

Curriculum Committee Meeting Agenda

Voting Committee Members

Chair – Andrea LoMonaco (Business)

Vice Chair – Pam Koop (Math)

Ashley Beardmore (Science)

Mimi Pentz (Nurs/Hlth Occ)

Robert Wells-Clark (Tec/Trad)

Kristen Booth (Pre-Coll/ESOL)

Stephen Shwiff (Soc Sci & Ed)

Leigh Hancock (Art/Comm)

Tori Stanek (Inst Dean/Dir)

Non-Voting Committee Members

Jarett Gilbert (VP Instructional Services)

Jared Dill (Student Services)

Susan Lewis (Curriculum)

Support Staff

Sara Wade (Instructional Services)

Guests

Janie Griffin

October 24, 2024 3:30 – 5:00 pm

The Dalles Campus, room 1.162 (Board Room, Building 1 next to cafe)

Hood River Center, room 1.209 (conference room)

Zoom log-in: <https://cgcc.zoom.us/j/86457853619>; Meeting ID: 864 5785 3619; phone in: 1-253-215-8782

Information items: none

Old Business:

1. General Education requirements for AAS degrees – **ACTION ITEM**: meet with IC and LC to gain feedback from additional constituents (postponed until action item completed)

Approval of October 10, 2024 minutes¹ (Andrea)

Submissions²

1. Janie Griffin (3:40 – 3:50pm)
 - EMS 105 EMT Part 1 (Course Revision: des, req, out, cont, txt/mat)

2. Robert Wells-Clark (3:50 – 4:30pm)

(CCOGs for courses articulated to licenses are included following all the licensure articulation forms for your reference)

- Autodesk CAM for 2.5 Axis Milling – Licensure Articulation
- Autodesk Certified Professional in CAM for 3 Axis Milling – Licensure Articulation
- AWS D1.1 3G GMAW or SMAW Mild Steel – Licensure Articulation
- AWS D1.1 4G, SMAW or GMAW Mild Steel – Licensure Articulation
- AWS D1.2 2G GTAW Aluminum – Licensure Articulation
- AWS D1.2G SMAW, GMAW Mild Steel – Licensure Articulation
- AWS D1.6 GTAW 2G Stainless Steel – Licensure Articulation
- Haas Basic Mill – Licensure Articulation
- Mastercam 2D Mill – Licensure Articulation
- Mastercam 3D Mill – Licensure Articulation

2. Susan Lewis (4:30 – 4:35pm)

- EET 180 Industrial Computing (Course Revision: #)
- MFG 280 Aluminum GTAW/TIG Welding (Course Revision: #)
- TA 180A Theater Rehearsal and Performance (Course Revision: #)
- TA 180B Theater Rehearsal and Performance (Course Revision: #)
- TA 180C Theater Rehearsal and Performance (Course Revision: #)
- TA 180D Theater Rehearsal and Performance (Course Revision: #)

New Business

1. None

Discussion Items

2. None

Next Meeting: November 7, 2024

Attachments: ¹ October 10, 2024 Minutes; ² Submissions: 10 Licensure Articulations, 7 Course Revisions

Curriculum Committee Minutes
October 10, 2024
Location: Zoom Only

PRESENT:

Voting Committee Members

Chair- Andrea LoMonaco (Business)
 Vice Chair- Pam Koop (Math)
 Mimi Pentz (Nursing/Health)
 Kristen Booth (Pre-College)

Stephen Shwiff (Social Science)
 Ashley Beardmore (Science)
 Leigh Hancock (Art,Cult,Comm)
 Tori Stanek (Inst Dean)

Non-Voting Committee Members

Susan Lewis (Curriculum)
 Jared Dill (Student Services)

Supporting Staff

Sara Wade (Instructional Services)

Guests

Cat Graham, Sara Mustonen

ABSENT

Voting Members

Robert Wells-Clark (Tech/Trade)

Non-Voting Committee Members

Jarett Gilbert (VP Instructional Services)

Item	Discussion	Action
Call to Order: 3:35pm	Chair Andrea called the meeting to order at 3:35pm.	
Approval of September 19, 2023 Minutes	Motion: approve as written	Motion: Stephen 2nds: Pam 7 in favor – 0 opposed – 1 abstains
Submissions:		
Autodesk CAM for 2.5 Axis Milling – Licensure Articulation	Motion: postpone until the next meeting when Tech & Trade representation can be present to answer questions. (Motion & vote covered all 9 Licensure Articulation submissions.)	Motion: Leigh 2nds: Tori 8 in favor – 0 opposed – 0 abstains

Autodesk Certified Professional in CAM for 3 Axis Milling- Licensure Articulation	Motion/vote: see Autodesk CAM for 2.5 Axis Milling	Motion: 2nds: 0 in favor – 0 opposed – 0 abstains
AWS D1.1 3G GMAW or SMAW Mild Steel- Licensure Articulation	Motion/vote: see Autodesk CAM for 2.5 Axis Milling	Motion: 2nds: 0 in favor – 0 opposed – 0 abstains
AWS D1.2 2G GTAW Aluminum – Licensure Articulation	Motion/vote: see Autodesk CAM for 2.5 Axis Milling	Motion: 2nds: 0 in favor – 0 opposed – 0 abstains
AWS D1.2G SMAW, GMAW Mild Steel Licensure Articulation	Motion/vote: see Autodesk CAM for 2.5 Axis Milling	Motion: 2nds: 0 in favor – 0 opposed – 0 abstains
AWS D1.6 GTAW 2G Stainless Steel – Licensure Articulation	Motion/vote: see Autodesk CAM for 2.5 Axis Milling	Motion: 2nds: 0 in favor – 0 opposed – 0 abstains
HAAS Basic Mill- Licensure Articulation	Motion/vote: see Autodesk CAM for 2.5 Axis Milling	Motion: 2nds: 0 in favor – 0 opposed – 0 abstains
Mastercam 2D Mill – Licensure Articulation	Motion/vote: see Autodesk CAM for 2.5 Axis Milling	Motion: 2nds: 0 in favor – 0 opposed – 0 abstains
Mastercam 3D Mill – Licensure Articulation	Motion/vote: see Autodesk CAM for 2.5 Axis Milling	Motion: 2nds: 0 in favor – 0 opposed – 0 abstains
MTH 140 Mathematics and Games (New LDC Course)	Motion: approve as amended to change the title to “Mathematics of Games”	Motion: Kristen 2nds: Stephen 8 in favor – 0 opposed – 0 abstains
MTH 105L Corequisite for Math in Society (Course Revision: Course Number)	Due to state mandate all lab corequisite classes will be changed to have a “q”. Motion: approve as written	Motion: Stephen 2nds: Leigh 8 in favor – 0 opposed – 0 abstains

MTH 111L Corequisite for Precalculus I: Functions (Course Revision: Course Number)	Motion: approve as written	Motion: Kristen 2nds: Tori 8 in favor – 0 opposed – 0 abstains
STAT 243L Corequisite for Elementary Statistics (Course Revision: Course Number)	Motion: approve as written	Motion: Mimi 2nds: Leigh 8 in favor – 0 opposed – 0 abstains
IRW 115L Corequisite for Critical Reading and Writing (Course Revision: Number, Title, Description, Outcomes)	Due to state mandate all lab corequisite classes will be changed to have a “Q” designator. Due to the possibility of this class being inactivated next year, it was questioned if the IRW115 requisite could be removed. Motion: approve as amended to remove IRW115 as a Corequisite.	Motion: Tori 2nds: Pam 8 in favor – 0 opposed – 0 abstains
WR 121L Corequisite for Composition I (Course Revision: Course Number)	Motion: approve as written	Motion: Pam 2nds: Stephen 8 in favor – 0 opposed – 0 abstains
Discussion Items:		
General Education Requirements for AAS Degrees	Continued discussion on General Ed requirements for AAS degrees. <ul style="list-style-type: none"> • Discussion on how other colleges rely on Related Instruction (RI) to fill the need for “a body of general education.” • Tori shared her research regarding gen ed requirements at other colleges around the state. (See table at end of minutes.) <ul style="list-style-type: none"> ○ Note: credit loads for general education courses vary across Oregon. Several years ago, many CCs moved from 3 credits to 4 credits for most GE courses, while others remained at 3 credits. CGCC is one of the colleges that moved to 4 credits. This is relevant because some requirements are based on a number of courses rather than a number of credits. • Gen Ed departments support the AAS degrees having 16-credits of Gen Ed. As this helps students be well rounded students: <ul style="list-style-type: none"> ○ Provides students with the opportunity for more exposure to all ILOs. 	

