies. Students will find, evaluate, and interpret complex material, including lived experience; use this to frame and pursue their own research questions; and integrate material purposefully into their own compositions.

**Prerequisites:** WR-121Z with a C or better

OC LCT	<b>WR-122Z-01 335734 MW</b>	J. DAVIS	\$504.00	\$52.00	\$19.00	\$575.00
OC LCT	<b>WR-122Z-02 335742 TTH</b>	J. BRYANT-TRERISE	\$504.00	\$52.00	\$19.00	\$575.00
OC LCT	<b>WR-122Z-03 335745 TTH</b>	J. BRYANT-TRERISE	\$504.00	\$52.00	\$19.00	\$575.00
OC HYB LCT	<b>WR-122Z-04 335747 M</b>	R. MURPHY	\$504.00	\$52.00	\$19.00	\$575.00
OC HYB LCT	<b>WR-122Z-05 335749 T</b>	C. ZIMMERLY-BECK	\$504.00	\$52.00	\$19.00	\$575.00
OC HYB LCT	<b>WR-122Z-06 335750 T</b>	S. NIZIOLEK	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-122Z-07 335751</b>	P. CRUMRINE	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-122Z-08 335753</b>	S. WARREN	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-122Z-09 335754</b>	E. WILDER-TACK	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-122Z-10 335756</b>	A. WICKERT	\$504.00	\$52.00	\$19.00	\$575.00
HAR HYB	<b>WR-122Z-15 339560 M</b>	TBA	\$504.00	\$52.00	\$19.00	\$575.00

**WR-124ES ESCRITURA DE ENSAYOS DE NIVEL UNIVERSITARIO 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

Este curso ofrece una introducción al ensayo académico. El alumnado aprenderá un proceso de escritura y redacción: desde cómo hacer una «lluvia de ideas» para generar ideas hasta cómo corregir e editar un escrito. A la vez, se desarrollarán respuestas originales-en forma escrita-a reseñas y reportajes sobre temas controversiales y a los ensayos académicos difíciles. La clase enfatizará la alfabetización de la información, así como: cómo encontrar y evaluar materiales, recursos relevantes y obras originales; cómo integrarlos en una redacción académica y cómo citarlos.

**Required:** Los y las estudiantes deben leer y escribir a nivel universitario, en español, antes de comenzar el curso

**Prerequisites:** WRD-098ES o tener un nivel de evaluación de WR-124ES

ONL ESPAÑOL	<b>WR-124ES-01 335760</b>	A. DEFREESE	\$504.00	\$52.00	\$19.00	\$575.00
-------------	---------------------------	-------------	----------	---------	---------	----------

**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	<b>WR-127-01 335761</b>	J. DAVIS	\$126.00	\$13.00	\$19.00	\$158.00
Meets: 1/20-2/28.						

**WR-128 INTRODUCTION TO APA STYLE & DOCUMENTATION, 1 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	<b>WR-128-01 335764</b>	S. PESZNECKER	\$0.00	\$0.00	\$19.00	\$19.00
---------	-------------------------	---------------	--------	--------	---------	---------

**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	<b>WR-227Z-01 335766 TTH</b>	L. ORMANDY	\$504.00	\$52.00	\$19.00	\$575.00
OC HYB LCT	<b>WR-227Z-02 335771 M</b>	S. WARREN	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-227Z-03 335773</b>	R. DAVIS	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-227Z-04 335774</b>	J. MCALPINE	\$504.00	\$52.00	\$19.00	\$575.00
ONL LCT	<b>WR-227Z-05 335775</b>	R. DAVIS	\$504.00	\$52.00	\$19.00	\$575.00
HAR HYB	<b>WR-227Z-15 339553 W</b>	L. ORMANDY	\$504.00	\$52.00	\$19.00	\$575.00

**WR-241 FICTION WRITING I, 4 CREDITS**

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

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	<b>WR-241-01</b>	<b>335778 T</b>		<b>1-2:50 PM</b>	
	N. ROSEVEAR	\$504.00	\$52.00	\$19.00	\$575.00

**WR-242 POETRY WRITING I, 4 CREDITS**

Provides the basic skills for writing and revising poems following contemporary trends in form and content; provides a supportive environment and the critical abilities to read and discuss poems confidently.

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

OC LCT	<b>WR-242-01</b>	<b>335781 MW</b>		<b>1-2:50 PM</b>	
	A. COFFEY	\$504.00	\$52.00	\$19.00	\$575.00

**WR-246 EDITING & PUBLISHING, 4 CREDITS**

This course is for students with an interest in creative writing and/or literary journal design, layout, and publication who wish to develop editing and publishing skills. Students work collaboratively as editors to contribute to the production of a literary journal. May be repeated for up to 8 credits.

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

REM LCT	<b>WR-246-01</b>	<b>335785 TTH</b>		<b>10-11:50 AM</b>	
	M. WARREN	\$504.00	\$52.00	\$60.00	\$616.00

**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	<b>WRD-090-01</b>	<b>335791 MW</b>		<b>10-11:50 AM</b>	
	W. DAWKINS	\$504.00	\$52.00	\$19.00	\$575.00

OC LCT	<b>WRD-090-02</b>	<b>335795 TTH</b>		<b>10-11:50 AM</b>	
	A. WARREN	\$504.00	\$52.00	\$19.00	\$575.00

**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	<b>WRD-098-01</b>	<b>335797 TTH</b>		<b>10-11:50 AM</b>	
	J. DAVIS	\$504.00	\$52.00	\$19.00	\$575.00

OC LCT	<b>WRD-098-02</b>	<b>335802 MW</b>		<b>1-2:50 PM</b>	
	J. DAVIS	\$504.00	\$52.00	\$19.00	\$575.00

