Curriculum Committee Agenda

May 1, 2020

	Presenter	Action
1. Welcome and Introductions	**Chair**	
2. Approval of Minutes	**Chair**	Approval
3. Consent Agenda a. Course Number Change b. Course Title Change c. Reviewed Outlines for Approval	**Chair**	Approval
4. Informational Items		
5. Old Business a. Review Upcoming Membership Vacancies	**Chair**	Discussion
6. New Business		
a. Related Instruction		
i. HR: COMM-100, 140, 219	RI Sub-Committee	Approval/20.SU
ii. PE/Health: HE-163, 164, 201, 202, 207, 250		
b. Course Hours, Instructional Method, Credits Change		
i. EET-139, EET-239	**Mike Farrell**	Approval/20.SU
ii. HUM-160/SSC-160	**Joseph Shelton**	Approval/20.SU
iii. HPE-296	**Megan Feagles** (on behalf of Ed/HS/Crim Justice)	Approval 20.SU
iv. MFG-109	**Megan Feagles** (on behalf of Industrial Tech)	Approval/20.SU
c. New Courses		
i. APR-104MA, 106MA, 111MA, 112MA, 201MA, 202MA	**Shelly Tracy**	Approval/20.SU
ii. APR-108LM	"	Approval/20.SU
iii. APR-236IEL	"	Approval/20.SU
iv. EFA-101J	**Bob Keeler**	Approval/20.SU
v. EFA-101N	*Matt LaForce*	Approval/20.SU
vi. PE-185's	**Megan Feagles** (on behalf of Jim Martineau)	Approval/20.SU
d. Program Amendments		
i. AS, Civil/Environmental Engineering, PSU	**Eric Lee**	Approval/20.SU
ii. AS, Electrical/Computer Engineering, PSU	"	Approval/20.SU
iii. AS, Engineering, George Fox	"	Approval/20.SU
iv. AS, Mechanical Engineering, PSU	"	Approval/20.SU
v. Electrician Apprenticeship Technologies AAS	**Shelly Tracy**	Approval/20.SU
vi. Electrician Apprenticeship Technologies CC	"	Approval/20.SU
e. New Programs		
i. Industrial Mechanics and Maintenance Technology Apprenticeship AAS	**Shelly Tracy**	Approval/20.SU
ii. Mechanics and Maintenance Apprenticeship Technologies: Trade Worker Apprenticeship Technologies CPCC	"	Approval/20.SU
7. Closing Comments		

Curriculum Committee Minutes

March 6, 2020 (8-9:30am, CC127)

Present: Katie Hodgin (ASG), Nora Brodnicki, Rick Carino, Megan Feagles (Recorder), Sue Goff, Shalee Hodgson, Kara Leonard, Mike Mattson, Jeff McAlpine (Alternate Chair), Tracy Nelson, Lisa Reynolds, Esther Sexton, Dru Urbassik, Andrea Vergun

Guests:

Absent: Karen Ash, Dustin Bare, Elizabeth Carney, Frank Corona, Jeff Ennenga, Ida Flippo, Eden Francis, Darlene Geiger, Jason Kovac, Alice Lewis, Suzanne Munro, David Plotkin, Scot Pruyn (Chair), Cynthia Risan, Charles Siegfried, Tara Sprehe, Sarah Steidl, Helen Wand

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1. **Welcome & Introductions**

2. **Approval of Minutes**
   a. Approval of the **February 7, 2020** minutes

   Motion to approve, approved

3. **Consent Agenda**
   a. Course Number Changes
   b. Course Title Change
   c. Reviewed Outlines for Approval

   Motion to approve, approved

4. **Informational Items**
   a. Three-Year Course Inactivation List (06.30.21)
      i. Megan Feagles presented
      ii. These are courses that haven't been offered since 2018/SP. Including new courses that have never been offered (unless it's a recent new course)
      iii. To prevent inactivation, the course must be offered during the 20-21 year, OR JUST ASK US NOT TO INACTIVATE IT.
      iv. The list is posted under Additional Documents and will be updated frequently.
      v. Curriculum Office will send to Department Chairs, Directors, Admins, etc.
         Dru sent out on 3/19/20
   b. Five Year Course Review
      i. Dru Urbassik presented
      ii. Courses are supposed to be updated and reviewed every 5 years. There are 41 courses that haven't been looked at since 2011.
      iii. Curriculum Office will send the list to Department Chairs, Admins, and Review Team Leads next week.
         Dru sent out on 3/10/20

5. **Old Business**
   a.

6. **New Business**
   a. **Course Inactivations**
      i. EM Courses (92)
         1. Megan Feagles presented on behalf of Shelly Tracy
         2. These were part of the Emergency Management program that was suspended a few years ago. The courses were never inactivated so we're doing it now.

   Motion to approve, approved

7. **Closing Comments**
   a.

-Meeting Adjourned-

Next Meeting: March 20, 2020 CC127 8-9:30am

Clackamas Community College

CONSENT AGENDA

May 1, 2020

1. Course Title Change

Course	Current Title	Proposed Title
HOR-284	Organic Farming - Campus Farm/CWE	Organic Farming Practicum/Summer
PE-185	Baseball Conditioning/Beginning	Baseball Conditioning I
	Baseball Conditioning/Intermediate	Baseball Conditioning II
	Baseball Hitting/Beginning	Baseball Hitting I
	Baseball Hitting/Intermediate	Baseball Hitting II
	Baseball Techniques/Beginning	Baseball Techniques I
	Baseball Techniques/Intermediate	Baseball Techniques II
	Basketball/Beginning	Basketball I
	Basketball/Intermediate	Basketball II
	Basketball/Advanced	Basketball III
	Basketball, Men's Conditioning/Beginning	Basketball, Men's Conditioning I
	Basketball, Men's Conditioning/Intermediate	Basketball, Men's Conditioning II
	Basketball, Women's Conditioning/Beginning	Basketball, Women's Conditioning I
	Basketball, Women's Conditioning/Intermediate	Basketball, Women's Conditioning II
	Bowling/Beginning	Bowling I
	Bowling/Intermediate	Bowling II
	Bowling/Advanced	Bowling III
	Cross Training I/Beginning	Cross Training I
	Cross Training I/Intermediate	Cross Training II
	Cross Training II/Beginning	Cross Training III
	Cross Training II/Intermediate	Cross Training IV
	Cross Training III/Beginning	Cross Training V
	Cross Training III/Intermediate	Cross Training VI
	Dance, Ballet/Beginning	Dance, Ballet I
	Dance, Ballet/Intermediate	Dance, Ballet II
	Dance, Swing/Beginning	Dance, Swing I
	Dance, Swing/Intermediate	Dance, Swing II
	Dance, Swing/Advanced	Dance, Swing III
	Golf/Beginning	Golf I
	Golf/Intermediate	Golf II
	Golf/Advanced	Golf III
	Kung Fu Conditioning Beginning	Kung Fu Conditioning I
	Kung Fu Conditioning Intermediate	Kung Fu Conditioning II
	Rescue Scuba Diver	Rescue Scuba Diver I
	Advanced Rescue Scuba Diver	Rescue Scuba Diver II
	Rock Climbing & Repelling/Intermediate	Rock Climbing & Repelling II
	Rock Climbing & Repelling/Advanced	Rock Climbing & Repelling III
	Rock Climbing/Beginning	Rock Climbing I
	Scuba Diving	Scuba Diving I
	Scuba Diving/Advanced	Scuba Diving II
	Soccer Conditioning/Beginning	Soccer Conditioning I
	Soccer Conditioning/Intermediate	Soccer Conditioning II
	Softball Conditioning/Beginning	Softball Conditioning I
	Softball Conditioning/Intermediate	Softball Conditioning II

	Softball Hitting/Beginning	Softball Hitting I
	Softball Hitting/Intermediate	Softball Hitting II
	Softball Techniques/Beginning	Softball Techniques I
	Softball Techniques/Intermediate	Softball Techniques II
	Tai Chi/Beginning	Tai Chi I
	Tai Chi/Intermediate	Tai Chi II
	Tai Chi/Advanced	Tai Chi III
	Tennis/Beginning	Tennis I
	Tennis/Intermediate	Tennis II
	Track Conditioning/Beginning	Track Conditioning I
	Track Conditioning/Intermediate	Track Conditioning II
	Track Fundamentals/Beginning	Track Fundamentals I
	Track Fundamentals/Intermediate	Track Fundamentals II
	Volleyball Conditioning/Beginning	Volleyball Conditioning I
	Volleyball Conditioning/Intermediate	Volleyball Conditioning II
	Volleyball/Beginning	Volleyball I
	Weight Training/Beginning	Weight Training I
	Weight Training/Intermediate	Weight Training II
	Weight Training/Advanced	Weight Training III
	Wrestling Conditioning/Beginning	Wrestling Conditioning I
	Wrestling Conditioning/Intermediate	Wrestling Conditioning II
	Zumba, Strength Intervals/Beginning	Zumba, Strength Intervals I

2. Course Number Change

Course	Title	Proposed Course Number

3. Outlines Reviewed for Approval

Course	Title	Implementation
AM-121	General Auto Repair I	2020/SU
APR-236IE	Motors & Controls	
APR-267PB	Advanced Plumbing Code III	
BI-165D	Natural History of the Western Deserts	
HOR-284	Organic Farming Practicum/Summer	
MA-115	Phlebotomy for Medical Assistants	
PSY-101	Human Relations	
R-204	History of Christianity	
PE-185	Physical Education	

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Automotive Technology: Auto Mechanics

Submitter

First Name: Jay
Last Name: Leuck
Phone: 3052
Email: jayl

Course Prefix and Number: AM - 121

 # Credits: 3

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 72
Lab (# of hours):
Total course hours: 72

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: General Auto Repair I

Course Description:

In this course students will experience working in an auto shop/lab as they repair customer vehicles. They will apply concepts such as shop and personal safety, tools and their usage, and customer service as they develop workplace employability skills and work habits. Required: Student Petition.

Type of Course: Career Technical Preparatory

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Automotive Service Technology AAS

Are there prerequisites to this course?

Yes

Pre-reqs: AM-100

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: 1st term students seeking the AAS degree in Automotive Service Technology should meet with instructor prior to the beginning of the term

Requirements: Student Petition

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: No

When do you plan to offer this course?

✓ **Fall**
✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. demonstrate proper shop and personal safety rules and procedures,
2. identify tools and equipment and their usage in automotive applications,
3. demonstrate preparing a vehicle for service,
4. demonstrate preparing a vehicle for customer,
5. demonstrate effective workplace employability skills and good work habits.

This course does not include assessable General Education outcomes.

Major Topic Outline:

Shop and personal safety
Tools and equipment
Preparing vehicle for service
Preparing vehicle for customer
Workplace employability skills
Work habits

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Specify term: Spring 2020

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Apprenticeship

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: shellyt

Course Prefix and Number: APR - 236IE

 # Credits: 3

Contact hours

Lecture (# of hours): 36
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 36

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Motors & Controls

Course Description:

This course is the first of two classes that covers how to properly design and install motor circuits and controls per NEC Article 430, including understanding basic field-installed control devices, push button controls, timers, relays, and working with ladder diagrams. Required: Student Petition.

Type of Course: Career Technical Apprenticeship

Can this course be repeated for credit in a degree?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Electrician Apprenticeship Technologies AAS and CC

Are there prerequisites to this course?

Yes

Pre-reqs: APR-236IEL

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations:

Requirements: Student Petition

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: Yes

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. identify components of motor circuits,
2. identify components of motor controls,
3. properly size motor circuits per NEC Article 430,
4. draw ladder diagrams,
5. explain how motor controls work,
6. explain how to wire basic motor controls.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. identify components of motor circuits,
2. identify components of motor controls,
3. properly size motor circuits per NEC Article 430,
4. draw ladder diagrams,
5. explain how motor controls work,
6. explain how to wire basic motor controls,
7. trouble shoot basic motor controls.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: WAFE

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: shellyt

Course Prefix and Number: APR - 267PB

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Advanced Plumbing Code III

Course Description:

This course is designed to prepare the apprentice for the plumbing journeyman exam. It is a continuation of Advanced Plumbing Code II, and covers additional plumbing codes, analysis of definitions, plumbing theory and design, advanced preparation for the State Journeyman Plumber's Exam, and overview of the entire code book. Required: Student Petition.

Type of Course: Career Technical Apprenticeship

Can this course be repeated for credit in a degree?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Electrical Apprenticeship AAS

Are there prerequisites to this course?

Yes

Pre-reqs: APR-257PB

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations:

Requirements: Student Petition

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: Yes

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. understand more completely the plumbing code,
2. analyze plumbing and code definitions,
3. understand plumbing theory and design,
4. use proper materials and processes for the entire Plumbing Code Book.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Laws, rules, definitions.
2. Administration of Code.
3. General regulations.
4. Plumbing mathematics.
5. Water distribution.
6. Drainage, waste and venting systems.
7. Fixtures.
8. Special piping.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Sciences

Submitter

First Name: Jennifer
Last Name: Bown
Phone: 3348
Email: jenb

Course Prefix and Number: BI - 165D

 # Credits: 4

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours): 33
Total course hours: 66

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Natural History of the Western Deserts

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

Yes

Check which General Education requirement:

✓ **Science & Computer Science**

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

Yes

Pre-reqs: WRD-098 or placement in WR-121

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: One term of college-level science

Requirements: Student Petition

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Winter**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. design and run scientific field experiments, analyze and interpret the results and apply them to broader desert ecological topics; (SC1) (SC2) (SC3)
2. through observation and journaling, explore various desert ecosystems and evaluate their fragile nature; (SC1) (SC2) (SC3)
3. collaboratively compare and discuss strategies for plant and animal survival in desert ecosystems;
4. observe geologic features, apply observations to fundamental geologic principles and formulate hypothesis on processes that formed the landscape;
5. collect and analyze field data and clearly explain the relationship between geology and biology of the region, including hydrology and soil development;
6. describe the history of humans in the region and evaluate their impacts on deserts; (SC3)
7. create scientifically accurate field journals, using correct taxonomic language, to document field observations, experiments, and hypothesis. (SC1) (SC2)

AAOT/ASOT GENERAL EDUCATION OUTCOMES

AAOT/ASOT GENERAL EDUCATION OUTCOMES

COURSE OUTLINE MAPPING CHART

Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
- Mark "S" if this course substantially addresses the outcome. More than one course is required for the outcome to be completely addressed. Students who successfully complete all of the required courses are likely to have attained this learning outcome.
- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as part of the class, but the class is not a primary means for attaining the outcome and assessment for general education purposes may not be necessary.

As a result of completing the AAOT/ASOT general education requirements, students will be able to:

WR: Writing Outcomes

P 1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.

2. Locate, evaluate, and ethically utilize information to communicate effectively.

3. Demonstrate appropriate reasoning in response to complex issues.

SP: Speech/Oral Communication Outcomes

P 1. Engage in ethical communication processes that accomplish goals.

2. Respond to the needs of diverse audiences and contexts.

3. Build and manage relationships.

MA: Mathematics Outcomes:

1. Use appropriate mathematics to solve problems.

2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

AL: Arts and Letters Outcomes

1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.

2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

SS: Social Science Outcomes

P 1. Apply analytical skills to social phenomena in order to understand human behavior.

2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

SC: Science or Computer Science Outcomes

S 1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.

S 2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.

S 3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

CL: Cultural Literacy Outcome

1. Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

Outcomes Assessment Strategies:

✓ **General Examination**

✓ **Writing Assignments**

✓ **Presentations**

✓ **Thesis/Research Project**

✓ **Journal Writing**

:

Major Topic Outline:

1. Fundamental geographic and ecological differences between desert ecosystems found in North America.
2. Introduction and examination of basic plants and animal communities of the Great Basin, Sonoran and Mojave deserts.
3. Survival strategies of plants and animals living in desert regions.
4. Geologic identification and formation of common desert features.
5. Geological history of western deserts including mining's impacts both environmentally and economically.
6. History of humans in western desert regions and their impact on those desert communities.
7. Evaluation of non-native species and their impact on desert ecosystems.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**

3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **PSU (Portland State University)**

✓ **OSU (Oregon State University)** ✓ **UO (University of Oregon)**

Identify comparable course(s) at OUS school(s)

UO (BI 1AAT), OSU (BI LDT)

How does it transfer? (Check all that apply)

✓ **general elective**
:

Provide evidence of transferability: (minimum one, more preferred)

✓ **Other. Please explain.**

Website and published course equivalency tables

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Horticulture

Submitter

First Name: April
Last Name: Chastain
Phone: 3055
Email: april.chastain

Course Prefix and Number: HOR - 284

 # Credits: 3

Contact hours

Lecture (# of hours):
Lec/lab (# of hours):
Lab (# of hours): 108
Total course hours: 108

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Organic Farming Practicum/Summer

Course Description:

Experiential learning of organic farming techniques, while working on the Student Farm. Students learn ecological and sustainable practices, principles, and management strategies. This course includes the seasonal activities of a working, small scale Organic Farm: seed sowing, planting, cultivation, irrigation, harvest, packing, selling at farmers market and to restaurants. An important aspect of this course is participating in the on-campus, weekly farmers market. All tasks are hands-on and guided by the instructor. This format has been selected to create a hands-on experience for each student in seasonal crop production and marketing.

Type of Course: Career Technical Preparatory

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Organic Farming certificate

Are there prerequisites to this course?

Yes

Pre-reqs: HOR-141 or Student Petition

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: Yes

When do you plan to offer this course?

✓ **Summer**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. explain cropping and labor systems used to run a small-scale, sustainable farm;
2. complete effective scheduling and management of mixed vegetable crops;
3. operate and maintain farm equipment and tools safely;
4. practice food safety guidelines in the harvesting, packing, and marketing of produce;
5. organize and operate the campus farmer's market stand;
6. adapt production and marketing systems to meet the demands of wholesale accounts.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Marketing
a. Labeling
b. Crop washing and handling
c. Communication with customers
d. Display

2.Farm Production Skills
a. Greenhouse propagation of transplants
b. Raised bed building
c. Direct seeding and transplanting
d. Production methods for specific crops
e. Use of crop production tools and equipment

3.Weed and Pest Management
a. Control strategies
b. Control equipment
c. OMRI approved products and use
d. Pest life cycles and prevention

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**Yes**
4. Clean up natural environment	**Yes**
5. Supports green services	**Yes**

Percent of course: 90%

First term to be offered:

Specify term: Summer 2020

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Health Sciences: Allied Health

Submitter

First Name: Karen
Last Name: Maynard
Phone: 0695
Email: KMaynard

Course Prefix and Number: MA - 115

 # Credits: 1

Contact hours

Lecture (# of hours): 11
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 11

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Phlebotomy for Medical Assistants

Course Description:

The focus of this course is to understand appropriate blood specimen procurement techniques using vacutainer, syringe, butterfly with syringe and capillary puncture methods and associated safety techniques. Other specifics of the blood specimen testing requirements, such as collection into the correct evacuated tube (additive), specimen handling procedures, collections of newborn screen and collection documentation are also covered. Assuring a safe, confidential and professional environment for the patient, and the phlebotomy technician. Required: Student Petition.

Type of Course: Career Technical Preparatory

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Medical Assistant Certificate

Are there prerequisites to this course?