	<ul style="list-style-type: none"> ○ Exposes students to more of the college i.e. Faculty and different points of views. ○ Are there possible classes that can be built that will cover these Gen Ed subjects that are more tailored and fit better for Tech & Trade/CTE students? ● Is it possible to expand cohort degrees/programs to 3 years? The Pathways & Mapping Committee can include this in their work related to part-time program maps. <p>Agreement that prior to additional discussion, the committee would like to take this to Instructional Council (IC) and Leadership Council (LC) for a larger discussion with departments and other key college members. Sara will see if there is space on the IC agenda in November or December. Susan will request time at LC.</p>	
Meeting Adjourned: 4:54pm	All in favor to end the meeting. Chair Andrea closed the meeting at 4:54pm.	Next Meeting: October 24, 2024

Institution	Gen Ed Reqs	Notes
Blue Mountain		
Central Oregon	Related Instruction	Comm (3-4), Comp (3-4), HR (3-6) total 9(?) - 14
Chemeketa	Related Instruction: (Comm/Writing (3), Comp/math (3), Human Relations/Psych/Soc (3--all classes are 4 credits though), Digital Literacy (3), 3 Gen ed electives (any), 3 additional credits from any area	Total - 18 +
Clackamas	Related Instruction- one course from each Comm (3-4), Comp (3-4), HR (3-4), PE/Health (1-3)	Total = 10-15
Clatsop	WR121 (4) and either WR122, WR227, BA214, or a specified course meeting the AAS program (4), 4-credit Math course (65 or 95), 6 credits Arts & Letters/Social Sciences, 1 course Human relations (3-4)	Total = 18 electives for all associate degrees
Klamath	I can't find a "rule" for AAS overall, but each degree has a required course list that includes Communications (usually in three areas; information systems, oral, and writing), Computation, Arts and Letters, Social Sci, Science/Math/Computer Sci and then general electives to get to the total credits required for the degree	Gen eds outside of foundational Comm/Comp area seem to be 3 Arts & Letters, 3 Social Sci, one series of Scie/Math/Comp sci (9-12), so total 15-18
Lane	3 credits each: Comm, Comp, HR	Total = 9+
Linn-Benton	Related instruction: Comm (3), Comp (3), HR (3)	Total = 9+
Mount Hood	Math (4-6), Writing (3-4), Human Relations (3-4), Health and Phys (3)	Total = 13-17

Oregon Coast	Arts & Letters, Social Science, Science/Math/Comp Sci	Total = 16, . For AAS Degrees, no more than two courses may come from courses required by specific programs. See link for competency requirements for Math and Writing in AAS Degrees
PCC	4 Courses, including one with a minimum of 3 credits from Arts & Letters, Social Sciences, Science/Math/Comp.	Total = 12-16
Rogue		
Southwestern	Writing (4), Comm (4), Computation (4), Health (3), Human Relations (3)	Related Instruction
Tillamook	Writing 121 (4) Comm/Arts/Letters (3+), Math 105+ (4+), Info Lit (embedded in WR), HR/Social Scie (3+)	Total = 14+
Treasure Valley	specific course/credit varies by program, but overarching categories are Comm/Comp/HR. Examples: Aviation is (writing 115 (4), comm 111z (4) or SP 219 (3), math 63 (4), psych 101 (3) or BA 204 (3))	90 quarter credits w/ exception to include courses numbered less than 100 if those courses are identified by the department as required under related education.
CGCC	Minimum of 16 credits of Gen Ed designated courses: Must include at least one course, with a minimum of 3 credits, from each discipline category: Arts & Letters, Social Sciences, Science / Math / Computer Science.	Total - 16

Columbia Gorge Community College

Course Revision

(Double click on check boxes to activate dialog box)

What are you seeking to revise? Check all that apply

<input type="checkbox"/> Course number	<input checked="" type="checkbox"/> Requisites	<input type="checkbox"/> Related Instruction
<input type="checkbox"/> Title	<input checked="" type="checkbox"/> Outcomes	<input checked="" type="checkbox"/> Content
<input checked="" type="checkbox"/> Description	<input type="checkbox"/> Repeatability	<input checked="" type="checkbox"/> Text / Materials

SECTION #1 GENERAL INFORMATION & REVISIONS

Department	Health	Submitter name	Janie Griffin
		Phone	541-506-6140
		Email	jgriffin@cgcc.edu
Reason for Revision	Change in Oregon Administrative Rule 333 Section 264 which removed the required practical psychomotor exam at the end of the EMT course and instead is requiring that a competency-based assessment (CBA) where statewide performance outcomes are embedded throughout the courses and measured with the OHA-EMS/TS CBA Standardized Scoring Scale to track student development and determine student achievement of competencies.		
Current prefix and number	EMS 105	Proposed prefix and number	No change
Current Course Title	EMT Part 1	Proposed Course Title (75 characters max)	No change
Current Repeatability	0	Proposed Repeatability	No change

COURSE DESCRIPTION: To be used in the catalog and schedule of classes. Begin each sentence of the course description with an active verb. Avoid using the phrases: "This course will ..." and/or "Students will ..." Include course requisites in the description. Guidelines for writing concise descriptions can be found at [Writing Course Descriptions](#).

Current Description (required whether being revised or not)	Proposed Description
Introduces the role of the Emergency Medical Technician (EMT) at the novice level. Develops the necessary understanding of human anatomy and physiology, as well as knowledge of relevant medical terminology. Provides training in the identification and use of EMT equipment, the assessment of patient status and development of a patient plan, the use of appropriate interventions, and professional and interpersonal communication in the prehospital setting. Explores the use of evidence-based practices in the EMT field and	Prepares students for entry-level Emergency Medical Technician (EMT) positions, fulfilling both national and state requirements. Provides training in the knowledge and skills necessary to make and implement patient care decisions for a wide range of common acute and non-acute conditions. Covers the Emergency Medical Systems (EMS) of care, and operational knowledge to ensure safe, effective patient care practices. Emphasizes assessment skills, therapeutic communication and cultural sensitivity, promoting professional conduct aligned with the Oregon Health

provides an introduction to the legal and ethical issues that may be encountered by the novice EMT. This is Part 1 of the 2-part Oregon EMT series. Course sequence requires mandatory orientation and passing a criminal background check and drug screen. Prerequisites: IRW 115 or WR 115 or equivalent placement; placement into MTH 65; current HCP CPR card. Audit available.	Authority required performance competencies. First course of two-part series. Course sequence requires mandatory orientation and passing a criminal background check and drug screen. Prerequisites: IRW 115 or WR 115 or equivalent placement; placement into MTH 65; Corequisite: current American Heart Association Healthcare Provider CPR card and a background check. Audit available.		
REQUISITES: Note: If this course has been approved for the Gen Ed list, it will have, as a default the following requisites: "Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121." If the department wants to set the WR and/or MTH prerequisites at a lower level, you will need to submit the Opt-out of Standard Prerequisites Request form.			
Current prerequisites, corequisites and concurrent (if no change, leave blank)			
<input type="checkbox"/> Standard requisites - Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121.			
<input checked="" type="checkbox"/> Placement into: MTH 65			
prefix & number: IRW 115 or WR 115 or equivalent placement	<input checked="" type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number: current HCP CPR card	<input checked="" type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
Proposed prerequisites, corequisites and concurrent			
<input type="checkbox"/> Standard requisites - Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121.			
<input checked="" type="checkbox"/> Placement into: MTH 65			
prefix & number: IRW 115 or WR 115 or equivalent placement	<input checked="" type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number: current American Heart Association Healthcare Provider CPR and a background check	<input type="checkbox"/> Prerequisite	<input checked="" type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
LEARNING OUTCOMES: Describe what the student will be able to do "out there" (in their life roles as worker, family member, community citizen, global citizen or lifelong learners). Outcomes must be measurable through the application of direct and/or indirect assessment strategies. Three to six outcomes are recommended. Start each outcome with an active verb, completing the sentence starter provided. (See Writing Learning Outcomes on the curriculum website.)			
NOTE: Gen Ed Courses revising outcomes are required to submit a new Gen Ed Request form. A new Cultural Literacy Request form will also be required of any course with a Cultural Literacy designation.			
Current learning outcomes (required whether being revised or not)	New learning outcomes		