ONL LCT	<b>WRD-098-03</b>	<b>335805</b>			
	M. WARREN	\$504.00	\$52.00	\$19.00	\$575.00

ONL LCT	<b>WRD-098-04</b>	<b>335808</b>			
	A. WARREN	\$504.00	\$52.00	\$19.00	\$575.00

ONL LCT	<b>WRD-098-05</b>	<b>335811</b>			
	M. WARREN	\$504.00	\$52.00	\$19.00	\$575.00

HAR	<b>WRD-098-15</b>	<b>339554 MW</b>		<b>10-11:50 AM</b>	
	J. PONS	\$504.00	\$52.00	\$19.00	\$575.00

**XWR-0001 CHRYSALIS WOMEN WRITERS, 0 CREDIT**

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

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	<b>XWR-0001-01</b>	<b>335826 W</b>		<b>12-1:50 PM</b>	
	P. LICHEN	\$0.00	\$0.00	\$0.00	\$0.00

**Zoology**

**Z-202 GENERAL ZOOLOGY, 4 CREDITS**

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

**Prerequisites:** MTH-095 with a C or better or placement in MTH-111Z

**Corequisites:** Z-202L

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

oc	<b>Z-202-01</b>	<b>335816 MW</b>		<b>10:30 -11:50 AM</b>	
	J. BOWN	\$504.00	\$52.00	\$55.00	\$611.00

**Z-202L GENERAL ZOOLOGY LAB, 0 CREDIT**

Lab course for Z-202

**Corequisites:** Z-202

oc	<b>Z-202L-01</b>	<b>335818 W</b>		<b>1-3:50 PM</b>	
	J. BOWN	\$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  
**LCT:** Low-Cost Text



# Our community partners provide programming for all ages!



Have you wanted to learn more about yoga or get a few extra dance steps in your day? Perhaps you are thinking about writing your memoir or learning more about parenting or computers. You may simply be wondering what family, youth or adult activities and services are available to you locally. Clackamas Community College Community Education partners with many local programs to bring a wide variety of class offerings at a location near you. Please see our partner websites for more information on course offerings and registration.



Please register for classes directly through the Community Education Partner hosting the class you would



like to attend. Many partners accept online registrations on their websites. Please contact the partner if you have additional questions regarding your classes or their policy regarding refunds.

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](http://www.clackamas.edu/suggest-a-community-ed-class).

## Senior Discount

Seniors 62 years of age or older qualify for discounted tuition for many Community Education classes. Proof of age is required.



### CANBY

#### Bridging Cultures

503-592-3781 | [www.bridgingculturescanby.org](http://www.bridgingculturescanby.org)

### GLADSTONE

#### Gladstone Community School

503-650-2570 | [www.clackamas.edu/gladstone](http://www.clackamas.edu/gladstone)

### MILWAUKIE

#### Milwaukie Community Center

503-794-8092 | [www.ncprd.com](http://www.ncprd.com)

#### North Clackamas Parks and Recreation

503-794-8080, ext. 0 | [www.ncprd.com](http://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](http://www.orcity.org/904/Aquatics)

#### Pioneer Community Center

503-657-8287 | [www.orcity.org/499/Pioneer-Community-Center](http://www.orcity.org/499/Pioneer-Community-Center)

### TEAM OREGON

#### Motorcycle/Scooter Safety Training

800-545-9944 | [www.team-oregon.org](http://www.team-oregon.org)

### WEST LINN

#### West Linn Parks and Recreation

503-557-4700 | [www.westlinnoregon.gov/parksrec](http://www.westlinnoregon.gov/parksrec)

### WILSONVILLE

#### City of Wilsonville Parks and Recreation

503-783-PLAY | [www.wilsonvilleparksandrec.com/parksrec](http://www.wilsonvilleparksandrec.com/parksrec)

#### West Linn/Wilsonville Family Empowerment Center

503-673-7690 | [www.wlww.k12.or.us/domain/3726](http://www.wlww.k12.or.us/domain/3726)

# ACADEMIC REGULATIONS

## Absences/Attendance

- You must be officially registered to attend class.
- Be sure to notify your instructor if you can't make it to your first day of class. If you don't, you may lose your seat to a student on the wait list.
- **If you stop going to class and you don't officially drop the classes from your schedule, you will be held academically and financially responsible.**
- If the college is open on a religious holiday, you may be excused through prior arrangement with your instructors.
- If you attend a college-sponsored field trip, intercollegiate function or other event, you may be excused through prior arrangement with your instructors.
- **Financial aid programs have specific attendance requirements. Contact the Financial Aid Office for more information at [finaid@clackamas.edu](mailto:finaid@clackamas.edu) or [www.clackamas.edu](http://www.clackamas.edu).**

## Academic Standing

If you are a degree/certificate student taking 6 or more credits, you are required to maintain a 2.0 GPA and complete at least 50% of your attempted credits in order to remain in good academic standing.

## Active Military Duty

If you are called up for active military duty, and wish to withdraw from classes, you will be held harmless with as much as possible regard to financial and academic responsibility.

- You will be asked to officially withdraw from classes by web, fax, mail, or in person.
- Students who have already shipped out or are unable to drop classes should contact Enrollment Services: 503-594-6074 or [registrar@clackamas.edu](mailto:registrar@clackamas.edu).
- You will be asked to submit a copy of your orders along with a request for a refund/credit to Enrollment Services.
- Requests to be held harmless financially and academically for a prior term enrollment must be submitted directly to the Registrar at 503-594-3370 or [chris.sweet@clackamas.edu](mailto:chris.sweet@clackamas.edu).