Yes

Pre-reqs: MA-116, MA-117, MA-117L, MA-118, MA-118L, and MTH-054

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

Yes

Co-reqs: MA-115L, MA-119, MA-121, and MA-121L

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations:

Requirements: Student must be enrolled in current Medical Assistant cohort. Student Petition.

Are there similar courses existing in other programs or disciplines at CCC?

Yes

Have you talked with the appropriate chair?
Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: Yes

When do you plan to offer this course?

✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. identify applicable blood vessel anatomy, blood composition, and collection tools;
2. demonstrate knowledge of and identify the appropriate techniques, explain why technique is used;
3. identify correct evacuated tube additive in relation to test ordered,
4. demonstrate proper documentation of procurement and specimen identification,
5. identify and apply Universal Precautions and meet OSHA Standards.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Proper venipuncture techniques.
a. Vacutainer/evacuated tubes.
b. Syringe.
c. Winged infusion/“butterfly.”
d. Capillary blood collection.
2. Capillary blood glucose.
3. Newborn screen collection.

4. Administrative procedures.
5. Requisition forms.
6. Documentation.
7. Specifics of individual blood collection tubes in relation to tests ordered.
8. Universal Precautions and Standard Procedures.
9. Blood vessel anatomy.
10. Specimen types: whole blood, plasma and serum.
11. Patient education and other factors that affect laboratory results.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Specify term: Spring 2016

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Social Science

Submitter

First Name: Margaret
Last Name: Mallatt
Phone: 0651
Email: margm@clackamas.edu

Course Prefix and Number: PSY - 101

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Human Relations

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Various

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: WRD-090 or placement in WRD-098

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Human Relations

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Summer**
✓ **Fall**
✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. Identify psychological concepts and analyze their influence on one's own intra- and interpersonal experiences and relationships;
2. Demonstrate effective strategies for managing conflict and improving communication skills in personal and professional contexts;
3. Apply coping strategies to deal more effectively with anger, frustration, and stress;
4. Explain cross-cultural differences and how they influence communication in personal and professional contexts;
5. Identify effective strategies to navigate relationships in digital realms.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Self-concept and self-esteem
2. Personality development
3. Dealing effectively with emotions
4. Diversity and cross-cultural communication
5. Interpersonal communication skills in social, workplace and digital contexts
6. Love and intimate relationships
7. Managing conflict in intimate relationships and the workplace
8. Managing stress and wellness
9. Values and ethics
10. Managing life transitions, including grief and loss
11. Sexuality, including gender identity, sexual orientation, transgender, sexual harassment and sex abuse
12. Happiness and well-being
13. Effects of digital technology in personal and professional relationships

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency **No**

2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **EOU (Eastern Oregon University)**
✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**
✓ **PSU (Portland State University)**
✓ **SOU (Southern Oregon University)**
✓ **UO (University of Oregon)**
✓ **WOU (Western Oregon University)**

Identify comparable course(s) at OUS school(s)

OSU: PSY LDT
OIT: PSY 000
UO: PSY 210T
SOU: PSY LDT
EOU: PSY LDT
WOU: PSY 2XX

How does it transfer? (Check all that apply)

✓ **required or support for major**
✓ **general education or distribution requirement**
✓ **general elective**
:

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Section #1 General Course Information

Department: Social Sciences

Submitter

First Name: Joseph
Last Name: Shelton
Phone: 6228
Email: joseph.shelton

Course Prefix and Number: R - 204

 # Credits: 4

Contact hours

Lecture (# of hours): 44
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 44

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: History of Christianity

Course Description:

An introduction to early Christianity, the Apostles, and formulation of the New Testament canon. Developments of post-apostolic Christianity and theology into the Modern Age. Contemporary topics include: Christianity in conflict, ethical and social religious issues, and the face of contemporary Christianity.

Type of Course: Lower Division Collegiate

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

Yes

Check which General Education requirement:

✓ **Arts and Letters**

✓ **Cultural Literacy**

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: WRD-090 or placement in WRD-098

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ Not every term

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. explain the origin of Christianity and its eventual separation from Judaism (AL1) (AL2) (SS2) (CL1);
2. demonstrate a knowledge of the background and development of the New Testament (AL1) (AL2) (CL1);
3. identify the worldviews that impacted Christianity's development (AL1) (AL2) (CL1);
4. articulate the difference between the 'Jesus of History' (modern scholarship's view of the 'Historical Jesus'), and the 'Christ of Faith' (CL1);
5. demonstrate a knowledge of how the core Christian beliefs have been understood throughout history (AL1) (AL2) (SS2) (CL1);
6. articulate the process that led up to the Protestant Reformation (AL1) (AL2) (SS2) (CL1).

AAOT/ASOT GENERAL EDUCATION OUTCOMES

AAOT/ASOT GENERAL EDUCATION OUTCOMES

COURSE OUTLINE MAPPING CHART

Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
- Mark "S" if this course substantially addresses the outcome. More than one course is required for the outcome to be completely addressed. Students who successfully complete all of the required courses are likely to have attained this learning outcome.
- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as part of the class, but the class is not a primary means for attaining the outcome and assessment for general education purposes may not be necessary.

As a result of completing the AAOT/ASOT general education requirements, students will be able to:

WR: Writing Outcomes

1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.
2. Locate, evaluate, and ethically utilize information to communicate effectively.
3. Demonstrate appropriate reasoning in response to complex issues.

SP: Speech/Oral Communication Outcomes

1. Engage in ethical communication processes that accomplish goals.
2. Respond to the needs of diverse audiences and contexts.
3. Build and manage relationships.

MA: Mathematics Outcomes:

1. Use appropriate mathematics to solve problems.
2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

AL: Arts and Letters Outcomes

S 1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.

S 2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

SS: Social Science Outcomes

1. Apply analytical skills to social phenomena in order to understand human behavior.

S 2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

SC: Science or Computer Science Outcomes

1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.
2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.
3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

CL: Cultural Literacy Outcome

C 1. Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

Outcomes Assessment Strategies:

✓ **General Examination**

✓ **Writing Assignments**

✓ **Other Assessment Tools**: Classroom discussion questions prepared by students from textbook readings.

Major Topic Outline:

1. Christianity emerging from Judaism.
2. Development and writing of the New Testament.
3. Apostolic Fathers.
4. Constantine and the Holy Roman Empire.
5. Monasticism.
6. Eastern Orthodox Church tradition.
7. Development of the Roman Papacy.
8. 'Church & State' relationship and Crusades.
9. Medieval Christianity & Reformation.
10. Migration of Christianity to the Americas.
11. Current doctrines and conflicts

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **PSU (Portland State University)**
✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**

Identify comparable course(s) at OUS school(s)

WOU - R2XX Religion L/D Elective TRN

How does it transfer? (Check all that apply)

✓ **general education or distribution requirement**

:

Provide evidence of transferability: (minimum one, more preferred)

First term to be offered:

Next available term after approval
:

Curriculum Committee Membership 19-20

Curriculum Committee/Curriculum Office

Member	Committee Role	Ending Term	Term Cycle
Scot Pruyn	Chair	2021/SP	2-year
Jeff McAlpine	Alternate Chair/Interim Chair	2021/SP	2-year
David Plotkin	Vice President, Instruction & Student Services	Ex-Officio	Permanent
Jason Kovac	Dean, Institutional Effectiveness & Planning	Ex-Officio	Permanent
Dru Urbassik	Director, Curriculum & Scheduling	Ex-Officio	Permanent
Megan Feagles	Curriculum & Scheduling Office/Recorder	Ex-Officio	Permanent
Elizabeth Carney	Assessment Coordinator	Ex-Officio	Permanent
Rotates	ASG Student Representative	Ex-Officio	Permanent
TBD	Library	2021/SP	3-year

Academic Foundations and Connections (AFAC)

Member	Committee Role	Ending Term	Term Cycle
Tara Sprehe	Dean, AFAC	Ex-Officio	Permanent
	Associate Dean, AFAC	Ex-Officio	Permanent
Karen Ash	Director, Financial Aid	Ex-Officio	Permanent
Sarah Steidl	Graduation Services	Ex-Officio	3-year
Dustin Bare	Director, Student Academic Support Services	2020/SP	3-year
Kara Leonard	Academic and Career Coaches	2020/SP	3-year
Suzanne Munro	Basic Skills Development & ESL	2020/SP	3-year
Vergun, Andrea	Faculty-At-Large	2022/SP	3-year
Jeff McAlpine	English; **Review Team Lead**	2021/SP	3-year
Tracy Nelson	Health/Physical Education	2021/SP	3-year
Scot Pruyn	Math	2021/SP	3-year
Esther Sexton	Faculty-At-Large	2022/SP	3-year

Arts & Sciences

Member	Committee Role	Ending Term	Term Cycle
Sue Goff	Dean, Arts & Science	Ex-Officio	Permanent
Lisa Reynolds	Associate Dean, Arts & Science; **Review Team Lead**	Ex-Officio	Permanent
Rick Carino	Computer Science	2020/SP	3-year
Nora Brodnicki	Art, Comm, Theatre, Journalism, World Lang, Music	2020/SP	3-year
Frank Corona	Business/Computer Science, Horticulture	2021/SP	3-year
Eden Francis	Sciences and Engineering	2022/SP	3-year
Alice Lewis	Faculty-At-Large	2022/SP	3-year
Jackie Flowers	Social Sciences	2019/SP	3-year
Charles Siegfried	Faculty-At-Large	2022/SP	3-year

Technology, Applied Science, and Public Services (TAPS)

Member	Committee Role	Ending Term	Term Cycle
Cynthia Risan	Dean, TAPS	Ex-Officio	Permanent
Shalee Hodgson	Associate Dean, TAPS; **Review Team Lead**	Ex-Officio	Permanent
Ida Flippo	Education, Human Services, Criminal Justice/Public Services	2020/SP	3-year
Mike Mattson	Industrial Technology	2021/SP	3-year
Helen Wand	Nursing, Allied Health/Part-Time Faculty Association	2021/SP	3-year
Jeff Ennenga	Wilsonville, Apprenticeship, Fire, Emergency	2020/SP	3-year
Sharron Furno	Faculty-At-Large	2021/SP	3-year
Dave Bradley	Automotive/Welding	2021/SP	3-year

*sabbatical 19/FA; Andrea Vergun filling in

Sub-Committees

Related Instruction Sub-Committee

Member	Ending Term
Shalee Hodgson (Lead)	Ex-Officio
Sarah Steidl	Ex-Officio
Scot Pruyn	2021/SP
Tracy Nelson	2021/SP

General Education Sub-Committee

Member	Ending Term
Lisa Reynolds (Lead)	Ex-Officio
Tara Sprehe	Ex-Officio
Dustin Bare	2020/SP
Jeff McAlpine	2021/SP
Esther Sexton	2022/SP
Jackie Flowers	2019/SP

Related Instruction

May 1, 2020

Course Number	Title	Related Instruction Area
COMM-100	Basic Speech Communication	Human Relations
COMM-140	Introduction to Intercultural Communication	Human Relations
COMM-219	Small Group Discussion	Human Relations
HE-163	Body & Drugs I: Introduction to Abuse &	Physical Education/Health
HE-164	Body & Drugs II: Alcohol	Physical Education/Health
HE-201	Personal Training	Physical Education/Health
HE-202	Introduction to Fitness Technology Careers	Physical Education/Health
HE-207	Introduction to Plant Based Living	Physical Education/Health
HE-250	Personal Health	Physical Education/Health

Clackamas Community College

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Date approved: February 7, 2020 Certified General Education Area(s): None

Section #1 General Course Information

Department: Communication Studies

Submitter

First Name: Kerrie
Last Name: Hughes
Phone: 3155
Email: kerrieh

Course Prefix and Number: COMM - 100

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Basic Speech Communication

Course Description:

Explores interpersonal and small group dynamics and communication skills in day-to-day formal and informal situations. Examines positive self-concept, listening skills, verbal and non-verbal modes of communication, and clarity of expression. Designed for non-transfer students.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Human Relations

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Fall**
✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. describe the elements of the communication process orally and in writing;
2. identify appropriate verbal and nonverbal messages for various communication situations,including messages used in electronic correspondence;
3. use strategies for effective listening;
4. describe strategies for building and maintaining relationships;
5. participate effectively in small group interactions;
6. demonstrate the ability to conduct informational interviews and job interviews.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Elements of the Communication Process.
2. Influence of self-concept.
3. Influence of culture and co-culture.
4. Types of communication.
5. Basic presentation skills
6. Effective verbal and nonverbal communication.
7. The Perceptual Process
8. Listening strategies.
9. Creating and maintaining relationships.
10. Ethical communication.
11. Johari's windows—Awareness and Disclosure.
12. Communicating emotions.
13. Small group roles and rules.
14. Leadership styles.
15. Conflict response.
16. Computer-mediated communication (e-mail, social/professional networks, etc.).
17. Interviewing techniques for both informational and professional purposes.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**
✓ **OSU-Cascade**
✓ **PSU (Portland State University)**
✓ **UO (University of Oregon)**

Identify comparable course(s) at OUS school(s)

Comm-100 or Comm Lower Division Transfer

How does it transfer? (Check all that apply)

✓ **general elective**
:

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Date approved: February 7, 2020 Certified General Education Area(s): Arts and Letters, Cultural Literacy

Section #1 General Course Information

Department: Communication Studies

Submitter

First Name: Kerrie
Last Name: Hughes
Phone: 3155
Email: kerrieh

Course Prefix and Number: COMM - 140

 # Credits: 4

Contact hours

Lecture (# of hours): 44
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 44

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Introduction to Intercultural Communication

Course Description:

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

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

Yes

Check which General Education requirement:

✓ **Arts and Letters**

✓ **Cultural Literacy**

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: WRD-098 or placement in WR-121

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

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Human Relations

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ Not every term

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. discuss the basic concepts of intercultural communication and how they apply to personal and work-related life; (C1) (AL2) (SS2) (SP1) (SP2) (SP3)
2. recognize and explain how cultural needs, behaviors, assumptions, values and beliefs influence one's own personal communication; (C1) (AL2) (SP1) (SP2) (SP3)
3. develop skills in being non-judgmental in situations involving cultural differences; (C1) (AL1) (AL2) (SP1) (SP2) (SP3)
4. identify value differences and learn to recognize the dominant values of one's culture; (C1) (AL2) (SP1) (SP2) (SP3) (SS2)
5. explain the effects of stereotyping, prejudice, and hate in cultural situations; (C1) (AL2) (SP1) (SP2) (SP3)
6. recognize an increase in his/her own sensitivity towards and appreciation of cultural differences; (C1) (AL2) (SP1) (SP2) (SP3) (SS2)
7. deal more effectively with problems stemming from intercultural misunderstandings and conflict; (C1) (AL1) (AL2) (SP1) (SP2) (SP3)
8. recognize and analyze the various values that underpin different communication styles across cultures. (C1) (AL2) (SP1) (SP2) (SP3) (SS2)

AAOT/ASOT GENERAL EDUCATION OUTCOMES

AAOT/ASOT GENERAL EDUCATION OUTCOMES

COURSE OUTLINE MAPPING CHART

Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
- Mark "S" if this course substantially addresses the outcome. More than one course is required for the outcome to be completely addressed. Students who successfully complete all of the required courses are likely to have attained this learning outcome.
- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as part of the class, but the class is not a primary means for attaining the outcome and assessment for general education purposes may not be necessary.

As a result of completing the AAOT/ASOT general education requirements, students will be able to:

WR: Writing Outcomes

1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.

P 2. Locate, evaluate, and ethically utilize information to communicate effectively.

3. Demonstrate appropriate reasoning in response to complex issues.

SP: Speech/Oral Communication Outcomes

S 1. Engage in ethical communication processes that accomplish goals.

S 2. Respond to the needs of diverse audiences and contexts.

S 3. Build and manage relationships.

MA: Mathematics Outcomes:

1. Use appropriate mathematics to solve problems.

2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

AL: Arts and Letters Outcomes

S 1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.

S 2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

SS: Social Science Outcomes

P 1. Apply analytical skills to social phenomena in order to understand human behavior.

S 2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

SC: Science or Computer Science Outcomes

1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.

2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.

3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

CL: Cultural Literacy Outcome

C 1. Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

Outcomes Assessment Strategies:

✓ **General Examination**
✓ **Presentations**
✓ **Thesis/Research Project**
✓ **Criteria**
✓ **Rubrics**
✓ **Journal Writing**
✓ **Projects**
✓ **Writing Assignments**
✓ **Multiple Choice Test**

:

Major Topic Outline:

1. Surface and deep culture.
2. What a culture needs.
3. Stereotypes.
4. Cultural identity – subcultures.
6. Ethnocentrism.
8. Review of culture and barriers to intercultural communication.
9. Communication process and noise.
10. Difference in nonverbal communication across cultures
11. Culture shock.
12. Dominant American values.
13. Hofstede’s five dimensions of cultural differences.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**
✓ **OSU-Cascade**
✓ **PSU (Portland State University)**
✓ **SOU (Southern Oregon University)**
✓ **UO (University of Oregon)**

Identify comparable course(s) at OUS school(s)

COMM-215 Intro to Intercultural Communication at PSU
SP132T at U of O
COMM-205 Intercultural Comm at OIT

How does it transfer? (Check all that apply)

✓ **general education or distribution requirement**
✓ **general elective**
✓ **other (provide details)**: Identity/Plural Tolerance credits at U of O; Humanities Exploration credits at SOU

Provide evidence of transferability: (minimum one, more preferred)

✓ **Other. Please explain.**

Verified transferability information through colleges' websites

First term to be offered:

Specify term: Spring 2014

Clackamas Community College

Online Course/Outline Submission System

Show changes since last approval in red Print Edit Delete Back

Date approved: February 7, 2020 Certified General Education Area(s): Arts and Letters, Cultural Literacy

Section #1 General Course Information

Department: Communication Studies

Submitter

First Name: Kerrie
Last Name: Hughes
Phone: 3155
Email: kerrieh

Course Prefix and Number: COMM - 219

 # Credits: 4

Contact hours

Lecture (# of hours): 44
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 44

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Small Group Discussion

Course Description:

Theories and practices of small group communication through group discussions, readings and written exercises. Emphasis on effective group communication, leadership skills, and problem-solving in small groups.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

Yes

Check which General Education requirement:

✓ **Arts and Letters**

✓ **Cultural Literacy**

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: WRD-098 or placement in WR-121

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Human Relations

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ Not every year

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. identify the various types of groups available in the private, public, global arena; (CL1)
2. recognize group members' roles and functions in the group process; (AL1)(AL2)
3. describe the development, maintenance and deterioration of small groups; (AL1) (AL2)
4. identify the inter/intra-cultural difference between verbal and nonverbal communication and their influence upon human interaction and group relationships; (AL1) (AL2) (CL1)
5. demonstrate problem-solving, conflict resolution and reduction techniques within groups; (AL1)
6. discuss leadership skills that affect group members' attitudes and motivations; (AL1) (AL2) (C1)
7. identify the ethical dimensions and elements of cohesiveness and groupthink within group dynamics; (AL2)
8. prepare for and participate in the group decision-making process; (AL1) (AL2) (SP1) (SP2) (SP3)
9. identify how different methods of group decision-making, critical thinking (including errors), and creative problem-solving techniques can affect a group in its decision-making; (AL1) (AL2) (SP1) (SP2) (SP3)
10. investigate, analyze, and integrate evidence and reasoning into group problem-solving; (AL1) (AL2) (SP1) (SP2) (SP3)
11. identify and evaluate different types of verbal and nonverbal messages as well as listening skills in group work; (C1) (SS1) (AL2) (SP1) (SP2) (SP3)

AAOT/ASOT GENERAL EDUCATION OUTCOMES

AAOT/ASOT GENERAL EDUCATION OUTCOMES

COURSE OUTLINE MAPPING CHART

Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
- Mark "S" if this course substantially addresses the outcome. More than one course is required for the outcome to be completely addressed. Students who successfully complete all of the required courses are likely to have attained this learning outcome.
- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as part of the class, but the class is not a primary means for attaining the outcome and assessment for general education purposes may not be necessary.