<p>Upon successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1. Apply knowledge of basic anatomy and physiology of the human body and medical terminology as it relates to patient assessment in pre-hospital emergency situations. 2. Identify and use equipment needed to assess and care for the sick or injured patient at the novice EMT level 3. Assess patient status and analyze scene information in order to formulate a patient treatment plan at the novice EMT level. 4. Perform appropriate interventions at a novice EMT level. 5. Have a basic understanding of EMS communications systems and interpersonal communication as they relate to the prehospital setting. 6. Have an understanding of the legal requirements and obligations of an EMT. 	<p>Upon successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1. Apply knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care. 2. Apply knowledge of the anatomy and function of all human systems to the practice of EMS. 3. Analyze scene information and patient assessment findings to guide emergency management. 4. Perform basic history and physical examination to identify acute complaints and monitor change using appropriate monitoring systems. 5. Apply knowledge of life-span development to patient assessment and management. 6. Evaluate the medications that an EMT can administer during an emergency and analyze the potential interactions or effects of any chronic or maintenance medications the patient may be taking. 7. Apply knowledge of anatomy and physiology to patient assessment and management to assure a patent airway, adequate mechanical ventilation and respiration for patients of all ages. 8. Report and communicate patient assessment findings, interventions, and clinical decisions using appropriate anatomical and medical terminology in both oral and written communication with colleagues and healthcare professionals. 9. Apply knowledge of public health principles, including epidemiology, public health emergencies, monitoring, and illness/injury prevention. 10. Demonstrate professional behavior and ethical decision-making in various emergency medical situations.
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<p>Course Content – organized by outcomes (list each outcome followed by an outline of the related content):</p>	<p>Outcome #1: Apply knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care.</p> <ul style="list-style-type: none"> ● EMS systems and history ● Roles and responsibilities ● Workforces’ safety and wellness ● Research, data collection, evidence-based decision making ● Documentation ● EMS communication ● Therapeutic Communication ● Medical /Legal and Ethics ● Patients’ rights ● HIPAA <p>Outcome #2: Apply knowledge of the anatomy and function of all human systems to the practice of EMS.</p> <ul style="list-style-type: none"> ● upper airway ● heart, ● vessels
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- blood
- lungs
- skin
- muscles
- bones

Outcome #3: Analyze scene information and patient assessment findings to guide emergency management.

- Scene safety/situational awareness
- Standard precautions
- Primary assessment: integrations of treatment/procedures needed to preserve life
- Addressing hazards, violence
- Need for additional resources or specialized resources

Outcome #4: Perform basic history and physical examination to identify acute complaints and monitor change using appropriate monitoring systems.

- subjective data
- objective data
- physical assessment techniques, primary, focused and total
- equipment for monitoring patients

Outcome #5: Apply knowledge of life-span development to patient assessment and management.

- Different stages of life: response and needs
 - Physical
 - Emotional
 - cognitive
- Approaches and interactions at different stages of life
- State and national standards of care for emergency situations

Outcome #6: Evaluate the medications that an EMT can administer during an emergency and analyze the potential interactions or effects of any chronic or maintenance medications the patient may be taking.

- Principles of medication
- Medication administration
- Acute medications
- Chronic maintenance medications
- Management of medication misuse

Outcome #7: Apply knowledge of anatomy and physiology to patient assessment and management to assure a patent airway, adequate mechanical ventilation and respiration for patients of all ages.

- Airway management
- Respiration, (age related variations in pediatric and geriatric patients)
- Ventilation, (age related variation in pediatric and geriatric patients)

Outcome #8: Report and communicate patient assessment findings, interventions, and clinical decisions using appropriate anatomical and medical terminology in both oral

	<p>and written communication with colleagues and healthcare professionals.</p> <ul style="list-style-type: none"> ● Recording patient findings ● Principles of medical documentation and report writing ● Standing orders and protocols ● national -recognized standards of care ● Electronic system for documentation <p>Outcome #9: Apply knowledge of public health principles, including epidemiology, public health emergencies, monitoring, and illness/injury prevention.</p> <ul style="list-style-type: none"> ● EMS roles on public health ● Infection prevention and control ● Governmental /non-governmental roles and resources ● Social, geographic, economic, demographic determinants of health ● Unique pediatric, geriatric and special populations public health concerns ● Screening and vaccinations / immunizations <p>Outcome #10: Demonstrate professional behavior and ethical decision-making in various emergency medical situations.</p> <ul style="list-style-type: none"> ● Integrity ● Empathy/compassion ● Self-motivation ● Communication ● Appearance and personal hygiene ● Time management ● Teamwork/diplomacy ● Respect ● Patient advocacy ● Lifelong learning
Suggested Texts & Materials updates (specify if any texts or materials are required):	<ul style="list-style-type: none"> ● <u>Emergency Care and Transportation of the Sick and Injured</u> Nancy Caroline AAOS Twelfth Edition
Department Required Course Activities (optional)	(update as needed)
Department Notes (optional)	<p>All OHA-EMS/TS performance outcomes, at their respective learning levels, must be met for the student to pass the course and be eligible to enroll in EMT 106.</p> <p>Course enrollment requires mandatory orientation and passing a criminal background check.</p>

Is this course used for related instruction?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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If yes, then check to see if the hours of student learning should be amended in the related instruction template to reflect the revision. This may require a related instruction curriculum revision.

SECTION #2 IMPACT ON OTHER DEPARTMENTS	
Are there changes being requested that may impact other departments, such as academic programs that require this course as a prerequisite for courses, degrees, or certificates?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Please provide details, who was contacted and the resolution.	
Implementation term	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specify term (if BEFORE start of next academic year) Winter, 2025
Allow 2-3 months to complete the approval process before scheduling the course.	

SECTION #3 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean/director and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Janie Griffin	jgriffin@cgcc.edu	10/10/2024
Department Chair (enter name of department chair): Janie Griffin		
Department Dean/Director (enter name of department dean/director): Janie Griffin MN, BSN, RN		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee [meeting schedule and submission deadlines](#). You are encouraged to send submissions prior to the deadline so that the Curriculum Office may review and provide feedback.
3. Submissions will be placed on the next agenda with available time slots, and you will be notified of your submission's estimated time for review. The Curriculum Office will send a signature page to your department chair and department dean/director that may be completed electronically. Signature pages must be received by the Curriculum Office the day before the Curriculum Committee meeting for which the submission is scheduled. Submissions without signed signature pages will be postponed.
4. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

Columbia Gorge Community College

CC date 10.10.24

CC decision _____

CC vote _____

**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark, Chris Dodson rclark@cgcc.edu , cdodson@cgcc.edu
License/Certification Title:	CAM for 2.5 Axis Milling	Granting Institution(s)/Agency(s):	Autodesk
Course Equivalency:	Course Title(s):	MFG 220	
	Credits:	3	
Potential application to current awards:	Associate of Applied Science: Advanced Manufacturing and Fabrication		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

<p>Alignment of Licensure/Certification requirements to course outcomes:</p>	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>Introduces use of whole shop production methods for producing parts and assemblies. Describes the use of math and lean manufacturing principles to streamline production and prototyping in the industrial environment. Prerequisites: MFG 157. Audit available.</p> <ul style="list-style-type: none"> Produce complex products from scratch fully utilizing shop equipment. – Covered as part of the testing process for this certificate. Understand lean manufacturing principles. – Covered as part of the testing process for this certificate. Develop labor and cost estimating strategies based on prevailing wage. – Covered as part of the testing process for this certificate. Explore machining processes for production fabrication. – Covered as part of the testing process for this certificate.
<p>Other:</p>	<p>(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)</p>

SECTION #3 IMPLEMENTATION	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year):
Curriculum Committee and VPIS approval is all that is required for the recognition of the submitted licensure/certifications as CPL. Therefore, once this has occurred, students may apply for CPL for the courses aligned with the approved licensure/certificate immediately.	