## Adding and Dropping Classes

- You are required to obtain instructor permission (signature) once classes begin.
- You must officially drop courses you have registered for if you decide to stop going to class. **Ceasing to attend class does not constitute official withdrawal! You will be held responsible academically and financially if you do not officially drop your courses. Official withdrawal is via myClackamas or in person.**

## Administrative Withdraw

- If you don't attend your class during the first two weeks of the class, instructors **MAY** drop you but **ARE NOT REQUIRED** to do so. This is called administrative withdrawal.
- If an instructor does an administrative withdrawal, you may be granted a full refund of charges for the class.
- An instructor may administratively withdraw you from a course if you are unable to demonstrate fulfillment of the stated class prerequisite or co-requisite requirement.

- If you are utilizing financial aid or veterans benefits, you may owe a repayment. Please check with these offices for additional information regarding your enrollment status and entitlement to benefits.
- If you are administratively withdrawn from a course, you will be notified by Enrollment Services.

## Audit

An audit allows you to attend class without responsibility for a grade. Audit carries no credit, doesn't contribute toward full-time status and does not meet full-time status required for veterans, Social Security, financial aid or athletic eligibility. All other college policies apply including registration, tuition payment, refunds, and attendance. If you decide to change your status from audit to credit or credit to audit, notify your instructor prior to the end of the sixth week of the term.

If you are a financial aid student, please notify the Financial Aid Office if you change from a credit to an audit or receive an audit grade. You may be required to pay back funds. Audit classes do not qualify for financial aid.

## Variable Credit

Some courses are eligible for variable credit. These courses are noted in the Schedule of Classes with a "V" in the credit column. This option allows you to pursue an individualized learning program. You must register for the number of credits you expect to earn in that term as determined with your instructor. Changes to variable credit must be processed through registration by the end of the 10th week of the term.

## Wait List

Some CCC classes utilize a wait list option. If the class you want to register for is full and it has a wait list:

- Add your name to the wait list via myClackamas or in person.
- When a spot opens up, you will receive an email in your [@student.clackamas.edu](mailto:@student.clackamas.edu) email. You will have 48 hours to respond to the email.
- To add the class, go to "Manage my wait list" within myClackamas to register.
- You are responsible academically and financially if you no longer want to be in the class and don't drop it.

The following conditions may affect your eligibility for wait list placement:

- Wait list capacity has been met.
- There is a "hold" on your student record that restricts registration.
- There are course restrictions in place such as "instructor consent."
- You are already enrolled in another section of the same course.
- There is a time conflict with the course you have selected.
- You have reached the maximum number of credits allowed (18) without additional authorization.
- Class has already begun.

## FERPA

Directory information about your student record may be released without your permission under the Family Educational Rights & Privacy Act (FERPA). CCC will release the following directory information:

- Full name
- Enrollment status
- Enrollment dates
- Verification of certificate, degree, or honors and awards
- Residency status
- Major/program
- Athletic participation

No other information will be released without your permission. If you have questions regarding FERPA, please contact Enrollment Services, 503-594-6074 or go to our website: [www.clackamas.edu](http://www.clackamas.edu)



## Student Right to Know and Other Notification Requirements

Clackamas Community College information regarding academic programs, student completion/graduation rates, financial assistance, athletics, institutional financial support, privacy rights (FERPA), campus security, crime statistics and other Student Right to Know items may be obtained by viewing our annual college catalog or by going to [www.clackamas.edu](http://www.clackamas.edu). Printed copies of this information may also be obtained by contacting Enrollment Services at 503-594-6074 or [registrar@clackamas.edu](mailto:registrar@clackamas.edu).



Clackamas Community College is accredited by the Northwest Commission on Colleges and Universities.

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

**Northwest Commission on Colleges and Universities**  
8060 165th Avenue N.E., Suite 100  
Redmond, WA 98052  
(425) 558-4224  
[www.nwccu.org](http://www.nwccu.org)

# HOURS CCC Oregon City Campus

## ALL CAMPUSES CLOSED

Jan. 1 New Years Day, Jan. 20 MLK Jr. Day, Feb. 17 Presidents Day

Most student services are available during their regular business hours through video conference, phone and email. For the most up-to-date information, visit [www.clackamas.edu/hours](http://www.clackamas.edu/hours).

### BARLOW HALL

#### ITS – Information Technology Services

Jan. 6-Mar. 22 M-F 7 a.m.-7 p.m.

### DYE LEARNING CENTER

#### Academic Computing Lab

Limited on-campus computers available for student use, see website for specific days and times.

[www.clackamas.edu/tutoring/](http://www.clackamas.edu/tutoring/)

#### Library

Open in person and online. For research help, visiting hours, and access to articles, books, streaming video, and more, go to [library.clackamas.edu](http://library.clackamas.edu)

#### Writing Center, Math Lab and Other Tutoring Services

Limited on-campus and online tutoring available, see website for specific days and times.

[www.clackamas.edu/tutoring/](http://www.clackamas.edu/tutoring/)

#### Cougar Connect Tech Help Desk / Moodle Help

On-campus technology help is available during regular business hours; visit the [Cougar Connect Tech Help Desk](#) for specific days and times.

For virtual technology help, visit <https://www.clackamas.edu/cougarconnect> or call 503-594-6632 during regular business hours. For after hours, weekend, or bilingual support, visit [online.clackamas.edu](http://online.clackamas.edu) (see Academic Support and Essentials > Moodle Help > Extended Support).

### McLOUGHLIN HALL

#### Bookstore

Open Monday-Friday, please check the website at <https://clackamascbookstore.com> for the current days and times.

#### Textbook Buyback & Rental Check-In

Rental Return Due Date - Mar. 21, 2025

### PAULING CENTER

#### Workforce Development Services

Jan. 6-Mar. 22 M-F 8 a.m.-5 p.m.