As a result of completing the AAOT/ASOT general education requirements, students will be able to:

WR: Writing Outcomes

1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.
2. Locate, evaluate, and ethically utilize information to communicate effectively.
3. Demonstrate appropriate reasoning in response to complex issues.

SP: Speech/Oral Communication Outcomes

P 1. Engage in ethical communication processes that accomplish goals.

P 2. Respond to the needs of diverse audiences and contexts.

P 3. Build and manage relationships.

MA: Mathematics Outcomes:

1. Use appropriate mathematics to solve problems.
2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

AL: Arts and Letters Outcomes

S 1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.

S 2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

SS: Social Science Outcomes

1. Apply analytical skills to social phenomena in order to understand human behavior.
2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

SC: Science or Computer Science Outcomes

1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.
2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.
3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

CL: Cultural Literacy Outcome

S 1. Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

Outcomes Assessment Strategies:

✓ **General Examination**
✓ **Presentations**
✓ **Criteria**
✓ **Rubrics**
✓ **Projects**
✓ **Writing Assignments**
✓ **Multiple Choice Test**
✓ **Pre-Post Assessment**
✓ **Other Assessment Tools**: Community Service Project

Major Topic Outline:

1. Sender-message-receiver process.
2. Group motivational theories.
3. Definition of groups.
4. Functional versus dysfunctional groups development and deterioration.
5. Problem solving process and conflict resolution.
6. Cohesiveness and groupthink.
7. Leadership styles and theories.
8. Membership styles and theories.
9. Group evaluation from forming.
10. Stages of group development.
11. Diversity in groups.
12. Verbal and nonverbal communication in groups.
13. Listening in groups.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**
✓ **OSU-Cascade**
✓ **PSU (Portland State University)**
✓ **SOU (Southern Oregon University)**
✓ **UO (University of Oregon)**

Identify comparable course(s) at OUS school(s)

SPE 321 Small Group/Team Comm at OIT (but students must replace with another upper division class)
COMM 225 Small Group Comm at SOU

How does it transfer? (Check all that apply)

✓ **general education or distribution requirement**
✓ **general elective**
:

Provide evidence of transferability: (minimum one, more preferred)

✓ **Other. Please explain.**

Verified through transferability information listed on colleges' websites.

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

Show changes since last approval in red | Print | Edit | Delete | Back

Date approved: March 6, 2020 Certified General Education Area(s): Social Science

Section #1 General Course Information

Department: PE/Health/Athletics

Submitter

First Name: Tim
Last Name: Pantages
Phone: 3792
Email: timp

Course Prefix and Number: HE - 163

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Body & Drugs I: Introduction to Abuse & Addiction

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

Yes

Check which General Education requirement:

✓ **Social Science**

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Human Services, Criminal Justice, Health Fitness Technology

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Physical Education/Health

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Summer**
✓ **Fall**
✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. summarize five historical themes of drug use across all cultures;
2. describe the continuum of drug use;
3. discuss the five main routes of administration of drugs;
4. identify and explain the process of neurophysiological addiction;
5. summarize the history of addiction treatment;
6. access and utilize effective resources to improve and maintain mental and physical well being.

AAOT/ASOT GENERAL EDUCATION OUTCOMES

AAOT/ASOT GENERAL EDUCATION OUTCOMES

COURSE OUTLINE MAPPING CHART

Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
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As a result of completing the AAOT/ASOT general education requirements, students will be able to:

WR: Writing Outcomes

1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.
2. Locate, evaluate, and ethically utilize information to communicate effectively.
3. Demonstrate appropriate reasoning in response to complex issues.

SP: Speech/Oral Communication Outcomes

1. Engage in ethical communication processes that accomplish goals.
2. Respond to the needs of diverse audiences and contexts.
3. Build and manage relationships.

MA: Mathematics Outcomes:

1. Use appropriate mathematics to solve problems.
2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

AL: Arts and Letters Outcomes

1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.
2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

SS: Social Science Outcomes

1. Apply analytical skills to social phenomena in order to understand human behavior.
2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

SC: Science or Computer Science Outcomes

1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.
2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.
3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

Outcomes Assessment Strategies:

:

Major Topic Outline:

1. Brief history of alcohol and drug use.
2. Definition and categories of psychoactive drugs.
3. Classification of psychoactive drugs.
4. Overview of physiology/neurobiology of addiction.
5. History of addiction treatment.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **EOU (Eastern Oregon University)**
✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**
✓ **OSU-Cascade**
✓ **PSU (Portland State University)**
✓ **SOU (Southern Oregon University)**
✓ **UO (University of Oregon)**
✓ **WOU (Western Oregon University)**

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general elective**
:

Provide evidence of transferability: (minimum one, more preferred)

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

Show changes since last approval in red Print Edit Delete Back

Date approved: March 6, 2020 Certified General Education Area(s): Social Science

Section #1 General Course Information

Department: PE/Health/Athletics

Submitter

First Name: Tim
Last Name: Pantages
Phone: 3792
Email: timp

Course Prefix and Number: HE - 164

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Body & Drugs II: Alcohol

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

Yes

Check which General Education requirement:

✓ **Social Science**

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Human Services, Criminal Justice, Fitness Technology

Are there prerequisites to this course?

Yes

Pre-reqs: HE-163

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Physical Education/Health

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. describe the three basic categories of beverage alcohol;
2. summarize the history of alcohol use;
3. summarize direct and/or indirect consequences of alcohol consumption on the major physiological systems of the body;
4. access and utilize effective resources to improve and maintain mental and physical well being.

AAOT/ASOT GENERAL EDUCATION OUTCOMES

AAOT/ASOT GENERAL EDUCATION OUTCOMES

COURSE OUTLINE MAPPING CHART

Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
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- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as part of the class, but the class is not a primary means for attaining the outcome and assessment for general education purposes may not be necessary.

As a result of completing the AAOT/ASOT general education requirements, students will be able to:

WR: Writing Outcomes

1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.
2. Locate, evaluate, and ethically utilize information to communicate effectively.
3. Demonstrate appropriate reasoning in response to complex issues.

SP: Speech/Oral Communication Outcomes

1. Engage in ethical communication processes that accomplish goals.
2. Respond to the needs of diverse audiences and contexts.
3. Build and manage relationships.

MA: Mathematics Outcomes:

1. Use appropriate mathematics to solve problems.
2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

AL: Arts and Letters Outcomes

1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.
2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

SS: Social Science Outcomes

1. Apply analytical skills to social phenomena in order to understand human behavior.
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SC: Science or Computer Science Outcomes

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2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.
3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

Outcomes Assessment Strategies:

:

Major Topic Outline:

1. History of alcohol use.
2. Personal and societal costs of alcohol abuse.
3. Types of alcohol.
4. Physiological effects of alcohol consumption.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

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1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **EOU (Eastern Oregon University)**
✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**
✓ **OSU-Cascade**
✓ **PSU (Portland State University)**
✓ **SOU (Southern Oregon University)**
✓ **UO (University of Oregon)**
✓ **WOU (Western Oregon University)**

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general elective**
:

Provide evidence of transferability: (minimum one, more preferred)

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

Show changes since last approval in red | Print | Edit | Delete | Back

Date approved: March 6, 2020 Certified General Education Area(s): None

Section #1 General Course Information

Department: Health/PE and Athletics

Submitter

First Name: Tracy
Last Name: Nelson
Phone: 3274
Email: tracyn

Course Prefix and Number: HE - 201

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Personal Training

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: PE-240

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Physical Education/Health

GRADING METHOD:

A-F Only

Audit: Yes

When do you plan to offer this course?

✓ **Fall**
✓ **Winter**
✓ **Spring**
✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. design an exercise plan for client's based on specific goals and needs of the client;
2. demonstrate proper technique for various exercises and strength movements;
3. demonstrate and assess client's fitness levels through various tests and assessments;
4. customize training plans for special populations;
5. recommend dietary changes to help maximize client's goals;
6. cite specific exercises for functional training.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Functional Anatomy.
2. Biomechanics.
3. Muscle Physiology.
4. Endocrine System.
5. Bioenergetics.
6. Cardiovascular Physiology.
7. Nutrition/Supplements.
8. Body Composition.
9. Weight Management.
10. Physical Fitness and Flexibility Assessment.
11. Development of Training Programs.
12. Anaerobic Training.
13. Resistance Training.
14. Functional Training.
15. Working with Special Populations.
16. Ethics and Professional Behavior.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general elective**
:

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Date approved: March 6, 2020 Certified General Education Area(s): None

Section #1 General Course Information

Department: Health/PE and Athletics

Submitter

First Name: Tracy
Last Name: Nelson
Phone: 3274
Email: tracyn

Course Prefix and Number: HE - 202

 # Credits: 1

Contact hours

Lecture (# of hours): 11
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 11

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Introduction to Fitness Technology Careers

Course Description:

This course will explore the various careers in the Fitness Industry through lecture and guest speakers currently in the professional field. Students will gain insight to the requirements, expectations, salary range, education requirements, and any additional information related to specific careers.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Fitness Technology Certificate

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Physical Education/Health

GRADING METHOD:

A-F Only

Audit: Yes

When do you plan to offer this course?

✓ **Fall**

✓ **Spring**
✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. differentiate the various careers in the Fitness Industry;
2. identify an area of interest for a potential career path;
3. apply gained knowledge to develop a career path.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Personal Trainer
2. Gym Owner
3. Nutrition and Health Coach
4. Health and Wellness Director.
5. Group X Instructor
6. Strength and Conditioning Coach
7. Athletic Coach

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general elective**
:

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Date approved: March 6, 2020 Certified General Education Area(s): None

Section #1 General Course Information

Department: Health/PE and Athletics

Submitter

First Name: Tracy
Last Name: Nelson
Phone: 3274
Email: tracyn

Course Prefix and Number: HE - 207

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Introduction to Plant Based Living

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?
Yes (A 'Yes' certifies you have talked with the librarian and have received approval.)*

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Physical Education/Health

GRADING METHOD:

A-F Only

Audit: Yes

When do you plan to offer this course?

✓ **Fall**
✓ **Winter**
✓ **Spring**
✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. describe the benefits of plant based living;
2. demonstrate an understanding of plant based living through various assignments and projects;
3. analyze information to make informed decisions to their personal lifestyle and wellness.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Plant Based Living
2. Organic Foods
3. Big Agricultural Companies
4. Environmental Impacts of Big Ag
5. Cow's milk
6. Plant Based Diet
7. Plant Based Athlete's

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?

2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **PSU (Portland State University)**

Identify comparable course(s) at OUS school(s)

General Health courses

How does it transfer? (Check all that apply)

✓ **general elective**
:

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Date approved: March 6, 2020 Certified General Education Area(s): None

Section #1 General Course Information

Department: PE/Health

Submitter

First Name: Josh
Last Name: Rhoden
Phone: 3275
Email: joshr

Course Prefix and Number: HE - 250

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Personal Health

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Physical Education/Health

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Summer**
✓ **Fall**
✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. evaluate at least seven personal health habits and shape one of their health habits for a healthier life,
2. demonstrate their understanding of basic information by written summary of units or by performing at a 65% plus mark on quizzes,
3. critically evaluate health information from 5 current health articles (videos) or 1 book.

This course does not include assessable General Education outcomes.

Major Topic Outline:

Accessing your Health
Psychological Health
Managing Stress
Preventing Violence & Injury
Nutrition, Weight management & Fitness
Addiction/Drug Abuse
Cardiovascular Disease
Infectious 7 Non Infectious Diseases

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?

3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **EOU (Eastern Oregon University)**
✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**
✓ **OSU-Cascade**
✓ **PSU (Portland State University)**
✓ **SOU (Southern Oregon University)**
✓ **UO (University of Oregon)**
✓ **WOU (Western Oregon University)**

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general education or distribution requirement**
✓ **general elective**
:

First term to be offered:

Next available term after approval
:

Clackamas Community College

Hours, Instructional Method, Credits Change

May 1, 2020

1. Course Hours, Instructional Method, Credits Change

Course	Current Hours/Credits	Proposed Hours/Credits
EET-139	44 LE/LA/2 Credits	11 LECT, 22 LE/LA/2 Credits
EET-239	44 LE/LA/2 Credits	11 LECT, 22 LE/LA/2 Credits
HUM-160	55 LECT/5 Credits	44 LECT/4 Credits
SSC-160	55 LECT/5 Credits	44 LECT/4 Credits
HPE-296	33 LECT/3 Credits	60 LE/LA/3 Credits
MFG-109	39 LECT/3 Credits	33 LECT/3 Credits

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: IDTD

Submitter

First Name: Mike
Last Name: Farrell
Phone: 1689
Email: mike.farrell

Course Prefix and Number: EET - 139

 # Credits: 2

Contact hours

Lecture (# of hours): 11
Lec/lab (# of hours): 22
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Principles of Troubleshooting I

Course Description:

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

Type of Course: Career Technical Preparatory

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Electronics Engineering Technology programs

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

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

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Fall**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. describe strategies for troubleshooting,
2. describe characteristics of a malfunction,
3. analyze faults that cause a malfunction,
4. evaluate steps for testing of faults.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Linear vs divide and conquer approach
2. Explain problem in detail
3. Simplify the problem.
4. Search for one failure not many
5. Justification for any tests or measurements that should be taken
6. Troubleshoot common electrical and mechanical systems from everyday life

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

Show changes since last approval in red | Print | Edit | Delete | Back | Reject | Publish

Section #1 General Course Information

Department: IDTD

Submitter

First Name: Mike
Last Name: Farrell
Phone: 1689
Email: mike.farrell

Course Prefix and Number: EET - 239

 # Credits: 2

Contact hours

Lecture (# of hours): 11
Lec/lab (# of hours): 22
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Principles of Troubleshooting II

Course Description:

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

Type of Course: Career Technical Preparatory

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): EET, IMT, RET

Are there prerequisites to this course?

Yes

Pre-reqs: IMT-139 or EET-139; EET-141 or MFG-131

Have you consulted with the appropriate chair if the pre-req is in another program?
Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: IMT-223

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

Yes

Have you consulted with the Dept Chair(s) of other program(s) regarding potential impact such as overlap, duplication, enrollment, impact, etc.?

Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

What was the result of the conversation with those department(s)?

RET and IMT both support the change.

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Fall**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. Describe troubleshooting advanced strategies, Total Preventive Maintenance, and applied SPC;
2. troubleshoot various circuits and determine possible failure modes,
3. explain detailed schematics of complex systems.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. PC troubleshooting review.
2. Schematic symbols review.
3. Transistors, opamps, transformers, digital basics review.
4. Statistical process control & total preventive maintenance.
5. AC/DC Motors and motor control circuits

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Social Sciences

Submitter

First Name: Joseph
Last Name: Shelton
Phone: 6228
Email: joseph.shelton

Course Prefix and Number: HUM - 160

 # Credits: 4

Contact hours

Lecture (# of hours): 44
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 44

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Faith & Reason

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: WRD-098 or placement in WR-121

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: SSC-160 Title: Faith & Reason

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. demonstrate an introductory knowledge of the history and interaction between Science & Religion (AL2) (CL1) (SS1) (SS2);
2. explain multiple perspectives of cultural differences through ideas from mythology, religion, philosophy and science (AL1) (SS1) (CL1);
3. analyze the role of diverse worldviews and beliefs on culture, historical, and global issues (AL2) (CL1) (SS1);
4. apply skills in Critical Thinking and Research Methods (SS1) (SS2);
5. demonstrate knowledge of Diversity & Multiculturalism in the development of science and religion (AL2) (CL1) (SS1) (SS2);
6. apply knowledge of ethics and social responsibilities to personal questions of faith and reason (AL2) (CL1) (SS1) (SS2);
7. analyze faith & reason phenomena by evaluating information, evidence, arguments and/or theories to draw logical conclusions or implications (SS1).

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. The nature of religion and belief.
2. Sacred, secular, myth, story, and ritual.
3. Worldviews and ideas of God/god.
4. Methods of communication about God/god.
5. Classical philosophy and its impact on contemporary thinking.
6. Arguments for the existence of God.
7. Classical Attributes of God.
8. General Science Literacy.
9. Ancient & Modern Cosmology.
10. Philosophies of Science & Evolution.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **PSU (Portland State University)**

✓ **UO (University of Oregon)**

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general elective**
:

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Social Sciences

Submitter

First Name: Joseph
Last Name: Shelton
Phone: 6228
Email: joseph.shelton

Course Prefix and Number: SSC - 160

 # Credits: 4

Contact hours

Lecture (# of hours): 44
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 44

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Faith & Reason

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: WRD-098 or placement in WR-121

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: HUM-160 Title: Faith & Reason

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. demonstrate an introductory knowledge of the history and interaction between Science & Religion (AL2) (CL1) (SS1) (SS2);
2. explain multiple perspectives of cultural differences through ideas from mythology, religion, philosophy and science (AL1) (SS1) (CL1);
3. analyze the role of diverse worldviews and beliefs on culture, historical, and global issues (AL2) (CL1) (SS1);
4. apply skills in Critical Thinking and Research Methods (SS1) (SS2);
5. demonstrate knowledge of Diversity & Multiculturalism in the development of science and religion (AL2) (CL1) (SS1) (SS2);
6. apply knowledge of ethics and social responsibilities to personal questions of faith and reason (AL2) (CL1) (SS1) (SS2);
7. analyze faith & reason phenomena by evaluating information, evidence, arguments and/or theories to draw logical conclusions or implications (SS1).

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. The nature of religion and belief.
2. Sacred, secular, myth, story, and ritual.
3. Worldviews and ideas of God/god.
4. Methods of communication about God/god.
5. Classical philosophy and its impact on contemporary thinking.
6. Arguments for the existence of God.
7. Classical Attributes of God.
8. General Science Literacy.
9. Ancient & Modern Cosmology.
10. Philosophies of Science & Evolution.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **PSU (Portland State University)**

✓ **UO (University of Oregon)**

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general elective**
:

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Section #1 General Course Information

Department: EHCJ

Submitter

First Name: Paul
Last Name: Fiskum
Phone: 3272
Email: paulf@clackamas.edu

Course Prefix and Number: HPE - 296

 # Credits: 3

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 60
Lab (# of hours):
Total course hours: 60

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Health and Fitness for Criminal Justice

Course Description:

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.

Type of Course: Lower Division Collegiate

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): AAS Criminal Justice; AAS Criminal Justice, Corrections Option

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

Yes

Have you talked with the appropriate chair?
Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Physical Education/Health

GRADING METHOD:

A-F or Pass/No Pass

Audit: No

When do you plan to offer this course?

✓ **Winter**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. assess their current status in each of the nine Dimensions of Wellness;
2. assess their current status in each of the five Health Related Components of Fitness;
3. assess their current nutritional and dietary practices;
4. assess their current energy expenditure status;
5. assess their current stress reaction status;
6. design a personal nutritional and dietary pattern to improve wellness;
7. design a personal plan for alternative methods of dealing with stress;
8. design a personal fitness plan to improve their performance on the Oregon Physical Abilities Test (ORPAT).