SECTION #4 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24
Department Chair (enter name of department chair):		
Department Dean/Director (enter name of department dean/director):		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee [meeting schedule and submission deadlines](#). You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Course submissions will be placed on the next agenda with available time slots. You will be notified of your submission's time for review, and you will be sent a signature page that may be completed electronically or manually by your department chair and department dean. It is the submitter's responsibility to ensure that completed signature pages are delivered to the Curriculum Office the day before the Curriculum Committee meeting for which the submission is scheduled. Submissions without signed signature pages will be postponed.
4. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

Columbia Gorge Community College

**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark, Chris Dodson rclark@cgcc.edu , cdodson@cgcc.edu
License/Certification Title:	Autodesk Certified Professional in CAM for 3 Axis Milling	Granting Institution(s)/Agency(s):	Autodesk
Course Equivalency:	Course Title(s):	MFG 221, 222	
	Credits:	6	
Potential application to current awards:	Associate of Applied Science: Advanced Manufacturing and Fabrication		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

<p>Alignment of Licensure/Certification requirements to course outcomes:</p>	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>MFG 221 Explores CNC operations processes and their role in creating a product from Solid 3d modeling. Utilizes numerous systems of control and manufacturing processes to create streamlined research and development and rapid prototype products for testing. Prerequisite MFG 220. Audit available.</p> <ul style="list-style-type: none"> Understand CNC operation and programming. – Covered as part of the testing process for this certificate. Demonstrate knowledge of feed speed and circular interpolation. – Covered as part of the testing process for this certificate. Produce product from existing 3d solid model and tolerance. – Covered as part of the testing process for this certificate. Create and assemble multi-part assemblies produced from CNC equipment. – Covered as part of the testing process for this certificate. <p>MFG222 Combines the use of CNC technology and other metalworking and welding techniques to create a simulated production fabrication environment from design to prototype. Utilizes numerous integrated math and technology aspects to accurately produce products. Explores manufacturing problem solving and critical thinking. Prerequisites: MFG 221. Audit available.</p> <ul style="list-style-type: none"> Design a blueprint and assembly drawing of a product that requires a fabrication solution. – Covered as part of the testing process for this certificate.
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	<ul style="list-style-type: none"> • Create a prototype from blueprint and do real world testing to check design. – Covered as part of the testing process for this certificate. • Fabricate a product that is production ready. – Covered as part of the testing process for this certificate. • Produce a fixture for production fabrication utilizing lean practices and CNC machining efficiency. – Covered as part of the testing process for this certificate. • Run a production run of a product. – Covered as part of the testing process for this certificate.
Other:	(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)

SECTION #3 IMPLEMENTATION	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year):
Curriculum Committee and VPIS approval is all that is required for the recognition of the submitted licensure/certifications as CPL. Therefore, once this has occurred, students may apply for CPL for the courses aligned with the approved licensure/certificate immediately.	

SECTION #4 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24
Department Chair (enter name of department chair):		
Department Dean/Director (enter name of department dean/director):		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee [meeting schedule and submission deadlines](#). You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
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Columbia Gorge Community College

Credit for Prior Learning (CPL) Acceptance of Licensure/Certification Request

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark, rclark@cgcc.edu
License/Certification Title:	AWS D1.1 3G GMAW or SMAW Mild Steel, Expired Ok	Granting Institution(s)/Agency(s):	American Welding Society
Course Equivalency:	Course Title(s):	MFG 195, MFG150	
	Credits:	6	
Potential application to current awards:	<ul style="list-style-type: none"> Associate of Applied Science: Advanced Manufacturing and Fabrication Manufacturing certificate Advanced Manufacturing Technology certificate 		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

Alignment of Licensure/Certification requirements to course outcomes:	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>MFG 195 Introduces the operation of equipment and tools used in standard welding and manufacturing shops. Identifies procedures, practices and skills used by welders including commonly used welding machines and the equipment used to cut and finish material. Audit available.</p> <ul style="list-style-type: none"> Apply welding industry safety standards – Will be known by operator who holds this licensure as these safety standards are required to take the test. Demonstrate industry standard basic and commonly welded joints and positions – The blueprint for the test procedure requires these skills Perform SMAW Position 1 and 2, G and F (groove and fillet) joints to apprentice level of welding – These processes are superseded by this licensure and co-awarded. Perform GMAW/MIG Position 1and2,G and F (groove and fillet) joints to apprentice level of welding - These processes are superseded by this licensure and co-awarded. Identify tools and equipment used in the welding industry and apply their appropriate use – This would be required to complete the test. Research welding careers and the requirements of the profession – The test taker will have already had a career in field to need to take this test. <p>MFG150 Introduces basic manufacturing processes used in industry. Expands on joints learned in MFG195 to out of position welding joints. Emphasizes weld quality,</p>
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	<p>joint quality and measurement tolerances for welding processes used in industry. Introduces additional tools used in welding trades. Prerequisite/concurrent: MFG 195. Audit available.</p> <ul style="list-style-type: none"> • Demonstrate knowledge of intermediate and advanced welding joints- This would be required to set up the plate for taking the test. • Identify and diagnose common weld errors and their corrections – This is covered by the test. • Perform SMAW position 3 G and F welds to an apprentice level of welding – This is covered by the test. • Perform GMAW position 3 G and F welds to an apprentice level of welding – This is covered by the Test • Create and weld appropriate joints for common manufacturing processes – This skill is required to set up the test. • Identify and precisely use commonly used manufacturing tooling – This is required to prepare the plate for the test, and process the plate for bending after the weldment part of the test is take.
Other:	<p>(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)</p>

SECTION #3 IMPLEMENTATION	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year):
<p>Curriculum Committee and VPIS approval is all that is required for the recognition of the submitted licensure/certifications as CPL. Therefore, once this has occurred, students may apply for CPL for the courses aligned with the approved licensure/certificate immediately.</p>	

SECTION #4 DEPARTMENT REVIEW		
<p><i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i></p>		
Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24
Department Chair (enter name of department chair):		
Department Dean/Director (enter name of department dean/director):		

NEXT STEPS:

Columbia Gorge Community College

**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark, rclark@cgcc.edu
License/Certification Title:	AWS D1.1 4G, SMAW or GMAW Mild Steel, Expired Ok	Granting Institution(s)/Agency(s):	American Welding Society
Course Equivalency:	Course Title(s):	MFG 195, 150, 151	
	Credits:	9	
Potential application to current awards:	<ul style="list-style-type: none"> Associate of Applied Science: Advanced Manufacturing and Fabrication Manufacturing certificate Advanced Manufacturing Technology certificate 		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

<p>Alignment of Licensure/Certification requirements to course outcomes:</p>	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>MFG 195 Introduces the operation of equipment and tools used in standard welding and manufacturing shops. Identifies procedures, practices and skills used by welders including commonly used welding machines and the equipment used to cut and finish material. Audit available.</p> <ul style="list-style-type: none"> Apply welding industry safety standards – Will be known by operator who holds this licensure as these safety standards are required to take the test. Demonstrate industry standard basic and commonly welded joints and positions – The blueprint for the test procedure requires these skills Perform SMAW Position 1 and 2, G and F (groove and fillet) joints to apprentice level of welding – These processes are superseded by this licensure and co-awarded. Perform GMAW/MIG Position 1and2,G and F (groove and fillet) joints to apprentice level of welding - These processes are superseded by this licensure and co-awarded. Identify tools and equipment used in the welding industry and apply their appropriate use – This would be required to complete the test. Research welding careers and the requirements of the profession – The test taker will have already had a career in field to need to take this test.
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	<p>MFG150 Introduces basic manufacturing processes used in industry. Expands on joints learned in MFG195 to out of position welding joints. Emphasizes weld quality, joint quality and measurement tolerances for welding processes used in industry. Introduces additional tools used in welding trades. Prerequisite/concurrent: MFG 195. Audit available.</p> <ul style="list-style-type: none"> • Demonstrate knowledge of intermediate and advanced welding joints- This would be required to set up the plate for taking the test. • Identify and diagnose common weld errors and their corrections – This is covered by the test. • Perform SMAW position 3 G and F welds to an apprentice level of welding – This is covered by the test. • Perform GMAW position 3 G and F welds to an apprentice level of welding – This is covered by the Test • Create and weld appropriate joints for common manufacturing processes – This skill is required to set up the test. • Identify and precisely use commonly used manufacturing tooling – This is required to prepare the plate for the test, and process the plate for bending after the weldment part of the test is take. <p>MFG 151 Builds on fabrication principles started in MFG 150 and adds Pos 4 welding on mild steel in groove and fillet fitments. Focuses on scientific principles that effect weld outcomes and how those principles can be used by welders to ensure quality weld and fabrication outcomes. Teaches use of Oxy-Fuel cutting equipment. Prerequisites: MFG 150. Audit available.</p> <ul style="list-style-type: none"> • Create Position 4 Fillet weldments using SMAW and GMAW processes for destructive testing as per AWS D1.1 code. – This is covered by the test. • Create Position 4 Groove weldments using SMAW and GMAW processes for destructive testing as per AWS D1.1 code. – This is covered by the test. • Accurately account for welding warp in mild steel processes. – This is required to pass the test. • Demonstrate knowledge of heat affected zone chemistry and its practical considerations in welding. – This is demonstrated by passing the test. • Use Oxygen-Fuel cutting techniques to process and handle materials in a fabrication environment. – This is used to prepare plates for the test. • Apply the technical skills and math needed to carry out correct joint preparation and fit-up. – This is demonstrated through the cutting of angles and setup of the plate accurately to take the test, and is inspected prior to the test being welded.
Other:	<p>(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)</p>