### RANDALL HALL

#### Fitness Center

(Hours vary, please check door for posted hours)

### STREETER HALL

#### Open Computing Lab

Limited on-campus computers available for student use, see website for specific days and times.

[www.clackamas.edu/tutoring/](http://www.clackamas.edu/tutoring/)

### WACHENO WELCOME CENTER

#### Academic Advising & Career Services

Office Hours	M/T/Th	9 a.m.-4 p.m.
	W	10 a.m.-4 p.m.
Remote working hours	M-F	8 a.m.-5 p.m.

#### Counseling Services

Telehealth and in-person appointments available, contact [counseling@clackamas.edu](mailto:counseling@clackamas.edu) or call 503-594-3176.

Office Hours	M-Th	9 a.m.-4 p.m.
Remote working hours	M-F	8 a.m.-5 p.m.

#### Disability Resource Center

Office Hours	M-Th	9 a.m.-4 p.m.
Remote working hours	M-F	8 a.m.-5 p.m.

#### Enrollment Services & Graduation Services

Office Hours	M-Th	9 a.m.-4 p.m.
Remote working hours	M-F	8 a.m.-5 p.m.

#### Financial Aid Resource Lab

Available	M-Th	10 a.m.-1 p.m. or by appt.
Drop-In Zoom hours:	MW	11 a.m.-2 p.m.

#### Financial Aid & Scholarships

Office Hours	M-Th	9 a.m.-4 p.m.
Remote working hours	M-F	8 a.m.-5 p.m.

#### Student Life & Leadership

Office Hours	M-Th	9 a.m.-4 p.m.
Remote working hours	M-F	8 a.m.-5 p.m.

#### Testing & Assessment Center

(Call 503-594-3283 for specific test times)

#### Veterans Education and Training Center

Office Hours	M-Th	9 a.m.-4 p.m.
Remote working hours	M-F	8 a.m.-5 p.m.

## WHERE TO FIND FOOD

**Cafeteria:** Cougar Café, Wacheno Welcome Center, hours vary. The café features grill items such as burgers and fries. In addition, vending machines offer fresh-food options as well as convenience items.

**Bookstore,** McLoughlin Hall, offers a variety of grab-and-go food selections as well as convenience items and beverages, including coffee. A microwave is available in the store to heat food.

**Vending machines** in various other locations across campus will provide additional snacks.

## CCC BOOKSTORE

Oregon City campus – in McLoughlin Hall, ground floor  
503-594-6500

### IN-STORE CUSTOMERS

#### Payment types:

- Cash
- Debit / credit
- Financial Aid – 3rd Party Account or Student Account

**ONLINE ORDERS** can be shipped out (for a fee) or held for customer pick-up. Credit card payment required at time of order. Email notifications will be sent when order is shipped or is ready to be picked up.

#### Winter term dates to remember:

Textbook sales begin online and in-store – Dec. 16, 2024  
Last day for textbook refunds – Jan. 10, 2025 without drop;  
Jan. 31 with proof of drop  
Rental books due back – March 21, 2025

*For campus maps, store hours, shipping costs, refund/returns policies and ordering details, see [clackamascbookstore.com](http://clackamascbookstore.com) or call the bookstore at 503-594-6500. We will be happy to answer your questions personally!*

## Low-Cost Texts

Low-cost text (LCT) course sections use textbooks and/or other course materials that have a minimal cost. The total cost of textbooks and/or materials\* in every low-cost course will be \$40 or less. Identify CCC's low-cost courses by looking for the **LCT** icon.

*\*Included in the cost calculations are: required textbooks and other text-based materials, workbooks, lab manuals, online homework software (e.g. mymathlab), and codes or publisher-provided curricular materials for students. Printing costs are not included, unless a printed version is required for the course. Excluded from the cost calculations are: art supplies, calculators, software, course and student fees or equipment, and optional costs.*

**DISCLAIMER:** Clackamas Community College makes every effort that the low-cost sections identified in this printed schedule are accurate at the time of publication. However, review the online schedule or contact the course instructor for the most up-to-date information on textbook and material costs.

## College Closure Information



**Cougar Alert!**

### ANNOUNCEMENTS

In the event of hazardous weather or other emergencies, the following will carry school schedule changes and college closure information:

- Clackamas website, [www.clackamas.edu](http://www.clackamas.edu)
- Local radio and television broadcasts and websites
- Recorded phone message on the college's main number: 503-594-6000
- Facebook, [Facebook.com/ClackamasCommCollege](https://Facebook.com/ClackamasCommCollege)
- Twitter, @ClackCollege

### COLLEGE CLOSURE LOCATIONS

In the event that the college is closed due to adverse weather conditions, all college campuses and centers will close. In the event of a non-weather related emergency closure (e.g., loss of electricity), only the affected campus will close.

### COLLEGE CLOSURE TIMES

Emergency closures due to hazardous weather or other emergencies:

#### Campus closure

If all campuses are closed, all classes, athletics, and events are canceled. Child care services may also close.

#### Late start

If the college issues a late start, all classes, events, and activities are canceled until a time to be determined.

#### Evening class closure

Should inclement weather hit in the afternoon or evening, a closure will be determined by 3 p.m. when possible. In the event of an evening closure, the college will close at 5 p.m. and all classes beginning at or after 4 p.m. will be canceled.

### CLOSURES DURING FINAL WEEK

#### One day closure during final week:

Monday, Tuesday and/or Wednesday daytime finals will be rescheduled for Thursday during the same time period as originally scheduled.

#### Second day closure during final week:

Finals will be rescheduled for Friday during the same time period as originally scheduled.

#### Evening closure during final week:

Finals will be rescheduled for Friday evening during the same time period as originally scheduled.

*Note: These are general guidelines. Exceptions may occur.*

### EMERGENCY NOTIFICATIONS

CCC students are automatically enrolled in Clackamas Community College's phone, text message and email emergency notification system – Rave Alert.