This course does not include assessable General Education outcomes.

Major Topic Outline:

Physical Fitness
Components of measurement; i.e., flexibility, strength, endurance
Body composition
Assessment of current status
Activities for improving personal status
Nutritional life styling
Stress management
Managing the hypervigilance rollercoaster
Relaxation techniques
Oregon Physical Abilities Test (pre & post)

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **EOU (Eastern Oregon University)**
✓ **OIT (Oregon Institute of Technology)**
✓ **OSU (Oregon State University)**
✓ **OSU-Cascade**
✓ **PSU (Portland State University)**
✓ **SOU (Southern Oregon University)**
✓ **UO (University of Oregon)**
✓ **WOU (Western Oregon University)**

Identify comparable course(s) at OUS school(s)

Lower division HPE courses

How does it transfer? (Check all that apply)

✓ **required or support for major**
✓ **general education or distribution requirement**
✓ **general elective**
:

First term to be offered:

Specify term: Winter 2020

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Section #1 General Course Information

Department: Manufacturing

Submitter

First Name: Adriana
Last Name: Aristizabal
Phone: 3916
Email: adrianaa

Course Prefix and Number: MFG - 109

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Computer Literacy for Technicians

Course Description:

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.

Type of Course: Career Technical Preparatory

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Manufacturing Programs

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Fall**
✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. describe the current uses and trends of computers in business and industry,
2. differentiate between operating systems, applications, and computer platforms;
3. identify the function of major hardware components of a computer,
4. manipulate files and create directories/folders by using Windows Explorer,
5. use the Internet to research a topic,
6. create and use a web-based email account,
7. create, edit, and print a document using Microsoft Word;
8. create a simple spreadsheet using Microsoft Excel,
9. create a simple presentation using Microsoft PowerPoint,
10. understand the jargon associated with computers.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Basic computer hardware.
2. Basic computer software.
3. Operating systems.
4. File management.
5. Microsoft Office applications: Word, Excel, Internet Explorer, & PowerPoint.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

New Courses

May 1, 2020

Course Number	Title	Implementation
APR-104MA	Print Reading	2020/SU
APR-106MA	Advanced Applied Geometric Dimensioning and Tolerancing for Manufacturing	
APR-111MA	Machine Tool Fundamentals I	
APR-112MA	Machine Tool Fundamentals II	
APR-201MA	CNC I: Set-up and Operation	
APR-202MA	CNC II: Programming & Operation	
APR-108LM	ARC Flash Electrical Safety	
APR-236IEL	Motors & Controls Lab	
EFA-101J	Introduction to the Social Sciences, Human Services and Criminal Justice	
EFA-101N	Introduction to Natural Resources	
PE-185	Self-Defense III	
PE-185	Zumba I	
PE-185	Walk, Jog, Fitness I	
PE-185	Walk, Jog, Fitness II	
PE-185	Walk, Jog, Fitness III	

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Section #1 General Course Information

Department: WAFE

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: shellyt

Course Prefix and Number: APR - 104MA

 # Credits: 2

Contact hours

Lecture (# of hours): 24
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 24

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Print Reading

Course Description:

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.

Type of Course: Career Technical Apprenticeship

Reason for the new course:

New Apprenticeship trade

Can this course be repeated for credit in a degree?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Industrial Mechanic s & Maintenance Technologies AAS and CPC

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

Yes

Have you consulted with the Dept Chair(s) of other program(s) regarding potential impact such as overlap, duplication, enrollment, impact, etc.?

Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

What was the result of the conversation with those department(s)?

added head count to classes

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: No

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: MFG-104 Title: Print Reading

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. visualize a 3D part from an orthographic representation,
2. identify Notes and Revision information,
3. extract dimensional information and finish information,
4. utilize basic print reading terminology used in industry,
5. effectively discuss the represented part or assembly,
6. demonstrate the care and handling of prints.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. What is a Print.
2. The Alphabet of Lines.
3. Multi View Drawings.
4. Auxiliary Views.
5. Section Views.
6. Threads and Fasteners.
7. Dimensioning.
8. Tolerancing.
9. Machining Specifications.
10. Surface Quality.
11. Introduction to GD&T Symbols.
12. Detail Drawings.
13. Assembly Drawings.
14. Pictorial Drawings.
15. Title Blocks.
16. List of Materials.
17. Drawing Notes.
18. Revisions.

19. Welding Prints.
20. Sheet Metal Prints.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Section #1 General Course Information

Department: WAFE

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: Shellyt@clackamas.edu

Course Prefix and Number: APR - 106MA

 # Credits: 3

Contact hours

Lecture (# of hours): 33
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Advanced Applied Geometric Dimensioning and Tolerancing for Manufacturing

Course Description:

Introduces participants to the application of gauging and inspection using Geometric Dimensioning and Tolerancing (GDT). Students will identify inspection equipment and inspect GDT characteristics while experiencing their manufacturing implications. Variable Credit: 1-3 credits.

Type of Course: Career Technical Apprenticeship

Reason for the new course:

New Apprenticeship Trade

Can this course be repeated for credit in a degree?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Industrial Mechanics and Maintenance Technologies AAS and CPC

Are there prerequisites to this course?

Yes

Pre-reqs: APR-104MA

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

Yes

Have you consulted with the Dept Chair(s) of other program(s) regarding potential impact such as overlap, duplication, enrollment, impact, etc.?

Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

What was the result of the conversation with those department(s)?

Added head count to classes

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: No

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: MFG-106 Title: Advanced Applied Geometric Dimensioning and Tolera

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. state GDT principles proficiently,
2. identify correct advanced applications of GDT,
3. apply GDT to a company drawing in a team setting,
4. describe inspection procedures or gaging to verify GDT,
5. perform calculations of applicable tolerances,
6. perform calculations of tolerance stacks within the part,
7. design a gage that verifies part function or assembly requirements.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. GDT review.
2. Understanding datum requirements.
3. Unrepeatable datum references.
4. Implied datum sequences.
5. Common datum feature types.
6. Fully defined part features checklist.
7. Proper applications of coordinate tolerances.
8. Identify leaders of an assembly or functional requirement.
9. Identify followers of an assembly or functional requirement.
10. Advanced positional controls.
11. Composite positional controls.
12. Multiple segment positional controls.

13. Composite profile controls.
14. Multiple segment profile controls.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

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Section #1 General Course Information

Department: WAFE

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: Shellyt@clackamas.edu

Course Prefix and Number: APR - 111MA

 # Credits: 9

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 198
Lab (# of hours):
Total course hours: 198

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Machine Tool Fundamentals I

Course Description:

This course is an introduction to machine tool operation, precision measurement and engineering drawings. It also covers machine tool operations including drill presses, lathes and milling machines. The course includes internal and external threading. Variable Credit: 3-9 credits. May be repeated for up to 9 credits.

Type of Course: Career Technical Apprenticeship

Reason for the new course:

New Apprenticeship Trade

Can this course be repeated for credit in a degree?

Yes

Up to how many credits can this course be repeated to satisfy a degree requirement? 9

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Industrial Mechanics and Maintenance Technologies AAS and CPC

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: MFG-104, MFG-107, and MTH-050

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

Yes

Have you consulted with the Dept Chair(s) of other program(s) regarding potential impact such as overlap, duplication, enrollment, impact, etc.?

Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

What was the result of the conversation with those department(s)?

added head count to classes

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: No

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: MFG-111 Title: Machine Tool Fundamentals I

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

3 credits:
1.Identify personal protective safety equipment, and proper safe behavior, including machine specific safety procedures, necessary for safe conduct in the machine shop environment;
2.Calculate proper RPM, and feed rates for Lathes, milling machines, and drill presses for a variety of cutting tools;
3.Measure and document dimensions of machined parts through the proper use and handling of a variety of dimensional inspection instruments;
4.Describe the major components of a milling machine, describe advantages and disadvantages of different cutting tool materials, identify mill tool holders, and identify different cutting tools used on a milling machine;
5.Describe the major components of a lathe, describe advantages and disadvantages of different cutting tool materials, identify lathe tool holders, and identify different lathe tool geometries;
6.Name the different types of work holding devices that could be mounted on the spindle of a lathe.
6 credits:
1.Demonstrate the process for changing RPM and Feed Rate on a gear head lathe;
2.Describe the process for dialing in a 4 jaw chuck;
3.Explain the difference between Pitch and Lead of a thread, and apply mathematical formulas used in the single point cutting of a thread on a lathe;
4.Describe the purpose of, and when to engage the Half-Nut on a lathe;
5.Successfully set up, cut and inspect threads on a lathe;
6.Identify major types of Drilling Machines and the variety of drills, taps and support tooling used on them;
7.Demonstrate safe setup, operation, and proper work holding procedures on a drill press, mill and lathe;
8.Apply properly calculated speed and feed rates for a variety of cutting tools on mills and lathes;
9.Describe basic types of cutting fluid and when they should be used.
9 credits:
1.Describe a variety of saws used in industry and demonstrate safe setup and operating procedures when using the horizontal or vertical band saw;
2.Describe conditions that determine blade selection for a horizontal or vertical band saw;
3.Recognize different blade tooth configuration and geometry;
4.Name advantages and disadvantages of an abrasive saw and when it is best used;
5.Demonstrate the proper set up, implementation, and verification of tapping procedures;

6.Describe the proper cutting of external threads with a threading die;
7.Describe the safe and proper use of a pedestal grinder, and demonstrate through the sharpening of a High Speed Steel tool bits.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. 3 Credit:
a. Shop safety
b. Lathe, milling machine and drill press rpm calculations
c. Milling cutter rpm and feed rate calculations
d. Inch/millimeter conversions
e. The correct applications, reading, handling and storage of steel rules
f. How to read and measure parts with a Vernier, dial or digital caliper
g. Application and reading outside, inside and depth micrometers
h. Application of small hole gages, telescoping gages and parallel bars
i. Manual lathe use and application
j. Lathe controls and their function
k. Commonly used tool holders for lathes
l. Commonly used cutting tool for the lathe
m. Use of 3 & 4-jaw chucks on the lathe
n. Collets, face plates and drive plates for the lathe
2. 6 Credit:
a. Operation of the various lathe controls
b. Facing and center drilling on the lathe
c. Sixty-degree thread calculations
d. The setup and cutting of a sixty-degree external thread
e. In process inspection or Inspection of a completed sixty-degree external thread
f. The calculations for the cutting of a sixty-degree internal thread
g. The setting up and cutting of a sixty-degree internal thread
h. In process inspection or Inspection of a completed sixty-degree internal thread
i. The various types of drilling machines used by industry
j. The various types of drills used by industry
k. The hand grinding of a twist drill
l. The correct setup and operation of a drilling machine
m. The corrects application, setup and use of Counterboring, countersinking and spotfacing tools
3. 9 Credit:
a. The various types of saws used by industry
b. Safe setup and operation of the horizontal and vertical band saws
c. Applications and advantages and disadvantaged of the abrasive saw
d. How to prepare to setup and use the vertical band saw
e. Using the vertical band saw
f. Taps and tapping applications
g. Correct tapping methods
h. Reducing tap breakage and broken tap removal
i. Types and application of thread cutting dies
j. Shaft size prior the thread cutting with a die
k. Applications of pedestal grinders in the machine shop
l. Pedestal grinder safety

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Section #1 General Course Information

Department: WAFE

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: Shellyt@clackamas.edu

Course Prefix and Number: APR - 112MA

 # Credits: 9

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 198
Lab (# of hours):
Total course hours: 198

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Machine Tool Fundamentals II

Course Description:

This course is a continuation of machine tool operations. Covers set-up and operation of the vertical milling machine and boring techniques on the lathe. Includes surface grinding and selection of abrasive grinding wheels. Variable Credit: 3-9 credits. May be repeated for up to 9 credits.

Type of Course: Career Technical Apprenticeship

Reason for the new course:

New Apprenticeship Trade

Can this course be repeated for credit in a degree?

Yes

Up to how many credits can this course be repeated to satisfy a degree requirement? 9

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Industrial Mechanics and Maintenance Technologies AAS and CPC

Are there prerequisites to this course?

Yes

Pre-reqs: 6 credits of APR-111MA

Have you consulted with the appropriate chair if the pre-req is in another program?
Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

Yes

Have you consulted with the Dept Chair(s) of other program(s) regarding potential impact such as overlap, duplication, enrollment, impact, etc.?

Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

What was the result of the conversation with those department(s)?

added head count to classes

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: No

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: MFG-112 Title: Machine Tool Fundamentals II

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

3 credits:
1. identify the basic geometric dimensioning & tolerancing symbols relevant to machining projects,
2. describe how a positive or negative tool rake may affect the surface finish of a piece of material,
3. describe relationsship between high speed steel, carbide and the surface finishes obtained at different surface feet per minute speeds;
4. describe the two basic functions of cutting fluids,
5. identify four different types of cutting fluids,
6. describe the basic advantages of carbide cutting tools over that of high speed steel,
7. identify some of the variables to consider when selecting a carbide cutting tool,
8. describe the advantages and disadvantages of turning a part between centers,
9. name the various types of centers used in a lathe tailstock,
10. state how much material should be left on a part for a finish cut,
11. describe the result when on the work piece when the lathes centers are out of alignment,
12. name three method of aligning the centers on a lathe,
13. explain the chief advantage of boring over reaming in a lathe,
14. list five ways to eliminate chatter in a boring bar,
15. describe the rpm that a ream should rotate at,
16. describe how fast a ream should be feed into a piece of material,
17. describe how to eliminate chatter when parting off a piece of material in a lathe,
18. explain how to eliminate the problem of double impressions when knurling,
19. explain how to avoid producing a knurl where the metal is flaking off.

6 credits:
1. describe when a steady rest should be used on a lathe,
2. describe when a follow rest should be used on a lathe,
3. explain howa steady rest can be dialed in with a dial indicator,
4. explain how a steady rest can be used on a piece of square or rectangular material,
5. name five different types of translating screw threads,
6. give the included angle of an acme thread,
7. calculate the correct depth of an external acme thread,

8. define the pitch of a thread,
9. define the lead of a thread,
10. describe what a multiple lead thread is,
11. name three advantages of a multiple lead thread,
12. name the types of threads that can be produced as a multiple lead,
13. identify and explain the function of each the major components of the vertical milling machine,
14. correctly identify a variety of milling cutters used on the vertical milling machine and the application of where it should be used,
15. describe how to correctly setup a part on the vertical milling machine and describe the related tooling such a vices, parallel bars, screw jacks, hold down clamps associated with the setup;
16. calculate the correct rpm and feed rate for a milling cutter,
17. explain the differences, advantages and disadvantages between conventional and climb milling,
9 credits:
1. name some of the commonly used materials used to produce grinding wheels,
2. identify some of most basic wheel symbols specification used to specify information about grinding wheels,
3. name some of the “variable” factors that need to considered when selecting a grinding wheel,
4. describe what dressing a grinding wheel is and what it does for the grinding wheel,
5. describe what truing a grinding is and what it does for the grinding wheel,
6. describe the position of the grinding wheel dresser with regards to the grinding wheel,
7. describe the advantages of a built-in wheel dresser,
8. describe what a form dresser is and where it would be used,
9. describe how a grinding wheel is balanced,
10. name two types of wheel balancers,
11. name four types of grinding fluids,
12. describe the correct application of a grinding fluid when surface grinding,
13. name at least three methods of filtering waste material from grinding fluids,
14. name the major components of a surface grinder and their function,
15. name the most commonly used work holding device on a surface grinder,
16. name two additional work holding devices used on the surface grinder,
17. explain what is meant by the term “grinding ratio,”
18. describe some of the most common problems associated with surface grinding,
19. explain how to eliminate some of the most common problems associated with surface grinding.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. 3 Credit:
a. Basic geometric and dimensioning symbols.
b. How metal flow when being cut.
c. The different types of chips produced with a cutting tool.
d. The effect the surface feet per minute has on the materials surface finish.
e. The machinability index of various types of materials.
f. Different types of cutting fluids used by industry.
g. The appropriate application of each of the cutting fluids.
h. Methods of applying cutting fluids.
i. The various methods of filtering cutting fluids.
j. The benefits of filtration and reuse of the cutting fluids.
k. Applications for high speed steel and carbide.
l. Variable factors to consider when selecting a carbide cutting tool.
m. The ASA carbide tool and insert identification system.
n. Appropriate applications for turning a part between centers.
o. Setting up and machining a part between centers.
p. The different types of centers used in the lathes tailstock.
q. Mounting parts on tapered or expanding mandrels.
r. Inspecting a lathe for center misalignment.
s. Alignment of the lathes center.
t. Other lathe operations such as drilling, boring, reaming, tapping, parting off and knurling.
2. 6 Credit:
a. Basic geometric and dimensioning symbols.
b. Applications for using the steady rest on a lathe.
c. Applications for using a follow rest on a lathe.
d. How to correctly setup a steady or follow rest on a lathe.
e. How to center or dial in a steady rest on a lathe.
f. How to setup and turn irregular shaped material in a steady rest.
g. The different types of translating screw threads used by industry.
h. Acme, square, modified square and buttress thread calculations.
i. Understanding the function and application of multiple lead threads.
j. Understanding how to setup and cut a multiple lead external thread.
k. The major components of a knee type vertical milling machine and their function.
l. The various types of milling cutters used on the vertical milling machine.
m. The different types of cutter holders used on the vertical milling machine.
n. How to (square) or dial the head of a vertical milling machine in perpendicular to its table.
o. How to dial a part in so it is parallel or perpendicular to the axis of the table.
p. How to correctly us and edge finder.
q. How to dial in the center of a bore on a part.
r. How to correctly calculating the feed and speed of milling cutters.
s. How to mill out a cavity on a part on the vertical milling machine.
t. The various methods of milling an angle on a part.
u. Applications for using a rotary table or indexing head.
3. 9 Credit:
a. The various types of grinding machines used in industry.
b. The different types of commonly used grinding wheel materials.
c. Review of common grinding wheel specifications.
d. Some of the variable factors to consider when selecting a grinding wheel.
e. The difference between dressing and truing a grinding wheel.
f. When to true and dress a grinding wheel.
g. How to true and dress a grinding wheel.
h. What is form dressing of a grinding wheel, and how it is performed.

i. When does a grinding wheel need to be balanced, and how is it performed.
j. Advantages and disadvantages of the two different types of wheel balancers.
k. The different types of grinding fluids used by industry.
l. The correct application of grinding fluids on grinding wheels.
m. The various methods and benefits of grinding fluid filtration.
n. The major components of the horizontal reciprocating grinder and their function.
o. The most widely used work holding devices for the surface grinder.
p. The difference between electro-permanent magnetic chuck and the permanent magnetic chuck.
q. How to reinstall a magnetic chuck if it has been removed from the surface grinder.
r. What are laminated accessories, and how are they used in work holding on surface grinders.
s. Setups and operations on the surface grinder.
t. The general cause of surface grinding problems.
u. Specific problems and solutions in surface grinding.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Section #1 General Course Information

Department: WAFE

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: Shellyt@clackamas.edu

Course Prefix and Number: APR - 201MA

 # Credits: 4

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 88
Lab (# of hours):
Total course hours: 88

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: CNC I: Set-up and Operation

Course Description:

A hands-on class will teach students how to set-up and operate Computer Numerical Control (CNC) milling and turning centers. Includes an introduction to G&M-code programming. Designed for persons with little or no previous experience.