SECTION #3 IMPLEMENTATION	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year):
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Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24
Department Chair (enter name of department chair):		
Department Dean/Director (enter name of department dean/director):		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
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Columbia Gorge Community College

**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark / rclark@cgcc.edu
License/Certification Title:	AWS D1.2 2G GTAW Aluminum, Expired OK	Granting Institution(s)/Agency(s):	American Welding Society
Course Equivalency:	Course Title(s):	MFG 281	
	Credits:	3	
Potential application to current awards:	<ul style="list-style-type: none"> Associate of Applied Science: Advanced Manufacturing and Fabrication Manufacturing certificate Advanced Manufacturing Technology certificate 		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

Alignment of Licensure/Certification requirements to course outcomes:	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>Builds on the knowledge of MFG 280 by beginning structural code welding practice and deepening knowledge of GTAW AC processes as they pertain to welding aluminum and alloys. Provides experience creating multipart assemblies as in a production manufacturing environment. Corequisites: MFG 280. Audit available.</p> <ul style="list-style-type: none"> Create Position 2 Fillet weldments using AC GTAW processes suitable for destructive testing as per AWS D1.2 code. – Superseded by the test required for this certification. Create Position 2 Groove weldments using AC GTAW processes suitable for destructive testing as per AWS D1.2 code. – This is the same as the above test for certification. Identify and recognize the oxidation processes of aluminum components as they pertain to weld quality. – Without this knowledge, the welder would not be able to pass the certification test. Identify common GTAW AC weld errors and their corrections. – This is proven by holding the certification. Demonstrate knowledge of procedural changes needed for welding different alloys of aluminum. – This is required knowledge to pass the test. Create multi-part assemblies from aluminum components with attention to tolerance and appropriate interpretation of a weld process sheet (WPS). – The test is a multi-part assembly with 1/32" tolerance, and includes a WPS.
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Other:	(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)
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SECTION #3 IMPLEMENTATION

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SECTION #4 DEPARTMENT REVIEW

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Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24

Department Chair (enter name of department chair):

Department Dean/Director (enter name of department dean/director):

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
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**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark / rclark@cgcc.edu
License/Certification Title:	D1.2G SMAW, GMAW Mild Steel, Expired ok	Granting Institution(s)/Agency(s):	American Welding Society
Course Equivalency:	Course Title(s):	MFG 195	
	Credits:	3	
Potential application to current awards:	<ul style="list-style-type: none"> • Associate of Applied Science: Advanced Manufacturing and Fabrication • Manufacturing certificate • Advanced Manufacturing Technology certificate 		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

Alignment of Licensure/Certification requirements to course outcomes:	(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)
	<p>MFG 195 Introduces the operation of equipment and tools used in standard welding and manufacturing shops. Identifies procedures, practices and skills used by welders including commonly used welding machines and the equipment used to cut and finish material. Audit available.</p> <ul style="list-style-type: none"> • Apply welding industry safety standards – Will be known by operator who holds this licensure as these safety standards are required to take the test. • Demonstrate industry standard basic and commonly welded joints and positions – The blueprint for the test procedure requires these skills • Perform SMAW Position 1 and 2, G and F (groove and fillet) joints to apprentice level of welding – These processes are superseded by this licensure and co-awarded. • Perform GMAW/MIG Position 1and2,G and F (groove and fillet) joints to apprentice level of welding - These processes are superseded by this licensure and co-awarded. • Identify tools and equipment used in the welding industry and apply their appropriate use – This would be required to complete the test. • Research welding careers and the requirements of the profession – The test taker will have already had a career in field to need to take this test.

Other:	(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)
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SECTION #3 IMPLEMENTATION

Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year):
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Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24

Department Chair (enter name of department chair):

Department Dean/Director (enter name of department dean/director):

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
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Columbia Gorge Community College

**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark / rclark@cgcc.edu
License/Certification Title:	D1.6 GTAW 2G Stainless Steel, Expired Ok	Granting Institution(s)/Agency(s):	American Welding Society
Course Equivalency:	Course Title(s):	MFG285	
	Credits:	3	
Potential application to current awards:	<ul style="list-style-type: none"> Associate of Applied Science: Advanced Manufacturing and Fabrication Manufacturing certificate Advanced Manufacturing Technology certificate 		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

<p>Alignment of Licensure/Certification requirements to course outcomes:</p>	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>Builds on the skills learned in MFG 285 by introducing welding to AWS code for stainless steel alloys. Introduces fabrication of stainless steel assemblies and the different procedural and prep changes for different stainless steel alloys. Presents AWS tolerances in color and purity in stainless steel welding, and experiments with a range of outcomes and how they differ both practically and chemically.</p> <p>Prerequisites: MFG 285. Audit available.</p> <ul style="list-style-type: none"> Create Position 2 Fillet weldments using DC GTAW processes suitable for destructive testing as per AWS D1.6 code. – Superseded by the test required for this certification. Create Position 2 Groove weldments using DC GTAW processes suitable for destructive testing as per AWS D1.6 code. - This is the same as the above test for certification. Manufacture stainless steel multi-part assemblies. – The test assembled by the welder is a multi-part assembly. Identify weld errors in stainless steel DC GTAW welding and necessary corrections. – This knowledge is demonstrated by holding the certification. Recognize and explain changes in procedure when dealing with different stainless steel alloys. – This knowledge is demonstrated by holding the certification. Demonstrate knowledge of AWS acceptable color and surface tolerances and the procedural relationship of those colors and surfaces to process.- This knowledge is demonstrated by holding the certification.
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Other:	(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)
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SECTION #3 IMPLEMENTATION

Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year):
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Curriculum Committee and VPIS approval is all that is required for the recognition of the submitted licensure/certifications as CPL. Therefore, once this has occurred, students may apply for CPL for the courses aligned with the approved licensure/certificate immediately.

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Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24

Department Chair (enter name of department chair):

Department Dean/Director (enter name of department dean/director):

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
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Columbia Gorge Community College

CC date 10.10.24

CC decision _____

CC vote _____

**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark, Chris Dodson rclark@cgcc.edu , cdodson@cgcc.edu
License/Certification Title:	Haas Basic Mill	Granting Institution(s)/Agency(s):	Haas Automation
Course Equivalency:	Course Title(s):	MFG 220	
	Credits:	3	
Potential application to current awards:	Associate of Applied Science: Advanced Manufacturing and Fabrication		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

<p>Alignment of Licensure/Certification requirements to course outcomes:</p>	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>Introduces use of whole shop production methods for producing parts and assemblies. Describes the use of math and lean manufacturing principles to streamline production and prototyping in the industrial environment. Prerequisites: MFG 157. Audit available.</p> <ul style="list-style-type: none"> Produce complex products from scratch fully utilizing shop equipment. – Covered as part of the testing process for this certificate. Understand lean manufacturing principles. – Covered as part of the testing process for this certificate. Develop labor and cost estimating strategies based on prevailing wage. – Covered as part of the testing process for this certificate. Explore machining processes for production fabrication. – Covered as part of the testing process for this certificate.
<p>Other:</p>	<p>(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)</p>

SECTION #3 IMPLEMENTATION	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year):
Curriculum Committee and VPIS approval is all that is required for the recognition of the submitted licensure/certifications as CPL. Therefore, once this has occurred, students may apply for CPL for the courses aligned with the approved licensure/certificate immediately.	