The Rave Alert system will NOT charge fees, however standard or other messaging charges apply depending on wireless carrier plan and subscription details.

# FACULTY ADVISORS

Undecided or need more information  
about your program of study?

Faculty advisors have the answers.

PROGRAM	ADVISOR	PHONE	ROOM	EMAIL
Accounting	Joan San-Claire	503-594-3013	S124	joan.san-claire@clackamas.edu
Administrative Assistant/Professional	Beverly Forney	503-594-3115	S129	beverlyf@clackamas.edu
Adult High School Diploma	Lisa Nielson	503-594-3401	D144	lisan@clackamas.edu
Anthropology	Keely Baca	503-594-3409	M223	keely.baca@clackamas.edu
Apprenticeship	Katelyn Karch	503-594-6201	T128	kkarch@clackamas.edu
Arboriculture	April Chastain	503-594-3055	C124	april.chastain@clackamas.edu
Art	Nora Brodnicki	503-594-3036	AC106	norab@clackamas.edu
Automotive	Dustin Bates	503-594-3973	B259	dustinb@clackamas.edu
Business Administration	Sharon Parker	503-594-3075	S123	sharonp@clackamas.edu
Career Technical Education Licensure Prep	Megan Helzerman	503-594-0976	F108c	meganh@clackamas.edu
Clinical Lab Assistant/Phlebotomy	Marilyn Braught	503-594-0634	H350	marilyn.braught@clackamas.edu
Communications/Speech	Kerrie Hughes	503-594-3155	N137	kerrieh@clackamas.edu
Computer Science: Transfer	Rich Albers	503-594-3166	S126	richa@clackamas.edu
Computer Science: Application Support & Web Design	Debra Carino	503-594-3170	S125	dcarino@clackamas.edu
Computer Science: Network Administration	Rick Carino	503-594-3167	S179	rcarino@clackamas.edu
Computer Science: Transfer	Jen Miller	503-594-3138	S127	jen.miller@clackamas.edu
Criminal Justice/Corrections	Joanna Crawford	503-594-6229	HW315	joanna.crawford@clackamas.edu
Customized Training & Development Services	Staff	503-594-3200	P104	training@clackamas.edu
Dental Assistant	Kari Hiatt	503-594-0674	H385	kari.hiatt@clackamas.edu
Digital Media Communications	Nora Brodnicki	503-594-3036	AC106	norab@clackamas.edu
Early Childhood Education	Dawn Hendricks	503-594-6158	F116	dawn.hendricks@clackamas.edu
Economics	Derek Lougee	503-594-3408	M213	derek.lougee@clackamas.edu
Education	Laurette Scott	503-594-3840	F115	laurette@clackamas.edu
Educación Infantil y Estudios Familiares	Ada Echevarria	503-594-1828	F112	ada.echevarria@clackamas.edu
Electronics and Microelectronics	Mike Mattson	503-594-3322	I217I	mattsonm@clackamas.edu
Emergency Medical Technology	Tana Sawzak	503-594-6025	H382	tanasa@clackamas.edu
Engineering	Eric Lee	503-594-6163	DJ212	elee@clackamas.edu
Engineering	Matt LaForce	503-594-3148	DJ210	laforce@clackamas.edu
English	Amanda Coffey	503-594-3257	RR242	amandac@clackamas.edu
English for Speakers of Other Languages	Laura Joyce	503-594-3718	D146	lauraj@clackamas.edu
Environmental Safety and Health	Mike Mattson	503-594-3322	I217I	mattsonm@clackamas.edu
Fire Science	Jordan Gulley	503-594-3683	C141	wildlandfire@clackamas.edu
GED/ABE	Lisa Nielson	503-594-3401	D144	lisan@clackamas.edu
Geography	Derek Lougee	503-594-3408	M213	derek.lougee@clackamas.edu
Gerontology	Yvonne Smith	503-594-3207	HW315	yvonne@clackamas.edu
GIS	Angela Armen	503-594-3678	M223	angela.armen@clackamas.edu
History	Jackie Flowers	503-594-3405	M217	jackief@clackamas.edu
Horticulture	April Chastain	503-594-3055	C124	april.chastain@clackamas.edu
Human Resource Management	Michael Moiso	503-594-3770	S128	mmoiso@clackamas.edu
Human Services	Yvonne Smith	503-594-3207	F119	yvonne@clackamas.edu
Humanities	Derek Lougee	503-594-3408	M213	derek.lougee@clackamas.edu
Humanities	Amanda Coffey	503-594-3257	RR237	amandac@clackamas.edu
Industrial Technology	Mike Mattson	503-594-3322	I217I	mattsonm@clackamas.edu
Journalism	Melissa Jones	503-594-3261	RR132	melissaj@clackamas.edu
Landscape	April Chastain	503-594-3055	C124	april.chastain@clackamas.edu
Management	Sharon Parker	503-594-3075	S123	sharonp@clackamas.edu
Marketing	Beverly Forney	503-594-3115	S129	beverlyf@clackamas.edu
Math	Kelly Mercer	503-594-6154	S102	kelly.mercer@clackamas.edu
Medical Assistant	Sarah Parker	503-594-6497	H381	sarah.parker@clackamas.edu
Music	Lars Campbell	503-594-3384	N131	lars.campbell@clackamas.edu
Music Technology	David Badstubner	503-594-6368	N131	david.badstubner@clackamas.edu
Nursing	Carol Dodson	503-594-0654	H280	carold@clackamas.edu
Organic Farming	April Chastain	503-594-3055	C124	april.chastain@clackamas.edu
Philosophy	Derek Lougee	503-594-3408	M213	derek.lougee@clackamas.edu
Physical Education/Health	Jim Martineau	503-594-3271	R101c	jmartineau@clackamas.edu
Political Science	Derek Lougee	503-594-3408	M213	derek.lougee@clackamas.edu
Pre-Professional (medical, dental, pharmacy)	Eden Francis	503-594-3352	P124k	edenf@clackamas.edu
Project Management	Frank Corona	503-594-6498	S130	francisco.corona@clackamas.edu
Psychology	Jessica Kissler	503-594-6625	M210	jessica.kissler@clackamas.edu
Religion	Derek Lougee	503-594-3408	M213	derek.lougee@clackamas.edu
Reading/Study Skills	Lisa Nielson	503-594-3401	D144	lisan@clackamas.edu
Renewable Energy	Mike Mattson	503-594-3322	I217I	mattsonm@clackamas.edu
Retail Management	Beverly Forney	503-594-3115	S129	beverlyf@clackamas.edu
Science	Kelly Mercer	503-594-6154	S102	kelly.mercer@clackamas.edu
Search and Rescue	Matt Adams	503-594-3677	T125	matt.adams@clackamas.edu
Skills Development	Lisa Nielson	503-594-3401	D144	lisan@clackamas.edu
Small Business Development Center	Rob Campbell	503-594-0733	HW160E	bizcenter@clackamas.edu
Social Science	Derek Lougee	503-594-3408	M213	derek.lougee@clackamas.edu
Sociology	Erich Pfeifer	503-594-3802	M225	erichp@clackamas.edu
Theatre Arts	Chris Whitten	503-594-3153	N152	cwhitten@clackamas.edu
Undecided Major of Study	Student Support Services	503-594-3475	WC	advising@clackamas.edu
Uncrewed Aircraft Systems	Angela Armen	503-594-3678	M223	angela.armen@clackamas.edu
Water & Environmental Technology	Matt LaForce	503-594-3148	DJ210	laforce@clackamas.edu
Water & Environmental Technology	Jim Nurmi	503-594-3813	DJ211	jamesn@clackamas.edu
Welding	Dustin Bates	503-594-3973	B259	dustinb@clackamas.edu
Women's Studies	Derek Lougee	503-594-3408	M213	derek.lougee@clackamas.edu
World Languages	Ernesto Hernandez	503-594-3710	M245	ernesto.hernandez@clackamas.edu