Type of Course: Career Technical Apprenticeship

Reason for the new course:

New Apprenticeship Trade

Can this course be repeated for credit in a degree?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Industrial Mechanics and Maintenance Technologies AAS and CPC

Are there prerequisites to this course?

Yes

Pre-reqs: 6 credits of APR-111MA

Have you consulted with the appropriate chair if the pre-req is in another program?
Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: MFG-109 and MTH-080

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

Yes

Have you consulted with the Dept Chair(s) of other program(s) regarding potential impact such as overlap, duplication, enrollment, impact, etc.?

Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

What was the result of the conversation with those department(s)?

added head count to classes

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: No

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: MFG-201 Title: CNC I: Set-up and Operation

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. appreciate how CNC machine tools have benefited industry by increasing productivity and reducing product cost,
2. understand the control system of a CNC machine,
3. use trigonometry to solve programming problems,
4. identify and use standardized G and M control codes specific to FANUC control systems,
5. transfer programs to and from a CNC machine tool using communication software,
6. install work-holding hardware and set-up machine work-zeros,
7. install tooling into a CNC machine,
8. touch off tools and set-up tool height offsets,
9. perform 1st runs on the CNC programs for the purpose of proving them out
10. work safely around automated manufacturing equipment.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. History, wages and controls.
2. Cartesian coordinate system.
3. Parameters, reference & home.
4. Machine & workpiece coordinates.
5. Tool length & radius compensation.
6. CNC tooling basics.
7. Machine set-up and operation.
8. G & M-codes.

9. Canned cycles.
10. Projects.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: WAFE

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: Shellyt@clackamas.edu

Course Prefix and Number: APR - 202MA

 # Credits: 4

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 88
Lab (# of hours):
Total course hours: 88

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: CNC II: Programming & Operation

Course Description:

This course emphasizes the writing of G&M machine codes. Students will learn advanced programming and operations of CNC milling centers and basic programming, set-up, and operation of CNC turning centers.

Type of Course: Career Technical Apprenticeship

Reason for the new course:

New Apprenticeship Trade

Can this course be repeated for credit in a degree?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Industrial Mechanics and Maintenance Technologies AAS and CPC

Are there prerequisites to this course?

Yes

Pre-reqs: APR-201MA

Have you consulted with the appropriate chair if the pre-req is in another program?
Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

Yes

Have you consulted with the Dept Chair(s) of other program(s) regarding potential impact such as overlap, duplication, enrollment, impact, etc.?

Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*

What was the result of the conversation with those department(s)?

added head count to classes

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: No

When do you plan to offer this course?

✓ Not every term

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: MFG-202 Title: CNC II: Programming and Operation

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. describe how efficiencies are gained through the use of CNC technology to provide increased productivity and reduced product cost,
2. use trigonometry to solve programming problems,
3. identify and use control codes specific to FANUC and OKUMA control systems,
4. write G&M code programs from scratch,
5. interpret a Numerical Control (NC) program and determine what machining operations are taking place,
6. transfer programs to and from a CNC machine tool using communication software,
7. install work-holding hardware and set-up machine work-zeros,
8. install tooling into CNC milling and turning machines,
9. touch off tools and set-up tool offsets on CNC milling and turning machines,
10. perform first runs on the CNC programs for the purpose of prove out.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. CNC mill
a. Sub-programming
b. 4TH axis programming
c. Set-up
d. Operation
2. CNC lathe
a. Programming
b. Set-up
c. Operation

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

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Section #1 General Course Information

Department: WAFE

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: shellyt

Course Prefix and Number: APR - 108LM

 # Credits: 1

Contact hours

Lecture (# of hours): 10
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 10

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: ARC Flash Electrical Safety

Course Description:

This electrical safety training course provides the student with a basic understanding of safe workplace practices from industry standards and recommended practices, including NFPA 70E, IEEE, NEC, NESC and OSHA requirements.

Type of Course: Career Technical Apprenticeship

Can this course be repeated for credit in a degree?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): AAS Electrical

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?
Yes (A 'Yes' certifies you have talked with the librarian and have received approval.)*

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: No

When do you plan to offer this course?

✓ Not every term

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1) describe the hazards of working with and around electricity including arc flash and electrical shock,
2) identify, reduce or eliminate risks and hazards around electricity;
3) review industry standards and recommended practices and apply selected NFPA 70E tables,
4) describe the role of proper system installation and maintenance for worker safety.

This course does not include assessable General Education outcomes.

Major Topic Outline:

Electrical Hazards including arc flash, blast and thermal, shock, injuries, statistics, causes and consequences.
Case studies and practical examples.
Mandates, standards, and recommended practices, NFPA 70E®, NFPA 70B®, NEC® and NESC®, IEEE®, OSHA 1910 Subpart I, S and R and 1926 subpart K (as applicable), other (ASTM, ANSI, etc.)
Installation practices essential for personnel safety
Electrical lockout/tagout
Test equipment and meter safety
Arc flash hazard analysis
Arc flash and shock boundaries
System labeling
Personal protective equipment, selection, application, limitations and maintenance, industry standards
Energized work permits
Justification for energized work
Tools ane equipment
Training requirements
Safety policies and programs
Risk assessment and maintenance

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Section #1 General Course Information

Department: Apprenticeship

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: shellyt

Course Prefix and Number: APR - 236IEL

 # Credits: 1

Contact hours

Lecture (# of hours):
Lec/lab (# of hours):
Lab (# of hours): 36
Total course hours: 36

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Motors & Controls Lab

Course Description:

This course is the second of two classes required to teach students the basics of Basic Motor Controls, reversing starters, timers, counters and sensing devices and solid state soft starts. Required: Student Petition.

Type of Course: Career Technical Apprenticeship

Reason for the new course:

Lab portion of series.

Can this course be repeated for credit in a degree?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Electrician Apprenticeship Technologies AAS and CC

Are there prerequisites to this course?

Yes

Pre-reqs: APR-236IE

Have you consulted with the appropriate chair if the pre-req is in another program?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations:

Requirements: Student Petition

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F Only

Audit: No

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. identify components of motor circuits,
2. identify components of motor controls,
3. properly size motor circuits per NEC Article 430,
4. draw ladder diagrams,
5. explain how motor controls work,
6. explain how to wire basic motor controls.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Orientation, NEC Article 430 layout.
2. General principles of motor controls.
3. Symbols and schematic diagrams, ladder diagram basics.
4. Starters, overloads, and relays.
5. Timer relays, pressure sensors, float switches.
6. Design multi-motor circuits and overcurrent.
7. Design control circuits for a specific scenario with ladder diagram.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Section #1 General Course Information

Department: DASC

Submitter

First Name: Robert
Last Name: Keeler
Phone: 9714002686
Email: robertk@clackamas.edu

Course Prefix and Number: EFA - 101J

 # Credits: 2

Contact hours

Lecture (# of hours): 22
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 22

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Introduction to the Social Sciences, Human Services and Criminal Justice

Course Description:

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.

Type of Course: Lower Division Collegiate

Reason for the new course:

Educational Focus Area course for undecided students

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Fall**
✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. identify and explain the different academic and career opportunities in the diverse fields of the Social Sciences, Human Services and Criminal Justice;
2. distinguish the approaches and methods used in these different fields to investigate problems, construct knowledge and serve society;
3. reflect on personal interests to clarify academic and career goals and create a plan for future study.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Overviews of academic and career opportunities in the diverse fields of the Social Sciences, Human Services and Criminasl Justice.
2. Examples, demonstrations, case studies and real life scenarios in the diverse fields of the Social Sciences, Human Services and Criminal Justice.
3. Reflections on personal and career goals relating to the diverse fields of the Social Sciences, Human Services and Criminal Justice and how they relate to one another.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general elective**
:

First term to be offered:

Specify term: Fall 2020

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: EFA

Submitter

First Name: Matthew
Last Name: LaForce
Phone: 503-594-3148
Email: laforce@clackamas.edu

Course Prefix and Number: EFA - 101N

 # Credits: 1

Contact hours

Lecture (# of hours): 11
Lec/lab (# of hours):
Lab (# of hours):
Total course hours: 11

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Introduction to Natural Resources

Course Description:

Course will highlight exciting career options within the natural resources educational focus area. Students will learn about academic disciplines within horticulture, arboriculture, landscaping, organic farming, wildland fire, forestry and water and environmental technology.

Type of Course: Lower Division Collegiate

Reason for the new course:

EFA course

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. Explain the different career options within the natural resources disciplines,
2. Match personal environmental interests to existing natural resource programs, identify academic goals and create a plan for future study.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Overviews of careers and educational opportunities in each natural resource discipline.
2. Reflection on personal environmental interests related to natural resources programs.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

Identify comparable course(s) at OUS school(s)

How does it transfer? (Check all that apply)

✓ **general elective**
✓ **other (provide details)**: EFA course that is part of Guided Pathways

First term to be offered:

Next available term after approval
:

Clackamas Community College

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Date approved: December 6, 2013 Certified General Education Area(s): Health & Physical Education

Section #1 General Course Information

Department: Health/PE

Submitter

First Name: Tracy
Last Name: Nelson
Phone: 3274
Email: tracyn

Course Prefix and Number: PE - 185

 # Credits: 1

Contact hours

Lecture (# of hours):
Lec/lab (# of hours):
Lab (# of hours): 33
Total course hours: 33

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Physical Education

Course Description:

Various activity classes which may include aikido, aerobic dance, ballet, basketball, conditioning, cross training, golf, karate, racquetball, rock climbing, self-defense, soccer, softball, swimming, swing dance, tai chi, tennis, volleyball, weight training, yoga, and zumba.

Type of Course: Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

Yes

Check which General Education requirement:

Is this course part of an AAS or related certificate of completion?

Yes

Name of degree(s) and/or certificate(s): Multiple AAS & Certificate Degrees

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

Yes

Recommendations: Current physical examination before enrolling

Requirements:

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

Yes

Area: Physical Education/Health

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

✓ **Summer**
✓ **Fall**
✓ **Winter**
✓ **Spring**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. demonstrate the techniques and rules of the specific activity,
2. comprehend and increase knowledge base of the specific activity,
3. improve current fitness level by the end of the term through the 3 hours of class time each week.

AAOT/ASOT GENERAL EDUCATION OUTCOMES

AAOT/ASOT GENERAL EDUCATION OUTCOMES

COURSE OUTLINE MAPPING CHART

Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
- Mark "S" if this course substantially addresses the outcome. More than one course is required for the outcome to be completely addressed. Students who successfully complete all of the required courses are likely to have attained this learning outcome.
- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as part of the class, but the class is not a primary means for attaining the outcome and assessment for general education purposes may not be necessary.

As a result of completing the AAOT/ASOT general education requirements, students will be able to:

WR: Writing Outcomes

1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.
2. Locate, evaluate, and ethically utilize information to communicate effectively.
3. Demonstrate appropriate reasoning in response to complex issues.

SP: Speech/Oral Communication Outcomes

1. Engage in ethical communication processes that accomplish goals.
2. Respond to the needs of diverse audiences and contexts.
3. Build and manage relationships.

MA: Mathematics Outcomes:

1. Use appropriate mathematics to solve problems.
2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

AL: Arts and Letters Outcomes

1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.
2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

SS: Social Science Outcomes

1. Apply analytical skills to social phenomena in order to understand human behavior.
2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

SC: Science or Computer Science Outcomes

1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.
2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.
3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

Outcomes Assessment Strategies:

:

Major Topic Outline:

Example major topics:
1. Goal setting.
2. Strength training.
3. Endurance training.
4. Flexibility development.
5. Technique development.
6. Knowledge development.
7. Competitive opportunities.

Does the content of this class relate to job skills in any of the following areas:

1. Increased energy efficiency	**No**
2. Produce renewable energy	**No**
3. Prevent environmental degradation	**No**
4. Clean up natural environment	**No**
5. Supports green services	**No**

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

1. Is there an equivalent lower division course at the University?
2. Will a department accept the course for its major or minor requirements?
3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

✓ **PSU (Portland State University)**

✓ **OSU (Oregon State University)**

Identify comparable course(s) at OUS school(s)

Activity classes offered in their Physical Education department.

How does it transfer? (Check all that apply)

✓ **general elective**
:

Provide evidence of transferability: (minimum one, more preferred)

First term to be offered:

Next available term after approval
:

Program Amendments

May 1, 2020

Program	Implementation
AS, Civil/Environmental Engineering, PSU	2020/SU
AS, Electrical/Computer Engineering, PSU	
AS, Engineering, George Fox	
AS, Mechanical Engineering, PSU	
Electrician Apprenticeship Technologies AAS	
Electrician Apprenticeship Technology CC	

Oregon Department of Community Colleges and Workforce Development
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FAX: (503) 378-5156

COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

This form should be completed electronically and the boxes will expand to accommodate text.

College:	Clackamas Community College	Date	

CAREER LEARNING AREA	
☐ Ag, Food & Natural Resource Systems	☐ Health Services
☐ Arts, Information & Communications	☐ Human Resources
☐ Business & Management	√ Industrial & Engineering Systems

PROGRAM INFORMATION

APPROVED Program Title	***APPROVED*** CIP Code (Include 7th & 8th digits used for OCCURS reporting.)			***APPROVED*** Recognition Award	Current Credits
	6-digit CIP	*7th digit*	*8th digit*		
AS Area of Emphasis Title: **Engineering – Civil/Environmental** AS.PSUCIVENVENGR				**Associate of Applied Science Area of Emphasis**	**100-104**
Partnering Institution Name **Portland State University**					

Last amendment approved on 02.07.20

TYPE OF PROGRAM AMENDMENT

(Check **ALL** That Apply)

☐ **New Agreement**	☐ **Curriculum Revision**	☐ **Revision in Program Credits**	
		***Proposed* Total Credits:**	**95-100**
☐ ***SUSPENSION* of Program**	*Reason for Suspension:*		
Suspension Effective Date:			

CURRICULUM AMENDMENT

[List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.
For a New Program, complete the Proposed Curriculum section only.]

CURRENT CURRICULUM 19-20 [List entire curriculum as last approved]				***PROPOSED CURRICULUM 20-21*** [List only course(s) to be amended]			
Course	**Title**	**Hours**	**Credits**	**Course**	**Title**	**Hours**	**Credits**
Program Requirements – First Year							
Fall Term							
CH-221	General Chemistry	77	5				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
Winter Term							
BI-204*	Elementary Microbiology	66	4				
CH-222	General Chemistry	77	5				
ENGR-112	Engineering Programming	33	3				
MTH-252	Calculus II	55	5				
Spring Term							
COMM-111	Public Speaking	44	4				
GIS-201	Introduction to Geographic Information Systems	66	3	Move to Term 4			
MTH-254	Vector Calculus	55	5				
WR-227	Technical Report Writing	44	4				
--	Arts & Letters elective		4				
Program Requirements – Second Year							
Fall Term							
ENGR-211	Statics	44	4				
PH-211	General Physics with Calculus	70	5				
--	Arts & Letters elective		4	REMOVE			
--	Social Science elective		4				
				GIS-201	Introduction to Geographic Information Systems	66	3
Winter Term							
CDT-103	Computer-Aided Drafting I	66	3				
ENGR-212	Dynamics	44	4				
MTH-256	Differential Equations	44	4				
PH-212	General Physics with Calculus	70	5				
Spring Term							
ENGR-213	Strength of Materials	44	4				
MTH-261	Linear Algebra	44	4				
PH-213	General Physics with Calculus	70	5				
--	Arts & Letters or Social Science elective		4	--	Arts & Letters or Social Science elective		3-4
Catalog Note:							
*Environmental Track only							
Arts & Letters Electives							
All courses in **ASL, COMM, ENG, FR, GER, HUM, PHL, SPN, WR**. Note that native speakers should only take advanced (300 level or above) foreign language courses. Non-performance based courses in art, journalism, music, and theater also meet this requirement. The accepted courses at CCC are: **ART**-101, 205, 206; **J**-211; **MUS**-105, 141, 205, 206, 230; **TA**-101, 102;							
Social Science Electives							

All courses in **ANT, EC, GEO, HST, PS, PSY, SOC, SSC,** and **WS.**					
Recommended:					
Recommended: Civil Engineers should take Plane Surveying (CE-211/CS-212) at PSU before beginning their junior year at PSU. The course is offered in the spring and summer terms at PSU. It is also recommended that a civil/environmental engineering student complete one additional Arts & Letters or Social Science elective.					
TOTAL *CURRENT* CREDITS:	100-104	**TOTAL *PROPOSED* CREDITS:**		95-100	
College Contact	Eric Lee	**Telephone No.**	6163		
E-Mail Address		**Fax No.**			
Chief Academic Officer *or* CTE Dean Signature		**Date**	**4/23/20**		

Oregon Department of Community Colleges and Workforce Development
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COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

This form should be completed electronically and the boxes will expand to accommodate text.

College:	Clackamas Community College	Date	

CAREER LEARNING AREA	
☐ Ag, Food & Natural Resource Systems	☐ Health Services
☐ Arts, Information & Communications	☐ Human Resources
☐ Business & Management	√ Industrial & Engineering Systems

PROGRAM INFORMATION

APPROVED Program Title	***APPROVED*** CIP Code (Include 7th & 8th digits used for OCCURS reporting.)			***APPROVED*** Recognition Award	Current Credits
	6-digit CIP	*7th digit*	*8th digit*		
AS Area of Emphasis Title: **Engineering – Electrical/Computer** AS.PSUELECCOMPENGR				**Associate of Applied Science Area of Emphasis**	**101-106**
Partnering Institution Name **Portland State University**					

Last amendment approved on 02.07.20

TYPE OF PROGRAM AMENDMENT

(Check **ALL** That Apply)

☐ **New Agreement**	☐ **Curriculum Revision**	☐ **Revision in Program Credits**	
		Proposed **Total Credits:**	**100-106**
☐ ***SUSPENSION*** **of Program**	*Reason for Suspension:*		
Suspension Effective Date:			

CURRICULUM AMENDMENT

[List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.
For a New Program, complete the Proposed Curriculum section only.]