SECTION #4 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24
Department Chair (enter name of department chair):		
Department Dean/Director (enter name of department dean/director):		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee [meeting schedule and submission deadlines](#). You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
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4. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

Columbia Gorge Community College

**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark, Chris Dodson rclark@cgcc.edu , cdodson@cgcc.edu
License/Certification Title:	Mastercam 2D Mill	Granting Institution(s)/Agency(s):	Mastercam
Course Equivalency:	Course Title(s):	MFG 220	
	Credits:	3	
Potential application to current awards:	Associate of Applied Science: Advanced Manufacturing and Fabrication		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

<p>Alignment of Licensure/Certification requirements to course outcomes:</p>	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>Introduces use of whole shop production methods for producing parts and assemblies. Describes the use of math and lean manufacturing principles to streamline production and prototyping in the industrial environment. Prerequisites: MFG 157. Audit available.</p> <ul style="list-style-type: none"> Produce complex products from scratch fully utilizing shop equipment. – Covered as part of the testing process for this certificate. Understand lean manufacturing principles. – Covered as part of the testing process for this certificate. Develop labor and cost estimating strategies based on prevailing wage. – Covered as part of the testing process for this certificate. Explore machining processes for production fabrication. – Covered as part of the testing process for this certificate.
<p>Other:</p>	<p>(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)</p>

SECTION #3 IMPLEMENTATION	
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Submitter	Email	Date
Robert Wells-Clark	rclark@cgcc.edu	10.4.24
Department Chair (enter name of department chair):		
Department Dean/Director (enter name of department dean/director):		

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Columbia Gorge Community College

**Credit for Prior Learning (CPL)
Acceptance of Licensure/Certification Request**

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION

Department:	AMF	Submitter name: phone: email:	Robert Wells-Clark, Chris Dodson rclark@cgcc.edu , cdodson@cgcc.edu
License/Certification Title:	Mastercam 3D Mill	Granting Institution(s)/Agency(s):	Mastercam
Course Equivalency:	Course Title(s):	MFG 221, 222	
	Credits:	6	
Potential application to current awards:	Associate of Applied Science: Advanced Manufacturing and Fabrication		

SECTION #2 OUTCOMES AND CONTENT ALIGNMENT

Alignment of Licensure/Certification requirements to course outcomes:	<p>(Enter course description and list all course outcomes [by each course if more than one course] and provide a bulleted outline for each outcome showing how licensure/certification requirements address/fulfill those outcomes.)</p> <p>MFG 221 Explores CNC operations processes and their role in creating a product from Solid 3d modeling. Utilizes numerous systems of control and manufacturing processes to create streamlined research and development and rapid prototype products for testing. Prerequisite MFG 220. Audit available.</p> <ul style="list-style-type: none"> Understand CNC operation and programming. – Covered as part of the testing process for this certificate. Demonstrate knowledge of feed speed and circular interpolation. – Covered as part of the testing process for this certificate. Produce product from existing 3d solid model and tolerance. – Covered as part of the testing process for this certificate. Create and assemble multi-part assemblies produced from CNC equipment. – Covered as part of the testing process for this certificate. <p>MFG222 Combines the use of CNC technology and other metalworking and welding techniques to create a simulated production fabrication environment from design to prototype. Utilizes numerous integrated math and technology aspects to accurately produce products. Explores manufacturing problem solving and critical thinking. Prerequisites: MFG 221. Audit available.</p> <ul style="list-style-type: none"> Design a blueprint and assembly drawing of a product that requires a fabrication solution. – Covered as part of the testing process for this certificate. Create a prototype from blueprint and do real world testing to check design.
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	<ul style="list-style-type: none"> – Covered as part of the testing process for this certificate. • Fabricate a product that is production ready. – Covered as part of the testing process for this certificate. • Produce a fixture for production fabrication utilizing lean practices and CNC machining efficiency. – Covered as part of the testing process for this certificate. • Run a production run of a product. – Covered as part of the testing process for this certificate.
Other:	(List any course requirements that may exist beyond learning outcomes. Describe how the licensure/certification ensures that the requirement is addressed/fulfilled. For example, if the course requires a specific # of clinical hours, include licensure/certification requirements that show that the hours required have been fulfilled/addressed. Course requisite requirements are not applicable to licensure/certification CPL approval.)

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Robert Wells-Clark	rclark@cgcc.edu	10.4.24
Department Chair (enter name of department chair):		
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Manufacturing Processes

Course Number: MFG 150

Transcript Title: Manufacturing Processes

Created: Aug 11, 2022

Updated: Jul 12, 2023

Total Credits: 3

Lecture Hours: 0

Lecture / Lab Hours: 60

Lab Hours: 0

Satisfies Cultural Literacy requirement: No

Satisfies General Education requirement: No

Grading Options A-F, P/NP, Audit

Default Grading Options A-F

Repeats available for credit: 0

Prerequisites

Prerequisite / Concurrent

[MFG 195 \(/courses/mfg-195\)](/courses/mfg-195)

Course Description

Introduces basic manufacturing processes used in industry. Expands on joints learned in MFG195 to out of position welding joints. Emphasizes weld quality, joint quality and measurement tolerances for welding processes used in industry. Introduces additional tools used in welding trades. Prerequisite/concurrent: MFG 195. Audit available.

Course Outcomes

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

1. Demonstrate knowledge of intermediate and advanced welding joints
2. Identify and diagnose common weld errors and their corrections
3. Perform SMAW position 3 G and F welds to an apprentice level of welding
4. Perform GMAW position 3 G and F welds to an apprentice level of welding
5. Create and weld appropriate joints for common manufacturing processes
6. Identify and precisely use commonly used manufacturing tooling

Suggested Outcome Assessment Strategies

Assessment for this course is based upon destructive and visual testing of the intermediate weld joints produced by students. Students must identify the cause of these weld errors and correct them to industry specification. Assessments are a mix of quizzes and visual inspections of previous welds, as well as diagnosis of their own and their classmates welds. Projects created by students will be checked to specification and tolerance according to industry standard including pre-inspection before welding to check joint fit up quality. A rubric including tolerances will be used to assign a value to each assessment.

Course Activities and Design

The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped classroom, dyads, oral presentation, role play, simulation scenarios, group projects, service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry based instruction, differentiated instruction (learning centers), graphic organizers, etc.

Course Content

Outcome #1: Demonstrate knowledge of intermediate and advanced welding joints

- Read and understand technical documents pertaining to weld joint design
- Determine the correct process for welding intermediate and advanced welding joints
- Understand how to differentiate contour, type and quality

Outcome #2: Identify and diagnose common weld errors and their corrections

- Make corrective action based on visual feedback from welds
- Determine weld error from destructive testing procedure and correct
- Cut and etch welds and make a determination of overall quality
- Understand weld heat affected zone and corrections
- Determine necessary corrections for warp prior to welding.

Outcome #3: Perform SMAW position 3 G and F welds to an apprentice level of welding

- Weld in SMAW 3G and 3F to AWS Code
- Participate in mock destructive testing

Outcome #4: Perform GMAW position 3 G and F welds to an apprentice level of welding

- Weld in GMAW 3G and 3F to AWS Code
- Participate in mock destructive testing

Outcome #5: Create and weld appropriate joints for common manufacturing processes

- Prepare and fit joints using tools typically used in the welding industry to tolerance
- Correctly prepare mock AWS testing plates
- Use basic measuring tools to compare joint fitment to tolerance/allowance

Outcome #6: Identify and precisely use commonly used manufacturing tooling

- Complete basic fabrications using common and basic industry tooling
- Use math to determine necessary angles, lengths and placement of cuts and bends
- Create right angle to tolerance using available manufacturing tooling.

Suggested Texts and Materials

Some Suggested resources:

- [AWS Structural Code Book 2020](#)
- [Aeospacewelding.com](#)
- [Thefabricator.com](#)
- [Aws.org](#)
- [Millerwelds.com](#)
- [Lincolnelectric.com](#)

Suggested Text:

- Welding Skills 5th Edition; B.J. Moniz

Department Notes

Safety glasses are required at all times in the welding lab, and are provided for students. Students may also purchase their own safety glasses from a local supplier. Long pants and closed toed shoes are required in the welding lab at all times. Appropriate clothing must be worn to work in the lab (no synthetic materials, etc.). Safety requirements are covered prior to work in the lab.