# WHERE TO CALL

CCC'S MAIN PHONE NUMBER IS 503-594-6000.

BLDG.*	DEPARTMENT/OFFICE	PHONE
<b>ABE/GED</b>		
D	Oregon City	503-594-3027
H	Harmony	503-594-3027
D	Adult High School Diploma – Oregon City	503-594-3027
<b>Academic Advising</b>		
WC	Oregon City	503-594-3475
H	Harmony	503-594-0623
W	Wilsonville	503-594-0959
<b>Bookstore</b>		
M	Bookstore – Oregon City	503-594-6500
<b>Testing/Assessment Center</b>		
WC	Oregon City	503-594-3283
H	Harmony	503-594-0636
W	Wilsonville	503-594-0940
B	Account Receivable	503-594-6068
WC	Admissions & Recruitment/Welcome Center	503-594-3284
WC	Advanced College Credit	503-594-3161
T	Apprenticeship	503-594-0971
C	Arboriculture	503-594-3292
AC	Art	503-594-3034
WC	Associated Student Government	503-594-3040
R	Athletics	503-594-3043
B	Automotive	503-594-3047
S	Business	503-594-3071
HW	Business Development Center	503-594-0738
B	Business Office	503-594-3085
WC	Cafeteria	503-594-6091
WC	Campus Tours	503-594-6249
WC	Career Center	503-594-6001
I	Career Technical Education	503-594-3441
F	Child Care Center	503-657-9795
	Child Care Info & Referral	503-253-5000
P	The Clackamas Print Newspaper	503-594-3261
M	College Safety Office	503-594-6650
N	Communication Studies	503-594-6489
H	Community Education	503-594-0627
	Community Garden	503-594-3040
D	Computer Lab (Academic)	503-594-6632
S	Computer Lab (Open)	503-594-6632
S	Computer Science	503-594-3071
WC	Cooperative Work Experience	503-594-3511
D	Cougar Connect Desk	503-594-6632
WC	Counseling	503-594-3176
HW	Criminal Justice/Corrections	503-594-3203
P	Customized Training & Development	503-594-3200
AC	Digital Media Communications	503-594-3034
WC	Disability Resource Center	503-594-6357
F	Education and Early Childhood Education	503-594-3203
I	Electronics & Microelectronics	503-594-3318
T	Emergency Management	503-594-0971
DJ	Engineering	503-594-3345