CURRENT CURRICULUM 19-20 [List entire curriculum as last approved]				***PROPOSED CURRICULUM 20-21*** [List only course(s) to be amended]			
Course	**Title**	**Hours**	**Credits**	**Course**	**Title**	**Hours**	**Credits**
Program Requirements – First Year							
Fall Term							
CH-221	General Chemistry	77	5				
CS-161	Computer Science I	44	4				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
Winter Term							
CS-162	Computer Science II	44	4				
ENGR-112	Engineering Programming	33	3				
ENGR-171	Digital Logic	66	4				
MTH-252	Calculus II	55	5				
Spring Term							
COMM-111	Public Speaking	44	4				
ENGR-271	Digital Systems	66	4				
MTH-261	Linear Algebra	44	4				
WR-121	English Composition	44	4				
Summer Term							
WR-122 Or WR-227	English Composition or Technical Report Writing	44	4				
Program Requirements – Second Year							
Fall Term							
ENGR-221	Electrical Circuit Analysis I	33	4				
MTH-254*	Vector Calculus	55	5				
PH-211	General Physics with Calculus	70	5				
--	Arts & Letters elective		4				
Winter Term							
ENGR-222	Electrical Circuit Analysis II	66	4				
MTH-256	Differential Equations	44	4				
PH-212	General Physics with Calculus	70	5				
--	Social Science elective		4				
Spring Term							
ENGR-223	Electrical Circuit Analysis III	66	4				
MTH-253	Calculus III	55	5				
PH-213	General Physics with Calculus	70	5				
--	Arts & Letters or Social Science elective		4	--	Arts & Letters or Social Science elective		3-4
Catalog Notes							
*Electrical Track only							
Arts & Letters or Social Science Electives							
Arts & Letters							
All courses in **ASL, COMM, ENG, FR, GER, HUM, PHL, SPN, WR**. Note that native speakers should only take advanced (300 level or above) world language courses. Non-performance based courses in art, journalism, music, and theater also meet this requirement. The accepted courses at CCC are: **ART**-101, 205, 206; **J**-211; **MUS**-105, 141, 205, 206, 230; **TA**-101, 102;							
Social Science							

All courses in **ANT, EC, GEO, HST, PS, PSY, SOC, SSC,** and **WS.**			
TOTAL *CURRENT* CREDITS:	101-106	**TOTAL *PROPOSED* CREDITS:**	100-106
College Contact		**Telephone No.**	
E-Mail Address		**Fax No.**	
Chief Academic Officer *or* CTE Dean Signature		**Date**	**4/23/20**

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COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

This form should be completed electronically and the boxes will expand to accommodate text.

College:	Clackamas Community College	Date	

CAREER LEARNING AREA	
☐ Ag, Food & Natural Resource Systems	☐ Health Services
☐ Arts, Information & Communications	☐ Human Resources
☐ Business & Management	√ Industrial & Engineering Systems

PROGRAM INFORMATION

APPROVED Program Title	***APPROVED*** CIP Code (Include 7th & 8th digits used for OCCURS reporting.)			***APPROVED*** Recognition Award	Current Credits
	6-digit CIP	*7th digit*	*8th digit*		
AS Area of Emphasis Title: Engineering AS.GFENGINEER				**Associate of Applied Science Area of Emphasis**	**105-106**
Partnering Institution Name George Fox University					

Last amendment approved on 01.18.19

TYPE OF PROGRAM AMENDMENT

(Check **ALL** That Apply)

☐ New Agreement	☐ Curriculum Revision	☐ Revision in Program Credits	
		Proposed Total Credits:	101-102
☐ ***SUSPENSION*** of Program	*Reason for Suspension:*		
Suspension Effective Date:			

CURRICULUM AMENDMENT

[List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.
For a New Program, complete the Proposed Curriculum section only.]

CURRENT CURRICULUM 19-20 [List entire curriculum as last approved]				***PROPOSED CURRICULUM 20-21*** [List only course(s) to be amended]			
Course	**Title**	**Hours**	**Credits**	**Course**	**Title**	**Hours**	**Credits**
Program Requirements – First Year							
Fall Term							
CH-221	General Chemistry	77	5				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
				WR-121	English Composition	44	4
Winter Term							
CH-222	General Chemistry	77	5				
ENGR-112	Engineering Programming	33	3				
MTH-252	Calculus II	55	5				
--	Engineering Elective		4	Move to Term 6			
				WR-122	English Composition	44	4
Spring Term							
ENGR-115	Engineering Graphics	33	3				
MTH-243	Statistics I	44	4	REMOVE			
MTH-253	Calculus III	55	5	Move to Term 6			
WR-121	English Composition	44	4	Move to Term 1			
				EC-201 Or EC-202	Principles of Economics: MICRO or Principles of Economics: MACRO	44	4
				MTH-254	Vector Calculus	55	5
				--	Intercultural Experience Elective		4
Summer Term							
EC-201 Or EC-202	Principles of Economics: MICRO or Principles of Economics: MACRO	44	4	Move to Term 3			
WR-122	English Composition	44	4	Move to Term 2			
Program Requirements – 2nd Year							
Fall Term							
MTH-254	Vector Calculus	55	5	Move to Term 3			
PH-211	General Physics with Calculus	70	5				
--	Engineering Elective		8	--	Engineering Elective		4
				--	History elective		4
				COMM-111	Public Speaking	44	4
Winter Term							
COMM-111	Public Speaking	44	4	Move to Term 4			
MTH-256	Differential Equations	44	4				
PH-212	General Physics with Calculus	70	5				
--	Engineering Elective		3-4	--	Engineering Elective		8
Spring Term							
MTH-261	Linear Algebra	44	4				
PH-213	General Physics with Calculus	70	5				
--	History elective		4	Move to Term 4			
--	Intercultural Experience Elective		4	Move to Term 3			
				MTH-253	Calculus III	55	5

				--	Engineering Elective		3-4
Electives							
Electrical & Computer Engineering majors:							
ENGR-171	Digital Logic	66	4				
ENGR-221	Electrical Circuit Analysis I	33	4				
ENGR-222	Electrical Circuit Analysis II	66	4				
ENGR-271	Digital Systems	66	4				
Biomedical, Civil, and Mechanical Engineering majors:							
ENGR-211	Statics	44	4				
ENGR-212	Dynamics	44	4				
ENGR-231	Properties of Materials	66	4				
HPE-295	Health & Fitness for Life	60	3				
Intercultural Experience Elective:							
Choose one of the following: **FR/GER/SPN**-101, 102, 103, 201, 202, 203; **ANT**-103; **COMM**-140; **ENG**-107, 108, 109; **R**-210;							
History Elective:							
History Elective: Choose one of the following: **HST**-101, 102, 103, 201, 202, 203; **PS**-205;							
TOTAL *CURRENT* CREDITS:			105-106	**TOTAL *PROPOSED* CREDITS:**			101-102
College Contact				**Telephone No.**			
E-Mail Address				**Fax No.**			
Chief Academic Officer *or* CTE Dean Signature						**Date**	**4/23/20**

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COMMUNITY COLLEGE ASSOCIATE OF SCIENCE AREA OF EMPHASIS AMENDMENT FORM

This form should be completed electronically and the boxes will expand to accommodate text.

College:	Clackamas Community College	Date	

CAREER LEARNING AREA	
☐ Ag, Food & Natural Resource Systems	☐ Health Services
☐ Arts, Information & Communications	☐ Human Resources
☐ Business & Management	√ Industrial & Engineering Systems

PROGRAM INFORMATION

APPROVED Program Title	***APPROVED*** CIP Code (Include 7th & 8th digits used for OCCURS reporting.)			***APPROVED*** Recognition Award	Current Credits
	6-digit CIP	*7th digit*	*8th digit*		
AS Area of Emphasis Title: **Engineering – Mechanical** AS.PSUMECHENGR				**Associate of Applied Science Area of Emphasis**	**101**
Partnering Institution Name **Portland State University**					

Last amendment approved on 02.07.20

TYPE OF PROGRAM AMENDMENT

(Check **ALL** That Apply)

☐ New Agreement	☐ Curriculum Revision	☐ Revision in Program Credits	
		Proposed Total Credits:	100-101
☐ ***SUSPENSION*** of Program	*Reason for Suspension:*		
Suspension Effective Date:			

CURRICULUM AMENDMENT

[List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.
For a New Program, complete the Proposed Curriculum section only.]

CURRENT CURRICULUM 19-20 [List entire curriculum as last approved]				***PROPOSED CURRICULUM 20-21*** [List only course(s) to be amended]			
Course	**Title**	**Hours**	**Credits**	**Course**	**Title**	**Hours**	**Credits**
Program Requirements – First Year							
Fall Term							
CH-221	General Chemistry	77	5				
ENGR-111	Introduction to Engineering	33	3				
MTH-251	Calculus I	55	5				
WR-121	English Composition	44	4				
Winter Term							
CH-222	General Chemistry	77	5				
ENGR-112	Engineering Programming	33	3				
ENGR-231	Properties of Materials	66	4				
MTH-252	Calculus II	55	5				
Spring Term							
COMM-111	Public Speaking	44	4				
ENGR-115	Engineering Graphics	33	3				
MTH-254	Vector Calculus	55	5				
WR-122 Or WR-227	English Composition or Technical Report Writing	44	4	REMOVE			
				--	Arts & Letters or Social Science elective		4
Program Requirements – Second Year							
Fall Term							
ENGR-211	Statics	44	4				
MTH-261	Linear Algebra	44	4				
PH-211	General Physics with Calculus	70	5				
--	Arts & Letters elective		4				
Winter Term							
ENGR-212	Dynamics	44	4				
MTH-256	Differential Equations	44	4				
PH-212	General Physics with Calculus	70	5				
--	Social Science elective		4				
Spring Term							
ENGR-201	Electrical Fundamentals	66	4				
ENGR-213	Strength of Materials	44	4				
PH-213	General Physics with Calculus	70	5				
--	Arts & Letters or Social Science elective		4	--	Arts & Letters or Social Science elective		3-4
Arts & Letters or Social Science Electives							
Arts & Letters							
All courses in **ASL, COMM, ENG, FR, GER, HUM, PHL, SPN, WR**. Note that native speakers should only take advanced (300 level or above) world language courses. Non-performance based courses in art, journalism, music, and theater also meet this requirement. The accepted courses at CCC are: **ART**-101, 205, 206; **J**-211; **MUS**-105, 141, 205, 206, 230; **TA**-101, 102;							
Social Science							
All courses in **ANT, EC, GEO, HST, PS, PSY, SOC, SSC,** and **WS.**							

Catalog Notes:					
Optional: While not required for the AS degree, mechanical engineering students may complete additional coursework at CCC that will meet requirements for the Bachelor of Science degree at Portland State University. Additional courses include (1) One additional Arts & Letters or Social Science elective and (2) Approved Science Elective: Any minimum 4 credit course from Biology, Chemistry, Environmental Science, Geology, or Physics.					
TOTAL *CURRENT* CREDITS:	101	**TOTAL *PROPOSED* CREDITS:**			100-101
College Contact		**Telephone No.**			
E-Mail Address		**Fax No.**			
Chief Academic Officer *or* CTE Dean Signature			**Date**	**4/23/20**	

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COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text.
Current instructions, forms, handouts and other useful resources are located at
http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA	
☐ Ag, Food & Natural Resource Systems	☐ Health Services
☐ Arts, Information & Communications	☐ Human Resources
☐ Business & Management	x Industrial & Engineering Systems

PROGRAM INFORMATION

APPROVED Program Title (For Official Program Title, refer to your directory at http://www.ode.state.or.us/search/results/?id=232)	***APPROVED*** CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP	7th digit	8th digit	***APPROVED*** Recognition Award	Current Credits
Parent Program Electrician Apprenticeship Technologies SAAS	**46.0301**	**I**	*	☐ **Statewide AAS (90-108 credits)**	**90-101**
Apprenticeship Area: Inside Electrician (IE) Limited Energy (LE) Lineman (UL) Meterman (UM) Wireman (UW) Limited Maintenance Electrician (LME) Line Estimator (UE)	AAS.ELECTRICIANIE AAS.ELECTRICIANLE AAS.ELECTRICIANUL AAS.ELECTRICIANUM AAS.ELECTRICIANUW AAS.ELECTRICIANLME AAS.ELECTRICIANUE			☐	
Related Certificates: Electrician Apprenticeship Technologies SCC1 Limited License Electrician Apprenticeship Technologies SCPC				☐	

****Enter name of base degree in 'AAS Title' box**

Last amendment approved on 2/7/20

TYPE OF PROGRAM AMENDMENT

(Check **ALL** That Apply)

New Program++ Title Change for Program	Curriculum Revision	☐ Revision in Program Credits
		Proposed **Total Credits:**
Proposed **AAS Title:**		
Proposed **OPTION Title:**		
Proposed **Certificate Title:**		
☐ ***SUSPENSION*** **of Program**	*Reason for Suspension:*	

Suspension Effective Date:	

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

CURRICULUM AMENDMENT

[List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.
For a New Program, complete the Proposed Curriculum section only.]

CURRENT CURRICULUM 19-20 [List entire curriculum as last approved]				***PROPOSED CURRICULUM 20-21*** [List only course(s) to be amended]			
Course	**Title**	**Hours**	**Credits**	**Course**	**Title**	**Hours**	**Credits**
APR000	Apprenticeship-Credit for Prior Certification		22				
APR1000	**Computation Related Instruction**		3-4				
APR2000	**Communication Related Instruction**		3-4				
APR3000	**Human Relations Related Instruction**		3-4				
PEHREQ000	**PE/Health Related Instruction**		1-3				
APRIE000	**Apprenticeship-Inside Electrician (IE)**		**48**	**APRIE000**	**Apprenticeship-Inside Electrician (IE)**		**46**
--	Inside Electrician (IE) Electives		10-5	--	Inside Electrician (IE) Electives		12-7
APR-125IE	DC Theory	36	3				
APR-134IE	Residential Wiring I	36	3				
APR-135IE	Residential Wiring II	36	3				
APR-136IE	Electrical Design I	36	3				
APR-145IE	Grounding & Bonding	36	3				
APR-155IE	Motors & Transformers	36	3				
APR-165IE	AC Theory	36	3				
APR-175IE	Blueprint Reading for Construction Trades	36	3	REMOVE			
APR-185IE	Electrical Systems	36	3				
APR-235IE	Special Installations	36	3				
APR-236IE	Motors & Controls	36	3				
APR-237IE	Electrical Design II	36	3				
APR-245IE	NEC Analysis I	36	3				
APR-255IE	NEC Analysis II	36	3				
APR-265IE	NEC Analysis III	36	3				
APR-275IE	NEC Analysis IV	36	3				
				APR-236IEL	Motors & Controls Lab	36	1
APRLE000	**Apprenticeship-Limited Energy (LE)**		**36**				
--	Limited Energy (LE) Electives		22-17				
APR-111LE	Residential Technologies	48	4				
APR-112LE	Basic Trade, Code & Safety	48	4				
APR-113LE	Specialized Control Systems	48	4				
APR-114LE	Data Communications	48	4				
APR-115LE	Amplified Systems	48	4				
APR-116LE	Security Systems	48	4				
APR-217LE	Integrated Systems	48	4				
APR-218LE	Fire Alarm Systems	48	4				
APR-219LE	ADA & Code	48	4				

APRUL000	**Apprenticeship-Lineman (UL)**		**62**				
APR-111UL	Outside Electrical Basic Theory I	55	5				
APR-112UL	Outside Electrical Basic Theory II	55	5				
APR-113UL	Outside Electrical Basic Theory III	55	5				
APR-115UL	Initial Pole Yard Training	80	4				
APR-116UL	Six Month Pole Yard Review Training	40	2				
APR-118UL	Transformer Connections I	24	1				
APR-121UL	Outside Electrical Fundamental Theory I	55	5				
APR-122UL	Outside Electrical Fundamental Theory II	55	5				
APR-123UL	Outside Electrical Fundamental Theory III	55	5				
APR-125UL	Hot Stick Training	80	4				
APR-126UL	Troubleman Training	80	4				
APR-128UL	Transformer Connections II	24	1				
APR-138UL	Transformer Connections III	24	1				
APR-231UL	Outside Electrical Advanced Theory I	55	5				
APR-232UL	Outside Electrical Advanced Theory II	55	5				
APR-233UL	Outside Electrical Advanced Theory III	55	5				
APRUM000	**Apprenticeship-Meterman (UM)**		**59**				
APR-110UM	Initial Meterman Training	80	4				
APR-111UM	Metering: Basics I	55	5				
APR-112UM	Metering: Basics II	55	5				
APR-113UM	Metering: Basics III	55	5				
APR-115UW	Substation Metering & Relay Overview	40	2				
APR-116UM	Network Data Operations (NDO) Overview	11	1				
APR-117UM	Special Tester Overview	40	2				
APR-118UL	Transformer Connections I	24	1				
APR-118UM	Leadman Repairman Overview	40	2				
APR-121UM	Metering: Fundamentals I	55	5				
APR-122UM	Metering: Fundamentals II	55	5				
APR-123UM	Metering: Fundamentals III	55	5				
APR-128UL	Transformer Connections II	24	1				
APR-138UL	Transformer Connections III	24	1				
APR-231UM	Metering: Advanced I	55	5				
APR-232UM	Metering: Advanced II	55	5				
APR-233UM	Metering: Advanced III	55	5				
APRUW000	**Apprenticeship-Wireman (UW)**		**64**				
APR-110UW	Initial Substation Wireman Training	80	4				
APR-111UW	Basic Substation Wireman I	55	5				

APR-112UW	Basic Substation Wireman II	55	5				
APR-113UW	Basic Substation Wireman III	55	5				
APR-115UW	Substation Metering & Relay Overview	40	2				
APR-116UW	System Control & Data Acquisitions (SCADA) Overview	40	2				
APR-117UW	Safety Coordinator Overview	20	1				
APR-118UW	Substation Operator Overview	40	2				
APR-119UW	Batteryman Overview	40	2				
APR-121UW	Fundamental Substation Wireman I	55	5				
APR-122UW	Fundamental Substation Wireman II	55	5				
APR-123UW	Fundamental Substation Wireman III	55	5				
APR-125UW	Wireman Hotstick Training	80	4				
APR-128UW	Transformer Shop Overview	40	2				
APR-231UW	Advanced Substation Wireman I	55	5				
APR-232UW	Advanced Circuit Theory & Troubleshooting I	55	5				
APR-233UW	Advanced Circuit Theory & Troubleshooting II	55	5				
APRLME000	**Apprenticeship-Limited Maintenance Electrician (LME)**		**29**	**APRLME000**	**Apprenticeship-Limited Maintenance Electrician (LME)**		**28**
--	Limited Maintenance Electrician (LME) Electives		29-24	--	Limited Maintenance Electrician (LME) Electives		30-25
APR-104LM	Reading Schematics and Symbols	22	2				
APR-107LM	Industrial Safety & First Aid	33	3	REMOVE			
APR-130LM	Basic Electricity I	33	3				
APR-131LM	Basic Electricity II	33	3				
APR-132LM	Basic Electricity III	33	3				
APR-202LM	Electrical Code Level I	44	4				
APR-203LM	Electrical Code-Level II	44	4				
APR-204LM	Electrical Code-Level III	44	4				
APR-223LM	Instrumentation & Controls	66	3				
				APR-108LM	ARC Flash Electrical Safety	10	1
				HE-261	Community CPR	10	1
APRUE000	**Apprenticeship-Line Estimator (UE)**		**57**				
APR-111UE	Line Estimator Basic I: Tools and Equipment	44	4				
APR-112UE	Line Estimator Basic II: Electrical Theory	44	4				
APR-113UE	Line Estimator Basic III: Wire Circuits	44	4				
APR-121UE	Line Estimator Theory I: Operations	44	4				
APR-122UE	Line Estimator Theory II: Standards	44	4				

APR-123UE	Line Estimator Theory III: Power Line	44	4				
APR-131UE	Electric Utility System Operation (EUSO)	30	3				
APR-132UE	Estimator Navigational Mapping	30	3				
APR-133UE	Estimator Facility Point Inspection	30	3				
APR-134UE	Estimator Phase Design	30	3				
APR-135UE	Estimator Metering	30	3				
APR-136UE	Estimator Transformer Training	30	3				
APR-137UE	Estimator Field Functions	30	3				
APR-231UE	Line Estimator Responsibility I: Live Line	44	4				
APR-232UE	Line Estimator Responsibility II: Substation	44	4				
APR-233UE	Line Estimator Responsibility III: Field Responsibility	44	4				
*4 credits of Computation required for Line Estimator (UE)							
TOTAL *CURRENT* CREDITS:			90-101	**TOTAL *PROPOSED* CREDITS:**			

College Contact		**Telephone No.**	
E-Mail Address		**Fax No.**	
Chief Academic Officer *or* PTE Dean Signature		**Date**	**3/6/20**

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Oregon Department of Community Colleges and Workforce Development
255 Capitol Street NE
Salem, OR 97310-0203

Office of Educational Improvement & Innovation
Phone: (503) 378-3600
FAX: (503) 378-5156

COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text.
Current instructions, forms, handouts and other useful resources are located at
http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA	
☐ Ag, Food & Natural Resource Systems	☐ Health Services
☐ Arts, Information & Communications	☐ Human Resources
☐ Business & Management	x Industrial & Engineering Systems

PROGRAM INFORMATION

APPROVED Program Title (For Official Program Title, refer to your directory at http://www.ode.state.or.us/search/results/?id=232)	***APPROVED*** CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP	7th digit	8th digit	***APPROVED*** Recognition Award	Current Credits
Parent Program Electrician Apprenticeship Technologies SAAS	46.0301	I	*	☐Statewide AAS (90-108 credits)	
Apprenticeship Area: Inside Electrician (IE) Limited Energy (LE)	CC.ELECTRICIANIE CC.ELECTRICIANLE			☐	
Certificate: Electrician Apprenticeship Technologies SCC1				**☐SCC1 (45-60 credits)**	**45-60**

**Enter name of base degree in 'AAS Title' box

Last amendment approved on 04.05.19

TYPE OF PROGRAM AMENDMENT

(Check **ALL** That Apply)

New Program++ Title Change for Program	Curriculum Revision	☐ Revision in Program Credits	
		Proposed Total Credits:	45-58
***Proposed* AAS Title:**			
***Proposed* OPTION Title:**			
***Proposed* Certificate Title:**			
☐ ***SUSPENSION* of Program**	*Reason for Suspension:*		
Suspension Effective Date:			

++**If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.**

CURRICULUM AMENDMENT

[List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping.
For a New Program, complete the Proposed Curriculum section only.]