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The Dalles Campus

400 East Scenic Drive

The Dalles, OR 97058

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Hood River Center

1730 College Way

Hood River, OR 97031-7502

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Fabrication Processes 1

Course Number: MFG 151

Transcript Title: Fabrication Processes 1

Created: Aug 11, 2022

Updated: Jul 12, 2023

Total Credits: 3

Lecture Hours: 0

Lecture / Lab Hours: 60

Lab Hours: 0

Satisfies Cultural Literacy requirement: No

Satisfies General Education requirement: No

Grading Options A-F, P/NP, Audit

Default Grading Options A-F

Repeats available for credit: 0

Prerequisites

[MFG 150 \(/courses/mfg-150\)](/courses/mfg-150)

Course Description

Builds on fabrication principles started in MFG 150 and adds Pos 4 welding on mild steel in groove and fillet fitments. Focuses on scientific principles that effect weld outcomes and how those principles can be used by welders to ensure quality weld and fabrication outcomes. Teaches use of Oxy-Fuel cutting equipment. Prerequisites: MFG 150. Audit available.

Course Outcomes

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

1. Create Position 4 Fillet weldments using SMAW and GMAW processes for destructive testing as per AWS D1.1 code.
2. Create Position 4 Groove weldments using SMAW and GMAW processes for destructive testing as per AWS D1.1 code.
3. Accurately account for welding warp in mild steel processes.
4. Demonstrate knowledge of heat affected zone chemistry and its practical considerations in welding.
5. Use Oxygen-Fuel cutting techniques to process and handle materials in a fabrication environment.

6. Apply the technical skills and math needed to carry out correct joint preparation and fit-up.

Suggested Outcome Assessment Strategies

Outcomes are assessed through a mixture of hands on and written assessments. Priority is given to hands-on proficiency based assessment in an environment that rewards demonstration of skill needed for success in industry.

- Lecture and in booth coaching and direct instruction.
- Direct instruction in full class demonstration of skills.
- Written exams.
- Student proficiency through demonstration of learned strategies and skills in industry standard environment.
- Mock AWS Testing procedure (destructive testing) or mock local industry supported on-site testing procedures.
- Job readiness based on performance.
- In class lab experiments and testing using the scientific process with written result reporting.

Course Activities and Design

The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped

classroom, dyads, oral presentation, role play, simulation scenarios, group projects, service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry based instruction, differentiated instruction (learning centers), graphic organizers, etc.

Course Content

Outcome #1: Create Position 4 Fillet weldments using SMAW and GMAW processes for destructive testing as per AWS D1.1 code.

- Understand American Welding Society (AWS) D1.1 structural code for SMAW 7018 fillet weld process in position 4.
- Prepare plate for welding according to structural standard.
- Weld plate to code specification.
- Prepare plate for destructive testing per AWS Code.
- Interpret destructive testing results.

Outcome #2: Create Position 4 Groove weldments using SMAW and GMAW processes for destructive testing as per AWS D1.1 code.

- Understand American Welding Society (AWS) D1.1 structural code for SMAW 7018 groove weld process in position 4.
- Prepare plate for welding according to structural.
- Weld plate to code specification.
- Prepare plate for destructive testing per AWS Code.

- Interpret destructive testing results.

Outcome #3: Accurately account for welding warp in mild steel processes.

- Define and predict using a formula the amount of warp an assembly will experience based on the expected heat input.
- Create basic tacked together assemblies with warp tolerances pre-accounted for.
- Manufacture and finish assemblies and use quality control best practices to ensure tolerances are met post welding.

Outcome #4: Demonstrate knowledge of heat affected zone chemistry and its practical considerations in welding and fabrication.

- Understand the chemical changes that occur within the heat effected zone and the resulting change in material structure.
- Define the different zones within the heat affected zone and how they are chemically and physically different from the welded zone and base material.
- Understand mitigation strategies for reducing heat affected zone size and fatigue in mild steel.
- Prepare and implement heat affected zone mitigation strategies.

Outcome #5: Use Oxygen-Fuel cutting techniques to process and handle materials in a fabrication environment.

- Understand Oxygen-Fuel cylinder safety and handling procedures.
- Demonstrate proper Oxy-Fuel cutting torch setup and shut down.

- Produce industry standard cuts in material up to 1” thick using appropriate cutting torch size and setup.
- Determine gas flow necessary for appropriate cutting torch operation.
- Understand practical and procedural differences in different types of fuel gasses commonly used in torch cutting.
- Demonstrate basic torch maintenance and upkeep procedures.

Outcome #6: Apply the technical skills and math needed to carry out correct joint preparation and fitup.

- Use circumference math and tube sizing formula to calculate the amount of tube needed to make bent product.
- Calculate angles of triangles and length of triangles in assemblies to accurately determine length of materials needed for projects.
- Accurately calculate material amount needed for large scale project from blueprints and cost material using online resources.

Suggested Texts and Materials

Resources are available openly on the web, but largely the curriculum adaptation needs to be done based on the instructors existing skill set. Since there are many ways to teach the content, the “teach what you know, and teach well what you do” is very appropriate for courses like this.

The following books are recommended:

- Welding Skills, 5th Edition, B.J. Moniz

- Welding Skills Workbook, 5th Edition, Jonathan F. Gosse
- Print Reading for Welders, 5th Edition, Thomas E. Proctor, Jonathan F. Goss

Some Suggested resources:

- AWS Structural Code Book 2020
- Aeospacewelding.com
- Thefabricator.com
- Aws.org
- Millerwelds.com
- Lincolnelectric.com

Department Notes

Safety glasses are required at all times in the welding lab and are provided for students. Students may also purchase their own safety glasses from a local supplier. Long pants and closed toed shoes are required in the welding lab at all times. Appropriate clothing must be worn to work in the lab (no synthetic materials, ect.). Safety requirements are covered prior to work in the lab.



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Welding Technology I

Course Number: MFG 195

Transcript Title: Welding Technology I

Created: Aug 11, 2022

Updated: Jul 12, 2023

Total Credits: 3

Lecture Hours: 0

Lecture / Lab Hours: 60

Lab Hours: 0

Satisfies Cultural Literacy requirement: No

Satisfies General Education requirement: No

Grading Options A-F, P/NP, Audit

Default Grading Options A-F

Repeats available for credit: 0

Course Description

Introduces the operation of equipment and tools used in standard welding and manufacturing shops. Identifies procedures, practices and skills used by welders including commonly used welding machines and the equipment used to cut and finish material. Audit available.

Course Outcomes

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

1. Apply welding industry safety standards
2. Demonstrate industry standard basic and commonly welded joints and positions
3. Perform SMAW Position 1 and 2, G and F (groove and fillet) joints to apprentice level of welding
4. Perform GMAW/MIG Position 1 and 2, G and F (groove and fillet) joints to apprentice level of welding
5. Identify tools and equipment used in the welding industry and apply their appropriate use
6. Research welding careers and the requirements of the profession

Suggested Outcome Assessment Strategies

Assessment will be based upon written examinations for safety and basic welding practice prior to working in the lab, basic tool quizzes after introduction and use, and weld sample inspection / destructive weld sample testing for all SMAW/GMAW welds. An exploratory career research report will be written for the student to better understand potential careers in the field.

Course Activities and Design

The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped classroom, dyads, oral presentation, role play, simulation scenarios, group projects, service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry based instruction, differentiated instruction (learning centers), graphic organizers, etc.

Course Content

Outcome #1: Apply welding industry safety standards

- Demonstrate appropriate PPE useage
- Safely use common tools in the welding shop
- Display knowledge of environmental hazards in the welding lab

Outcome #2: Demonstrate industry standard basic and commonly welded joints and positions

- Identify lap, groove, butt, plug, slot, corner, edge and fillet joints
- Create lap, groove, butt, plug, slot, corner, edge and fillet joints

Outcome #3: Perform SMAW Position 1 and 2, G and F (groove and fillet) joints to apprentice level of welding

- Pass a SMAW mock certification in Position 1G and 2G
- Pass a SMAW destructive test in Position 1F and 2F.