BLDG.*	DEPARTMENT/OFFICE	PHONE
RR	English	503-594-3254
D	English for Speakers of Other Languages	503-594-3234
WC	Enrollment Services	503-594-6074
ELC	Environmental Learning Center	503-594-3306
B	Environmental Safety & Health	503-594-3322
G	Events & Conference Services - Oregon City	503-594-3308
H	Events & Conference Services - Harmony	503-594-0950
W	Events & Conference Services - Wilsonville	503-594-0970
WC	Financial Aid and Scholarship Office	503-594-6082
HW	Gerontology	503-594-3203
T	GIS	503-594-0971
WC	Graduation Services	503-594-6651
R	Gym	503-594-3043
H	Harmony Campus Registration/Information	503-594-0620
H	Health Sciences	503-594-0650
WC	High School Connections	503-594-3161
C	Horticulture	503-594-3292
B	Human Resources/Employment Opportunity	503-594-3458
F	Human Services	503-594-3203
I	Industrial Technology	503-594-3318
B	Instructional Media Services	503-594-3500
C	Landscape	503-594-3292
D	Learning Center	503-594-6191
D	Library - Circulation	503-594-6323
D	Library - Reference	503-594-6042
WC	Life & Career Options	503-594-3176
S	Math	503-594-3395
D	Moodle Help	503-594-6632
N	Music	503-594-3337
H	Nursing	503-594-0650
WC	Office of Education Partnerships	503-594-3161
C	Organic Farming	503-594-3292
S	Online Learning & Educational Technology	503-594-6618
P	Pauling Center Gallery	503-594-3034
R	Physical Education	503-594-3271
RR	President's Office	503-594-3002
WC	Registration and Records	503-594-6074
I	Renewable Energy Technology	503-594-3318
DJ	Science	503-594-3345
D	Skills Development	503-594-3233
M	Social Science	503-594-3403
WC	Student Life & Leadership	503-594-3040
WC	Student Support Services	503-594-3475
N	Theater/Performing Arts	503-594-3153
D	Tutoring Services	503-594-6191
WC	Veterans Educational Benefits	503-594-3438
WC	Veterans Education & Training Center	503-594-3438
RR	Vice President, College Services	503-594-3010
RR	Vice President, Instructional & Student Services	503-594-3020
DJ	Water & Environmental Technology	503-594-3345
T	Welding	503-594-3046
T	Wildland Fire	503-594-0971
W	Wilsonville Registration/Information	503-594-0940
P	Workforce Development Services	503-594-6246
M	World Languages	503-594-3403
D	Writing Center	503-594-6275

\* Find building code key on the campus map on the back cover of this schedule.

## COLLEGE SAFETY

In an emergency or life-threatening situation, dial **911** from any phone.  
College Safety Office, ext. **6234** or **6650** or call **971-563-0101**.



# SERVICES FOR STUDENTS



## We've got you covered.

**The Student Life & Leadership Office in Room 160 of the Wacheno Welcome Center offers lots of services to help you.**

**Free Food Pantry:** A free pantry that offers food and toiletries for students. Donations accepted! For more information, visit our website: [www.clackamas.edu/food-pantry](http://www.clackamas.edu/food-pantry).

**Grants:** There are grants available for child care, textbooks, fees, transportation and veterans gas cards and course materials. Grants are awarded each term to students who have demonstrated need. Fill out an application online at [www.clackamas.edu/asg/grants](http://www.clackamas.edu/asg/grants).

**Clubs:** Do you have a special interest? Want to meet new people? CCC offers many clubs for students. Find out more in Student Life & Leadership.

**Lost & Found:** Located in the Student Government office in WC 160.

**Fax & Phone:** Fax service is available to students in the Student Life Office. There is also a phone you can use, free of charge, in the Wacheno Welcome Center.

**Register to Vote:** It's simple and fast. Voter registration links for Oregon and Washington available on the Student Government webpage: [www.clackamas.edu/ASG](http://www.clackamas.edu/ASG)





# TRANSPORTATION OPTIONS

## Save money on your CCC commute!

Clackamas Community College connects students with a variety of transportation resources including fare assistance, ClackCo free shuttle service, carpooling matching, and multiple bus options.

The latest information and additional details can be found at [www.clackamas.edu/transportation](http://www.clackamas.edu/transportation).

### CLACKAMAS COUNTY CONNECTS FREE SHUTTLES

Free shuttles in Oregon City, Clackamas Town Center/Harmony, Clackamas Industrial Area, and Estacada. Shuttle routes can be found at <https://www.clackamas.us/h3s/connects-shuttle>

### CARPOOL MATCHING SERVICE

Find a carpool partner at [GetThereOregon.org](http://GetThereOregon.org). Sign up using your @student.clackamas.edu email address.

### PUBLIC TRANSPORTATION

Clackamas Community College is serviced by a number of bus lines. Plan your trip on Google Maps.

### NEAR CLACKAMAS TOWN CENTER?

Ride the CCC Xpress or Clackamas Industrial Area Shuttles. Plan your route at [rideclackamas.org](http://rideclackamas.org).



### DRIVE?

Find a carpool partner at [GetThereOregon.org](http://GetThereOregon.org).



### RIDE THE BUS?

CCC has partnered with TriMet to provide reduced or free TriMet fares. Email [transportation@clackamas.edu](mailto:transportation@clackamas.edu) or go to the Wacheno Welcome Center for more info.



# #ClackCo

CONNECTS

## CCC Xpress

### Southbound

<b>A</b>	Clackamas Town Center	5:55	7:15	8:35	9:55	11:55	<b>1:15</b>	<b>2:35</b>	<b>3:55</b>	<b>5:55</b>	<b>7:15</b>
<b>B</b>	CCC Harmony Campus	6:05	7:25	8:45	10:05	<b>12:05</b>	<b>1:25</b>	<b>2:45</b>	<b>4:05</b>	<b>6:05</b>	<b>7:25</b>
<b>C</b>	Oregon City Transit Center	6:25	7:45	9:05	10:25	<b>12:25</b>	<b>1:45</b>	<b>3:05</b>	<b>4:25</b>	<b>6:25</b>	<b>7:45</b>
<b>D</b>	Clairmont Dr. CCC Campus	6:40	8:00	9:20	10:40	<b>12:40</b>	<b>2:00</b>	<b>3:20</b>	<b>4:40</b>	<b>6:40</b>	<b>8:00</b>