CURRENT CURRICULUM 19-20 [List entire curriculum as last approved]				***PROPOSED CURRICULUM 20-21*** [List only course(s) to be amended]			
Course	**Title**	**Hours**	**Credits**	**Course**	**Title**	**Hours**	**Credits**
APR1000	**Computation Related Instruction**		3-4				
APR2000	**Communication Related Instruction**		3-4				
APR3000	**Human Relations Related Instruction**		3-4				
Course Group 1							
APRIE000	Apprenticeship-Inside Electrician (IE)		48	APRIE000	Apprenticeship-Inside Electrician (IE)		46
APR-125IE	DC Theory	36	3				
APR-134IE	Residential Wiring I	36	3				
APR-135IE	Residential Wiring II	36	3				
APR-136IE	Electrical Design I	36	3				
APR-145IE	Grounding & Bonding	36	3				
APR-155IE	Motors & Transformers	36	3				
APR-165IE	AC Theory	36	3				
APR-175IE	Blueprint Reading for Construction Trades	36	3	REMOVE			
APR-185IE	Electrical Systems	36	3				
APR-235IE	Special Installations	36	3				
APR-236IE	Motors & Controls	36	3				
APR-237IE	Electrical Design II	36	3				
APR-245IE	NEC Analysis I	36	3				
APR-255IE	NEC Analysis II	36	3				
APR-265IE	NEC Analysis III	36	3				
APR-275IE	NEC Analysis IV	36	3				
				APR-236IEL	Motors & Controls LAB	36	1
APRLE000	Apprenticeship-Limited Energy (LE)		36				
APR-111LE	Residential Technologies	48	4				
APR-112LE	Basic Trade, Code & Safety	48	4				
APR-113LE	Specialized Control Systems	48	4				
APR-114LE	Data Communications	48	4				
APR-115LE	Amplified Systems	48	4				
APR-116LE	Security Systems	48	4				
APR-217LE	Integrated Systems	48	4				
APR-218LE	Fire Alarm Systems	48	4				
APR-219LE	ADA & Code	48	4				
TOTAL *CURRENT* CREDITS:			45-60	**TOTAL *PROPOSED* CREDITS:**			45-58

College Contact		**Telephone No.**	
E-Mail Address		**Fax No.**	
Chief Academic Officer *or* PTE Dean Signature		**Date**	**3/6/20**

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New Programs

May 1, 2020

Program	Implementation
Industrial Mechanics and Maintenance Technology Apprenticeship AAS	2020/SU
Mechanics and Maintenance Apprenticeship Technologies: Trade Worker Apprenticeship Technologies CPCC	2020/SU

Oregon Department of Community Colleges and Workforce Development
255 Capitol Street NE
Salem, OR 97310-0203

Office of Educational Improvement & Innovation
Phone: (503) 378-3600
FAX: (503) 378-5156

COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

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http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA

☐ Ag, Food & Natural Resource Systems	☐ Health Services
☐ Arts, Information & Communications	☐ Human Resources
☐ Business & Management	x Industrial & Engineering Systems

PROGRAM INFORMATION

APPROVED Program Title (For Official Program Title, refer to your directory at http://www.ode.state.or.us/search/results/?id=232)	***APPROVED*** CIP Code (Include 7th & 8th digits used for OCCURS reporting.) 6-digit CIP	7th digit	8th digit	***APPROVED*** Recognition Award	Current Credits
Parent Program Industrial Mechanics and Maintenance Technology Apprenticeship AAS	47.0303	N	*	☐Statewide AAS (90-108 credits)	90-96
Apprenticeship Areas:				☐	
Related Certificates: Mechanics and Maintenance Apprenticeship Technologies: Trade Worker Apprenticeship Technologies CPCC				☐	

**Enter name of base degree in 'AAS Title' box

TYPE OF PROGRAM AMENDMENT

(Check **ALL** That Apply)

New Program++ Title Change for Program	**Curriculum Revision**	☐ **Revision in Program Credits**	
		***Proposed* Total Credits:**	
***Proposed* AAS Title:**			
***Proposed* OPTION Title:**			
***Proposed* Certificate Title:**			
☐ ***SUSPENSION* of Program**	*Reason for Suspension:*		
Suspension Effective Date:			

++If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.

CURRICULUM AMENDMENT							
CURRENT CURRICULUM 19-20				***PROPOSED CURRICULUM 20-21***			
Course	**Title**	**Hours**	**Credits**	**Course**	**Title**	**Hours**	**Credits**
				APR000	Apprenticeship Credit for Prior Certification		22
				APR1000	**Computation Related Instruction**		**3-5**
				APR2000	**Communication Related Instruction**		**3-4**
				APR3000	**Human Relations Related Instruction**		**3-4**
				PEHREQ000	**PE/Health Related Instruction**		**1-3**
				APRMA000	**Apprenticeship-Machinist (MA) SAAS**		**58**
				--	Machinist (MA) Electives		30
				APR-104MA	Print Reading	24	2
				APR-111MA	Machine Tool Fundamentals I	132	6
				MTH-080	Technical Mathematics II	33	3
				APR-112MA	Machine Tool Fundamentals II	132	6
				APR-201MA	CNC I: Set-up and Operation	88	4
				APR-202MA	CNC II: Programming & Operation	88	4
				APR-106MA	Advanced Applied Geometric Dimensioning and Tolerancing for Manufacturing	33	3
TOTAL *CURRENT* CREDITS:				**TOTAL *PROPOSED* CREDITS:**			90-96

College Contact		**Telephone No.**	
E-Mail Address		**Fax No.**	
Chief Academic Officer *or* PTE Dean Signature		**Date**	**4/26/20**

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APPLICATION for a NEW PROGRAM
CAREER TECHNICAL EDUCATION (CTE)

Department forms change periodically. It is the college's responsibility to use the most current forms available. Current forms, handouts and other useful resources are located at
http://www.ode.state.or.us/opportunities/grants/perkins/postsecondary/appsandwkshts.aspx

Note: It is essential that the companion document, the Planning Guide & Application Worksheet, is used in representing your new program. The Application Worksheet must be kept on file at the college and made available upon request.

Section 1. College Contact Information

College	**Clackamas Community College**

College Point Of Contact	Dru Urbassik
Title	Director, Curriculum & Scheduling
Department, Division	Institutional Effectiveness & Planning
Mailing Address	19600 Molalla Avenue
City, State Zip Code	Oregon City, OR 97045
Phone	503-594-6217
Fax	503-650-6659
E-Mail	dru.urbassik@clackamas.edu

Program Contact Person	Shelly Tracy
Title	Director of Apprenticeship
Department, Division	Apprenticeship Department- Technology, Applied Science and Public Services
Mailing Address	19600 Molalla Ave.
City, State Zip Code	Oregon City, OR 97045
Phone	503-594-0945
Fax	
E-Mail	shellyt@clackamas.edu

Section 2. Program Award Information

Name of Proposed Program	**Industrial Mechanics and Maintenance Technology Apprenticeship AAS**

✓	Type of Program (Check all that apply if the programs are related)	Total Credits
x	**Associate of Applied Science (AAS) Degree**	**90-96**
	Associate of Applied Science Degree, Option (An option is a specialized area within a base AAS. Must maintain 70% of common credits with base AAS)	
	Certificate of Completion	

	Business and Industry-based Program (privately-contracted, closed enrollment)

✓	Career Area (please check the appropriate area)
	Agriculture, Food & Natural Resources Systems
	Arts, Information & Communications
	Business & Management
	Health Services
	Human Resources
x	Industrial & Engineering Systems

EII Education Specialist	
Name	
Phone	
E-Mail	

Proposed Program Implementation Date	Fall 2020

CIP Code	47.0303	CIP Title	Industrial Mechanics and Maintenance Technology

CIP Narrative Description

A program that prepares individuals to apply technical knowledge and skills to repair and maintain industrial machinery and equipment such as cranes, pumps, engines and motors, pneumatic tools, conveyor systems, production machinery, marine deck machinery, and steam propulsion, refinery, and pipeline-distribution systems.

Program Summary

A journeyman has the opportunity to receive a Career Pathway Certificate of Completion, Certificate of Completion and/or Associate of Applied Science degree in their designated field of study upon the completion of their on-the-job training (OJT), related training, journey level card/certificate and the required Related Instruction courses and possible elective courses, depending on the trade. The program is restricted to enrollment by Bureau of Labor and Industries registered apprentices and not available to the general student population.

✓	Financial Assistance Options Sought for and/or Approved for the Program (Check all that apply)	
✓	Federal Financial Aid Options	
✓	Workforce Investment Act – Individual Training Account	
✓	Veterans Benefits	
✓	State of Oregon Financial Aid	Describe: Oregon Opportunity Grant
✓	College Financial Aid	Describe: Scholarships, tuition waivers, internships
✓	Private Business, Foundation Aid	Describe: Scholarships
✓	Other:	Describe: Voc Rehab funds, Social Services funds, Tribal Educational funds

Section 3. Program Approval Standards

Standard A *Need: The community college provides clear evidence of the need for the program.*
Program Highlights

Clackamas Community College is supporting the Northwest Willamette Trade Apprenticeship Training Committee (TATC). Our committee and training agents have expressed that industry in our region has need of skilled machinists and millwrights. An employer listening session was held and 14 businesses attended, which resulted in convening 4 employer representatives to serve on the committee to create Machinist Standards of Apprenticeship and commitments to host apprentices at their worksites as training agents.

Standard B
Collaboration: The community college utilizes systemic methods for meaningful and ongoing involvement of the appropriate constituencies.
Program Highlights
CCC collaborates with the NW Willamette TATC by hosting monthly committee meetings for employers on campus, and connecting the apprentices, training agents and employers with resources at the college, as well as leveraging other resources that may be available through state or federal grants and funding. We collaborate with the Oregon Bureau of Labor and Industry (BOLI) – Apprenticeship and Training Division (ATD) to follow all regulations concerning registered apprenticeship. We also collaborate with Community Colleges across the state as an advocacy and guiding body of the Oregon Community Colleges Apprenticeship Consortium OCCAC in coordination with Oregon Department of Education and Higher Education Coordinating Commission.

Standard C
Alignment: The program is aligned with appropriate education, workforce development, and economic development activities.
Program Highlights
This program started because our region is aligned with the state's goals of increasing apprenticeship and the Machinist program qualifies for the Apprenticeship Initiative in Manufacturing (AIM) grant which covers tuition and fees for apprentices, thereby removing the cost and burden of related training/educational expenses from the company or apprentice.

Standard D
Design: The program leads to student achievement of academic and technical knowledge, skills, and related proficiencies.
Program Highlights
Apprentices receive a registered apprenticeship card and upon completing the program receive a journey-worker card issued by BOLI- ATD and recognized as a credential statewide. Apprentices completing the program also receive a career pathway certificate, with the option to pursue an AAS. Apprentices complete 528 hours of related training (28 CCC credits) and 6000 hours of on-the-job-training according to the work processes outline in the Standards of Apprenticeship.

Standard E
Capacity: The community college identifies and has the resources to develop, implement, and sustain the program.
Program Highlights
The program is creating new APR courses by mirroring existing MFG courses and cross-listing the two courses. Apprentices attend these courses with manufacturing students in current existing courses/ This also helps faculty fill classes that otherwise may cancel due to low enrollment or run under-enrolled.

Section 4. Proposed Curriculum

***PROPOSED* CURRICULUM** **[List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping]**			
Course Number	**Course Title**	**Clock Hours**	**Credits**
APR-104MA	Print Reading	24	2
APR-111MA	Machine Tool Fundamentals I	132	6
MTH-080	Technical Mathematics II	33	3
APR-112MA	Machine Tool Fundamentals II	132	6
APR-201MA	CNC I: Set-up and Operation	88	4
APR-202MA	CNC II: Programming & Operation	88	4
APR-106MA	Advanced Applied Geometric Dimensioning and Tolerancing for Manufacturing	33	3
APR000	Apprenticeship-Credit for Prior Certification		22
APR1000	Computation Related Instruction		3-5
APR2000	Communication Related Instruction		3-4
APR3000	Human Relations Related Instruction		3-4
PEHREQ000	PE/Health Related Instruction		1-3
	Electives		30
TOTAL *PROPOSED* CREDITS:			90-96

Section 5. Assurances and Signature

College Authority Signature
(Applications must be signed by the chief academic officer or the president)

I have reviewed this application and supporting documents and attest to the accuracy, clarity, and completeness. The college will comply with the following assurances:

1. **Access**. The college and program will affirmatively provide access, accommodations, flexibility, and additional/supplemental services for special populations and protected classes of students.

2. **Continuous improvement**. The college has assessment, evaluation, feedback, and continuous improvement processes or systems in place. For the proposed program, there will be opportunities for input from and concerning the instructor(s), students, employers, and other partners/stakeholders. Program need and labor market information will be periodically re-evaluated and changes will be requested as needed.

3. **Adverse impact & detrimental duplication.** The college will follow all current laws, rules, and procedures and has made good faith efforts to avoid or resolve adverse *inter*segmental and *intra*segmental impact and detrimental duplication problems with other relevant programs or institutions.

4. **Program records maintenance & congruence.** The college acknowledges that the records concerning the program title, curriculum, CIP code, credit hours, and other identifying and descriptive information maintained by the Department are the official records and it is the college's responsibility to keep the college records aligned with those of the Department. The college will not make changes to the program without informing and/or receiving approval from the Department.

Our staff has worked closely with CCWD-EII staff in the development of the proposed program and completion of this application. The proposed program:

1. Has been designed to meet the State Board of Education approval standards for Need,
2. Collaboration, Alignment, Design and Capacity, as well as the elements identified that that are essential to a quality program;
3. Our college board has approved the proposed program described in this application;
4. All local campus procedures have been completed; and
5. This program is ready to be reviewed by CCWD-EII staff on behalf of the State Board of Education.

It is understood that documentation or evidence may be requested by CCWD-EII staff if additional information is needed.

Signature	
Title	Director, Curriculum & Scheduling
Name (Printed or typed)	Dru Urbassik
Date	

Curriculum Committee

New Associate of Applied Science

Associate of Applied Science (AAS) degrees are intended to prepare graduates for direct entry into the workforce.

This form provides additional information required by the NWCCU for accreditation
Signed copies must be submitted two weeks prior to Curriculum Committee meetings

Program Presenter	Shalee Hodgson or Shelly Tracy
Program Department/Division	Apprenticeship- TAPS
Program Type	Associate of Applied Science
Complete Program Title	Industrial Mechanics and Maintenance Technology Apprenticeship AAS
Credit Total (90-108)	90-96

Catalog description of new program

Must match description from CCWD CTE Program of Study Application

Industrial Mechanics and Maintenance Technology Apprenticeship AAS Degree (Limited Entry Program-Journeyman's card required)
RELATED INSTRUCTION OUTCOMES Computation (4-5 credits - See page 82 for course list) • Use appropriate mathematics to solve problems Communication (3-4 credits- See page 82 for course list) • Read actively, think critically, and write purposefully and capably for professional audiences Human Relations (3-4 credits - See page 82 for course list) • Engage in ethical communication processes that accomplish goals Physical Education/Health/Safety/First Aid (1-3 credits courses with HE, HPE, or PE prefix) • Use effective life skills to improve and maintain mental and physical wellbeing.
CAREERS Limited-Entry Program-Journeyman's Card Required. This degree does not guarantee licensure. 6000-8000-HR BOLI-ATD Trades: Machinist, CNC Operator
***Programs offered at Clackamas Community College through NW Willamette Apprenticeship Services.**

Similar to an existing program?

No

Program-Level Student Learning Outcomes

Upon successful completion of this program, students should be able to:

- Complete a minimum of 6000-8000 hours State of Oregon approved on-the-job training (OJT);
- Demonstrate the functions of trade-specific industrial systems
- Define lubrication processes with trade-specific industrial materials and equipment
- Identify mechanical and/or electrical industrial systems

- Demonstrate the proper care, use and storage of hand and power tools
- Develop machine shops skills in troubleshooting
- Read and interpret trade-specific industrial blueprints
- Analyze the properties of material and how they apply to trade-specific fabricating applications
- Fabricate industrial materials in appropriate trade-specific applications
- Calculate elementary algebraic equations and formulas
- Apply appropriate formulas to mathematical situations

Program-Level Assessment Plan
See Maintenance Pathway MASTER file attached in email

Courses in the Program
Use CCC Course Catalog format
See attached crosswalks for AAS
There are no course crosswalks in catalog for apprenticeships

Related Instruction Courses in the Program
Approved Course List
Computation (4-5 credits - See page 82 for course list)
• Use appropriate mathematics to solve problems
Communication (3-4 credits- See page 82 for course list)
• Read actively, think critically, and write purposefully and capably for professional audiences
Human Relations (3-4 credits - See page 82 for course list)
• Engage in ethical communication processes that accomplish goals
Physical Education/Health/Safety/First Aid (1-3 credits courses with HE, HPE, or PE prefix)
• Use effective life skills to improve and maintain mental and physical wellbeing.

Will there be revenues associated with the new program?
(i.e. bonds, grants, reallocation)

◉ Yes ○ No

NOTE: The Northwest Willamette Trade Apprenticeship Training Committee (TATC) currently has a trust set up at CCC where we are holding fees related the training agents administrative costs. Per training agent (employer sponsoring an apprentices), we charge a one time $250 application fee, and then an administrative fee of $85 per month, per apprentice. The funds we collect varies depending on the number of apprentices registered with our TATC.

Revenue Source	Amount ($)	Year/Term
		1 year prior to program

		1st year of program
		2nd year of program
		3rd year of program

New Courses needed?

◉ Yes ○ No

Course	Course Title	Credit Hours	Term
APR-104MA	PRINT READING	2	FA
APR-111MA	MACHINE TOOL FUNDAMENTALS I	3	WI
APR-111MA	MACHINE TOOL FUNDAMENTALS I	3	SP
APR-112MA	MACHINE TOOL FUNDAMENTALS II	3	WI
APR-112MA	MACHINE TOOL FUNDAMENTALS II	3	SP
APR-201MA	CNC I: SET-UP AND OPERATION	4	FA
APR-202MA	CNC II: PROGRAMMING AND OPERATION	4	WI
APR-106MA	ADVANCED APPLIED GEOMETRIC DIMENSIONING AND TOLERANCING FOR MANUFACTURING	3	SP

New Sections needed?

○ Yes ◉ No

Additional faculty needed?

○ Yes ◉ No

Please explain how current faculty will be sufficient to staff new program
These are existing courses in the manufacturing department, we will enroll apprentices to these existing courses under an APR prefix.

New physical facilities and equipment needed?

○ Yes ◉ No

Please explain how the current physical facilities and equipment will be allocated to meet the needs of the new program
Apprentices will be joining existing MFG/IMT courses being held primarily in the Industrial Technology Center and other buildings on campus.

New Student Services needed?
Link to student services listed in the current catalog

○ Yes ◉ No

Please explain how the current Student Services will accommodate the needs of the new program

The Apprenticeship Coordinator and Outreach Coordinator will be responsible for onboarding new apprentices. Once they are in a registered apprenticeship and enrolled for courses, they are considered CCC students with full access to additional student services currently provide for any student, such as tutoring, advising, financial aid, DRC, Veterans, etc.

Other expenses?

(•) Yes ( ) No

Expense Description	Cost	Term
PT faculty	Varies by need	Varies

Division Dean Signature/Date

Department Chair Signature/Date

Faculty/Program Lead Signature/Date
(optional)

Oregon Department of Community Colleges and Workforce Development
255 Capitol Street NE
Salem, OR 97310-0203

Office of Educational Improvement & Innovation
Phone: (503) 378-3600
FAX: (503) 378-5156

COMMUNITY COLLEGE PROGRAM AMENDMENT FORM

(For changes to State Approved Associate of Applied Science degree, AAS option and Certificate of Completion programs)

This form should be completed electronically and the boxes will expand to accommodate text.
Current instructions, forms, handouts and other useful resources are located at
http://www.ode.state.or.us/search/results/?id=231

College:	Clackamas Community College	Date	

CAREER LEARNING AREA

☐ Ag, Food & Natural Resource Systems	☐ Health Services
☐ Arts, Information & Communications	☐ Human Resources
☐ Business & Management	x Industrial & Engineering Systems

PROGRAM INFORMATION

APPROVED **Program Title** *(For Official Program Title, refer to your directory at http://www.ode.state.or.us/search/results/?id=232)*	***APPROVED*** **CIP Code** (Include 7th & 8th digits used for OCCURS reporting.)			***APPROVED*** **Recognition Award**	**Current Credits**
	6-digit CIP	*7th digit*	*8th digit*		
Parent Program Industrial Mechanics and Maintenance Technology Apprenticeship AAS	**47.0303**	**N**	*	☐**Statewide AAS (90-108 credits)**	
Apprenticeship Areas:				☐	
Related Certificates: **Mechanics and Maintenance Apprenticeship Technologies: Trade Worker Apprenticeship Technologies CPCC**	**47.0303**			☐Statewide Career Pathway SCPC (12-44 credits)	**28**

**Enter name of base degree in 'AAS Title' box

TYPE OF PROGRAM AMENDMENT

(Check **ALL** That Apply)

New Program++ **Title Change for Program**	**Curriculum Revision**	☐ **Revision in Program Credits**	
		***Proposed* Total Credits:**	
***Proposed* AAS Title:**			
***Proposed* OPTION Title:**			
***Proposed* Certificate Title:**			
☐ ***SUSPENSION* of Program**	*Reason for Suspension:*		
Suspension Effective Date:			

++**If new program is an additional award for an existing degree or certificate, complete 'Program Information' section for existing program.**

CURRICULUM AMENDMENT							
CURRENT CURRICULUM 19-20				***PROPOSED CURRICULUM 20-21***			
Course	**Title**	**Hours**	**Credits**	**Course**	**Title**	**Hours**	**Credits**
				APR-104MA	Print Reading	24	2
				APR-111MA	Machine Tool Fundamentals I	132	6
				MTH-080	Technical Mathematics II	33	3
				APR-112MA	Machine Tool Fundamentals II	132	6
				APR-201MA	CNC I: Set-up and Operation	88	4
				APR-202MA	CNC II: Programming & Operation	88	4
				APR-106MA	Advanced Applied Geometric Dimensioning and Tolerancing for Manufacturing	33	3
TOTAL *CURRENT* CREDITS:				**TOTAL *PROPOSED* CREDITS:**			28

College Contact		**Telephone No.**	
E-Mail Address		**Fax No.**	
Chief Academic Officer *or* PTE Dean Signature		**Date**	**4/26/20**

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APPLICATION for a NEW PROGRAM
CAREER TECHNICAL EDUCATION (CTE)

Department forms change periodically. It is the college's responsibility to use the most current forms available. Current forms, handouts and other useful resources are located at
http://www.ode.state.or.us/opportunities/grants/perkins/postsecondary/appsandwkshts.aspx

Note: It is essential that the companion document, the Planning Guide & Application Worksheet, is used in representing your new program. The Application Worksheet must be kept on file at the college and made available upon request.

Section 1. College Contact Information

College	**Clackamas Community College**

College Point Of Contact	Dru Urbassik
Title	Director, Curriculum & Scheduling
Department, Division	Institutional Effectiveness & Planning
Mailing Address	19600 Molalla Avenue
City, State Zip Code	Oregon City, OR 97045
Phone	503-594-6217
Fax	503-650-6659
E-Mail	dru.urbassik@clackamas.edu

Program Contact Person	Shelly Tracy
Title	Director of Apprenticeship
Department, Division	Apprenticeship Department- Technology, Applied Science and Public Services
Mailing Address	19600 Molalla Ave.
City, State Zip Code	Oregon City, OR 97045
Phone	503-594-0945
Fax	
E-Mail	shellyt@clackamas.edu

Section 2. Program Award Information

Name of Proposed Program	**Mechanics and Maintenance Apprenticeship Technologies: Trade Worker Apprenticeship Technologies CPCC**

✓	Type of Program (Check all that apply if the programs are related)	Total Credits
	Associate of Applied Science (AAS) Degree	
	Associate of Applied Science Degree, Option (An option is a specialized area within a base AAS. Must maintain 70% of common credits with base AAS)	
X	**Certificate of Completion**	**28**

	Business and Industry-based Program (privately-contracted, closed enrollment)

✓	Career Area (please check the appropriate area)
	Agriculture, Food & Natural Resources Systems
	Arts, Information & Communications
	Business & Management
	Health Services
	Human Resources
X	Industrial & Engineering Systems

EII Education Specialist	
Name	
Phone	
E-Mail	

Proposed Program Implementation Date	Fall 2020

CIP Code	47.0303	CIP Title	Industrial Mechanics and Maintenance Technology

CIP Narrative Description

A program that prepares individuals to apply technical knowledge and skills to repair and maintain industrial machinery and equipment such as cranes, pumps, engines and motors, pneumatic tools, conveyor systems, production machinery, marine deck machinery, and steam propulsion, refinery, and pipeline-distribution systems.

Program Summary

The Industrial Mechanics and Maintenance Technology: Trade Worker Apprenticeship Technologies is a Career Pathway Certificate of Completion and the first stackable credential on the path to an AAS degree in Industrial Mechanics and Maintenance Apprenticeship Technology. These pathways provide an articulated transfer and completion path for Industrial mechanics and maintenance apprentices. In addition to the existing statewide certificate of completion and AAS degree, the career pathway certificate is based on Oregon State Apprenticeship and Training Council and local Joint Apprenticeship Training Committee related training (trade specific) standards.
The statewide career pathway certificate of completion provides additional access to related training courses across the state for registered apprentices and aligned program outcomes, assessments and courses. The certificate is restricted to enrollment by Bureau of Labor and Industries registered apprentices and not available to the general student population.

A journeyman has the opportunity to receive a Career Pathway Certificate of Completion, Certificate of Completion and/or Associate of Applied Science degree in their designated field of study upon the completion of their on-the-job training (OJT), related training, journey level card/certificate and the required Related Instruction courses and possible elective courses, depending on the trade. The program is restricted to enrollment by Bureau of Labor and Industries registered apprentices and not available to the general student population.

✓	Financial Assistance Options Sought for and/or Approved for the Program (Check all that apply)	
✓	Federal Financial Aid Options	
✓	Workforce Investment Act – Individual Training Account	
✓	Veterans Benefits	
✓	State of Oregon Financial Aid	Describe: Oregon Opportunity Grant
✓	College Financial Aid	Describe: Scholarships, tuition waivers, internships
✓	Private Business, Foundation Aid	Describe: Scholarships

✓	**Other:**	**Describe: Voc Rehab funds, Social Services funds, Tribal Educational funds**

Section 3. Program Approval Standards

Standard A
***Need:* The community college provides clear evidence of the need for the program.**
Program Highlights
Clackamas Community College is supporting the Northwest Willamette Trade Apprenticeship Training Committee (TATC). Our committee and training agents have expressed that industry in our region has need of skilled machinists and millwrights. An employer listening session was held and 14 businesses attended, which resulted in convening 4 employer representatives to serve on the committee to create Machinist Standards of Apprenticeship and commitments to host apprentices at their worksites as training agents.

Standard B
***Collaboration*: The community college utilizes systemic methods for meaningful and ongoing involvement of the appropriate constituencies.**
Program Highlights
CCC collaborates with the NW Willamette TATC by hosting monthly committee meetings for employers on campus, and connecting the apprentices, training agents and employers with resources at the college, as well as leveraging other resources that may be available through state or federal grants and funding. We collaborate with the Oregon Bureau of Labor and Industry (BOLI) – Apprenticeship and Training Division (ATD) to follow all regulations concerning registered apprenticeship. We also collaborate with Community Colleges across the state as an advocacy and guiding body of the Oregon Community Colleges Apprenticeship Consortium OCCAC in coordination with Oregon Department of Education and Higher Education Coordinating Commission.

Standard C
***Alignment*: The program is aligned with appropriate education, workforce development, and economic development activities.**
Program Highlights
This program started because our region is aligned with the state's goals of increasing apprenticeship and the Machinist program qualifies for the Apprenticeship Initiative in Manufacturing (AIM) grant which covers tuition and fees for apprentices, thereby removing the cost and burden of related training/educational expenses from the company or apprentice.

Standard D
***Design*: The program leads to student achievement of academic and technical knowledge, skills, and related proficiencies.**
Program Highlights
Apprentices receive a registered apprenticeship card and upon completing the program receive a journey-worker card issued by BOLI- ATD and recognized as a credential statewide. Apprentices completing the program also receive a career pathway certificate, with the option to pursue an AAS. Apprentices complete 528 hours of related training (28 CCC credits) and 6000 hours of on-the-job-training according to the work processes outline in the Standards of Apprenticeship.

Standard E
Capacity*: *The community college identifies and has the resources to develop, implement, and sustain the program.
Program Highlights
The program is creating new APR courses by mirroring existing MFG courses and cross-listing the two courses. Apprentices attend these courses with manufacturing students in current existing courses/ This also helps faculty fill classes that otherwise may cancel due to low enrollment or run under-enrolled.

Section 4. Proposed Curriculum

***PROPOSED* CURRICULUM** [List in a Defined Sequence of Courses Format, e.g., Quarter-to-quarter mapping]			
Course Number	**Course Title**	**Clock Hours**	**Credits**
APR-104MA	Print Reading	24	2
APR-111MA	Machine Tool Fundamentals I	132	6
MTH-080	Technical Mathematics II	33	3
APR-112MA	Machine Tool Fundamentals II	132	6
APR-201MA	CNC I: Set-up and Operation	88	4
APR-202MA	CNC II: Programming & Operation	88	4
APR-106MA	Advanced Applied Geometric Dimensioning and Tolerancing for Manufacturing	33	3
TOTAL *PROPOSED* CREDITS:			28

Section 5. Assurances and Signature

College Authority Signature
(Applications must be signed by the chief academic officer or the president)

I have reviewed this application and supporting documents and attest to the accuracy, clarity, and completeness. The college will comply with the following assurances:

1. **Access**. The college and program will affirmatively provide access, accommodations, flexibility, and additional/supplemental services for special populations and protected classes of students.

2. **Continuous improvement**. The college has assessment, evaluation, feedback, and continuous improvement processes or systems in place. For the proposed program, there will be opportunities for input from and concerning the instructor(s), students, employers, and other partners/stakeholders. Program need and labor market information will be periodically re-evaluated and changes will be requested as needed.

3. **Adverse impact & detrimental duplication.** The college will follow all current laws, rules, and procedures and has made good faith efforts to avoid or resolve adverse *inter*segmental and *intra*segmental impact and detrimental duplication problems with other relevant programs or institutions.

4. **Program records maintenance & congruence.** The college acknowledges that the records concerning the program title, curriculum, CIP code, credit hours, and other identifying and descriptive information maintained by the Department are the official records and it is the college's responsibility to keep the college records aligned with those of the Department. The college will not make changes to the program without informing and/or receiving approval from the Department.

Our staff has worked closely with CCWD-EII staff in the development of the proposed program and completion of this application. The proposed program:

1. Has been designed to meet the State Board of Education approval standards for Need,
2. Collaboration, Alignment, Design and Capacity, as well as the elements identified that that are essential to a quality program;
3. Our college board has approved the proposed program described in this application;
4. All local campus procedures have been completed; and
5. This program is ready to be reviewed by CCWD-EII staff on behalf of the State Board of Education.

It is understood that documentation or evidence may be requested by CCWD-EII staff if additional information is needed.

Signature	
Title	Director, Curriculum & Scheduling
Name (Printed or typed)	Dru Urbassik
Date	

Curriculum Committee

New Career Pathway Certificate of Completion

Career Pathway Certificates of Completion are wholly contained in an approved Associate of Science degree or Certificate of Completion.

This form provides additional information required by the NWCCU for accreditation.
Signed copies must be submitted two weeks prior to Curriculum Committee meetings.

Program Presenter	Shalee Hodgson or Shelly Tracy
Program Department/Division	Apprenticeship - TAPS
Program Type	Career Pathway Certificate of Completion
Complete Program Title	Mechanics and Maintenance Apprenticeship Technologies: Trade Worker Apprenticeship Technologies CPCC
Credit Total (12-44)	28

Catalog description of new program

Mechanics and Maintenance Apprenticeship Technologies: Trade Worker Apprenticeship Technologies Career Pathway Certificate (Limited Entry Program-Journeyman's card required)

CAREERS Limited-Entry Program-Journeyman's Card Required. This degree does not guarantee licensure. 6000-8000-HR BOLI-ATD Trades: Machinist, CNC Operator. *Programs offered at Clackamas Community College through NW Willamette Apprenticeship Services.

- Complete a minimum of 6000-8000 hours State of Oregon approved on-the-job training (OJT);
- Demonstrate the functions of trade-specific industrial systems
- Define lubrication processes with trade-specific industrial materials and equipment
- Identify mechanical and/or electrical industrial systems
- Demonstrate the proper care, use and storage of hand and power tools
- Develop machine shops skills in troubleshooting
- Read and interpret trade-specific industrial blueprints
- Analyze the properties of material and how they apply to trade-specific fabricating applications
- Fabricate industrial materials in appropriate trade-specific applications
- Calculate elementary algebraic equations and formulas
- Apply appropriate formulas to mathematical situations

Similar to an existing program?

No

Program-Level Student Learning Outcomes

Upon successful completion of this program, students should be able to:

- Complete a minimum of 6000-8000 hours State of Oregon approved on-the-job training (OJT);
- Demonstrate the functions of trade-specific industrial systems
- Define lubrication processes with trade-specific industrial materials and equipment
- Identify mechanical and/or electrical industrial systems
- Demonstrate the proper care, use and storage of hand and power tools
- Develop machine shops skills in troubleshooting
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- Analyze the properties of material and how they apply to trade-specific fabricating applications
- Fabricate industrial materials in appropriate trade-specific applications
- Calculate elementary algebraic equations and formulas
- Apply appropriate formulas to mathematical situations

Program-Level Assessment Plan
See Maintenance Pathway MASTER file attached in email

Courses in the Program
Use CCC Course Catalog format
See attached crosswalks for CPC
There are no course crosswalks in catalog for Apprenticeships

Related Instruction Courses in the Program
None

Will there be revenues associated with the new program?
(i.e. bonds, grants, reallocation)

◉ Yes ○ No

NOTE: The Northwest Willamette Trade Apprenticeship Training Committee (TATC) currently has a trust set up at CCC where we are holding fees related the training agents administrative costs. Per training agent (employer sponsoring an apprentices), we charge a one time $250 application fee, and then an administrative fee of $85 per month, per apprentice. The funds we collect varies depending on the number of apprentices registered with our TATC.

Revenue Source	Amount ($)	Year/Term
		1 year prior to program
		1st year of program
		2nd year of program
		3rd year of program

New Courses needed?

◉ Yes ○ No

Course	Course Title	Credit Hours	Term
APR-104MA	PRINT READING	2	FA
APR-111MA	MACHINE TOOL FUNDAMENTALS I	3	WI
APR-111MA	MACHINE TOOL FUNDAMENTALS I	3	SP
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APR-112MA	MACHINE TOOL FUNDAMENTALS II	3	SP
APR-201MA	CNC I: SET-UP AND OPERATION	4	FA
APR-202MA	CNC II: PROGRAMMING AND OPERATION	4	WI

New Sections needed?

○ Yes ◉ No

Additional faculty needed?

○ Yes ◉ No

Please explain how current faculty will be sufficient to staff new program

These are existing courses in the manufacturing department, we will enroll apprentices to these existing courses under and APR prefix.

New physical facilities and equipment needed?

○ Yes ◉ No

Please explain how the current physical facilities and equipment will be allocated to meet the needs of the new program

Apprentices will be joining existing MFG/IMT courses being held primarily in the Industrial Technology Center and other buildings on campus.

New Student Services needed?

Link to student services listed in the current catalog

○ Yes ◉ No

Please explain how the current Student Services will accommodate the needs of the new program

The Apprenticeship Coordinator and Outreach Coordinator will be responsible for onboarding new apprentices. Once they are in a registered apprenticeship and enrolled for courses, they are considered CCC students with full access to additional student services currently provide for any student, such as tutoring, advising, financial aid, DRC, Veterans, etc.

Other expenses?

(•) Yes ( ) No

Expense Description	Cost	Term
PT Faculty	Varies by need	Varies

Division Dean Signature/Date

Department Chair Signature/Date

Faculty/Program Lead Signature/Date
(optional)