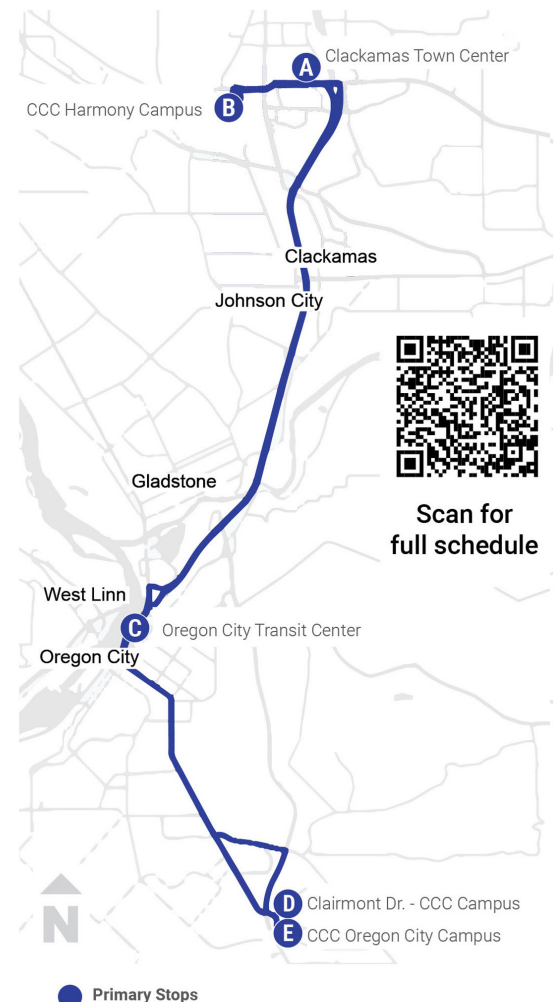
### Northbound

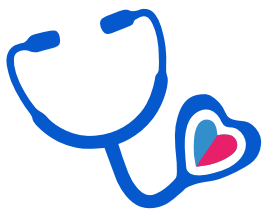
<b>E</b>	CCC Oregon City Campus	6:45	8:05	9:25	10:45	<b>12:45</b>	<b>2:05</b>	<b>3:25</b>	<b>4:45</b>	<b>6:45</b>	<b>8:05</b>
<b>B</b>	CCC Harmony Campus	7:00	8:20	9:40	11:00	<b>1:00</b>	<b>2:20</b>	<b>3:40</b>	<b>5:00</b>	<b>7:00</b>	<b>8:20</b>
<b>A</b>	Clackamas Town Center	7:10	8:30	9:50	11:10	<b>1:10</b>	<b>2:30</b>	<b>3:50</b>	<b>5:10</b>	<b>7:10</b>	<b>8:30</b>

The CCC Xpress Shuttle is a **free** "deviated fix-route" service. Can't make it to the main bus stop or route? **Call 24 hours in advance** to make arrangements and check availability to be picked up or dropped off within 3/4 mile from the route or in the deviation zone. You may also signal/flag the bus to get on or off the bus in-between stops.

The CCC Xpress Shuttle operates 7 days a week. The Clackamas Industrial Area Shuttle does not operate on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, or Christmas Day.

Schedule Times in **Bold** = PM





# CLACKAMAS FREE CLINIC

## VOLUNTEERS IN MEDICINE

**Clackamas Volunteers in Medicine** is located in **Clairmont Hall** and offers free health care services.

### SERVICES OFFERED

- Primary Care
- Optometry
- Diabetes Management and Education
- Asthma and C.O.P.D.
- Lab Services
- Specialty Referrals
- Screenings and Education

**HOURS:** Mon - Thur, 10 a.m. - 5 p.m.

**PHONE:** (503) 722-4400



**Clackamas**  
Community College

# WE WELCOME ALL AT CCC!

**ALL ETHNICITIES,  
ALL RELIGIONS,**

**ALL COUNTRIES  
OF ORIGIN, ALL AGES,**

**ALL ABILITIES,  
ALL GENDER IDENTITIES,**

**ALL SEXUAL  
ORIENTATIONS.**

***WE STAND WITH YOU.  
YOU BELONG HERE!***



 **Clackamas**  
Community College



# Clackamas Community College

## OREGON CITY CAMPUS

### Having difficulty finding parking?

Although it may be tempting to park in no-parking or handicapped spaces, parking citations are issued and vehicles are subject to towing and storage fees.

Students with disabilities should pick up a state application form from the Department of Motor Vehicles.



### BUILDING CODES and SERVICES

#### Art Center (AC)

#### Barlow Hall (B)

- Human Resources

#### Clairmont Hall (C)

#### DeJardin Hall (DJ)

#### Dye Learning Resource Center (D)

- Academic Computer Lab
- Library
- Moodle Help
- Tutoring

#### Environmental Learning Center (ELC)

#### Family Resource Center (F)

- Child Development Center

#### Gregory Forum (G)

#### Holden Industrial Technology Center (I)

#### Lewelling (L)

- Campus Services
- Shipping & Receiving

#### McLoughlin Hall (M)

- Bookstore
- College Safety

#### Niemeyer Center (N)

- Alexander Art Gallery
- Osterman Theatre

#### Pauling Center (P)

- Connections with Business and Industry
- Workforce Services

#### Randall Hall (R)

- Athletics Center

#### Roger Rook Hall (RR)

- Foundation
- President's Office

#### Streeter Hall (S)

- Online Learning & Educational Technology

#### Training Center (T)

- Welding

#### Wacheno Welcome Center (WC)

- Admissions Center
- Advising
- Career Services
- Cougar Café
- Disability Resource Center
- Education Partnerships
- Financial Aid
- Multicultural Center
- Registration/Records
- Student Accounts
- Student Government
- Testing Center
- VET Center

### CCC CAMPUS SITES

#### CCC at Harmony Community Campus

7738 SE Harmony Road  
Milwaukie, OR 97222

#### CCC Oregon City

19600 Molalla Ave.  
Oregon City, OR 97045

#### CCC Wilsonville Campus

29353 SW Town Center Loop E  
Wilsonville, OR 97070