Outcome #4: Perform GMAW/MIG Position 1 and 2, G and F (groove and fillet) joints to apprentice level of welding

- Pass a GMAW mock certification in Position 1G and 2G
- Pass a GMAW destructive test in Position 1F and 2F.

Outcome #5: Identify tools and equipment used in the welding industry and apply their appropriate use

- Identify different commonly used welding shop tools
- Demonstrate efficient and affective use of commonly used welding shop tools
- Determine the appropriate tooling for a task based upon a problem solving based approach

Outcome #6: Research welding careers and the requirements of the profession

- Consider different career options within welding and manufacturing fields
- Determine which careers may be the best choice for you, and articulate why
- Listen and understand from primary sources what different careers in the manufacturing spectrum entail

Suggested Texts and Materials

Resources are available openly on the web, but largely the curriculum adaptation needs to be done based on the instructors existing skill set. Since there are many ways to teach the content, the “teach what you know, and teach well what you do” is very appropriate for courses like this.

Some Suggested resources:

- AWS Structural Code Book 2020
- Aeospacewelding.com
- Thefabricator.com
- Aws.org
- Millerwelds.com
- Lincolnelectric.com

The following books are recommended:

- Welding Skills 5th Edition B.J. Moniz
- Welding Skills Workbook 5th Edition Jonathan F. Gosse

Department Notes

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(541) 506-6000 (tel:5415066000)



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Production Manufacturing 1

Course Number: MFG 220

Transcript Title: Production Manufacturing 1

Created: Aug 11, 2022

Updated: Jul 12, 2023

Total Credits: 3

Lecture Hours: 0

Lecture / Lab Hours: 60

Lab Hours: 0

Satisfies Cultural Literacy requirement: No

Satisfies General Education requirement: No

Grading Options A-F, P/NP, Audit

Default Grading Options A-F

Repeats available for credit: 0

Prerequisites

[MFG 157 \(/courses/mfg-157\)](/courses/mfg-157).

Course Description

Introduces use of whole shop production methods for producing parts and assemblies. Describes the use of math and lean manufacturing principles to streamline production and prototyping in the industrial environment. Prerequisites: MFG 157. Audit available.

Course Outcomes

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

1. Produce complex products from scratch fully utilizing shop equipment.
2. Understand lean manufacturing principles.
3. Develop labor and cost estimating strategies based on prevailing wage.
4. Explore machining processes for production fabrication.

Suggested Outcome Assessment Strategies

Outcomes are assessed through a mixture of hands on and written assessments. Priority is given to hands-on proficiency-based assessment in an environment that rewards demonstration of skill needed for success in industry.

- Lecture and in-booth coaching and direct instruction.
- Direct instruction in full class demonstration of skills.
- Written exams.
- Student proficiency through demonstration of learned strategies and skills in industry standard environment.
- Mock AWS Testing procedure (destructive testing) or mock local industry supported on-site testing procedures.
- Job readiness based on performance.
- In class lab experiments and testing using the scientific process with written result reporting.

Course Activities and Design

The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped classroom, dyads, oral presentation, role play, simulation scenarios, group projects,

service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry based instruction, differentiated instruction (learning centers), graphic organizers, etc.

Course Content

Outcome #1: Produce complex products from scratch utilizing shop equipment.

- Create a blueprint and assembly drawing.
- Produce products to tolerance and test, redesign from blueprint if necessary using CNC and manual equipment.
- Develop process and procedure sheets for blueprints.

Outcome #2: Understand lean manufacturing principles.

- Demonstrate knowledge of several lean manufacturing systems.
- Compare and contrast different lean manufacturing designs and their applicable implementation in an industrial environment.

Outcome #3: Develop labor and cost estimating strategies based on prevailing wage.

- Determine prevailing wage of different aspects of a producing a product.
- Create a labor cost estimate broken down by different techniques used.

- Identify any potential cost savings through efficiency in wage labor.

Outcome #4: Explore machining processes for production fabrication.

- Understand machining tools and processes.
- Identify different toolsets and their usage.
- Explore efficiency comparing manual machining and CNC machining.

Suggested Texts and Materials

Resources are available openly on the web, but largely the curriculum adaptation needs to be done based on the instructors existing skill set. Since there are many ways to teach the content, the “teach what you know, and teach well what you do” is very appropriate for courses like this.

Suggested/recommended text:

- Print Reading for Welders 5th Edition Thomas E. Proctor, Jonathan F. Gosse

Suggested Resources:

- AWS Structural Code Book 2020
- Aeospacewelding.com
- Thefabricator.com
- Aws.org
- Millerwelds.com
- Lincolnelectric.com

- Amatrol Learning Systems Curriculum

Students utilize on campus computer resources and software, e.g. CAD resources.

Department Notes

Safety glasses are required at all times in the manufacturing lab, and are provided for students. Students may also purchase their own safety glasses from a local supplier. Long pants and closed toed shoes are required in the welding lab at all times. Appropriate clothing must be worn to work in the lab (no synthetic materials, ect.). Safety requirements are covered prior to work in the lab.



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English



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Production Manufacturing 2

Course Number: MFG 221

Transcript Title: Production Manufacturing 2

Created: Aug 11, 2022

Updated: Jul 12, 2023

Total Credits: 3

Lecture Hours: 0

Lecture / Lab Hours: 60

Lab Hours: 0

Satisfies Cultural Literacy requirement: No

Satisfies General Education requirement: No

Grading Options A-F, P/NP, Audit

Default Grading Options A-F

Repeats available for credit: 0

Prerequisites

[MFG 220 \(/courses/mfg-220\)](/courses/mfg-220)

Course Description

Explores CNC operations processes and their role in creating a product from solid 3d modeling. Utilizes numerous systems of control and manufacturing processes to create streamlined research and development and rapid prototype products for testing. Prerequisite MFG 220. Audit available.

Course Outcomes

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

1. Understand CNC operation and programming.
2. Demonstrate knowledge of feed speed and circular interpolation.
3. Produce product from existing 3d solid model and tolerance.
4. Create and assemble multi-part assemblies produced from CNC equipment.

Suggested Outcome Assessment Strategies

Outcomes are assessed through a mixture of hands on and written assessments. Priority is given to hands-on proficiency-based assessment in an environment that rewards demonstration of skill needed for success in industry.

- Lecture and in-booth coaching and direct instruction.
- Direct instruction in full class demonstration of skills.
- Written exams.
- Student proficiency through demonstration of learned strategies and skills in industry standard environment.
- Mock AWS Testing procedure (destructive testing) or mock local industry supported on-site testing procedures.
- Job readiness based on performance.
- In class lab experiments and testing using the scientific process with written result reporting.

Course Activities and Design

The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped classroom, dyads, oral presentation, role play, simulation scenarios, group projects,

service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry based instruction, differentiated instruction (learning centers), graphic organizers, etc.

Course Content

Outcome #1: Understand CNC Operation and Programming.

- Demonstrate knowledge of G-code and write a basic machining process.
- Understand protocols of different commonly used CNC command programs.
- Understand different types of line code and their usage.

Outcome #2: Demonstrate knowledge of feed speed and circular interpolation.

- Program code that runs safely in the simulator.
- Demonstrate ability to optimize code and feed/run speed.
- Use circular interpolation strategies to minimize machining time.

Outcome #3: Produce product from existing 3d solid model and tolerance.

- Take an existing 3d model and apply tool pathing to it for use in a CNC.
- Ensure pathing runs correctly in simulator.
- Run code and tolerance product outcome.

Outcome #4: Create and assemble multi-part assemblies produced from CNC equipment.

- Create a multi-part assembly using CNC machining processes.
- Fabricate to specification of existing blueprint following CNC machine, to correct tolerances and using assembly drawing.

Outcome #5: Identify different CNC tooling.

- Demonstrate knowledge of different types of CNC tooling.
- Identify the job of different tooling and how to use that tooling efficiently.
- Explore safety requirements of different types of tooling.

Suggested Texts and Materials

Resources are available openly on the web, but largely the curriculum adaptation needs to be done based on the instructors existing skill set. Since there are many ways to teach the content, the “teach what you know, and teach well what you do” is very appropriate for courses like this.

Suggested/recommended text:

- Print Reading for Welders 5th Edition Thomas E. Proctor, Jonathan F. Gosse

Suggested Resources:

- AWS Structural Code Book 2020
- Aeospacewelding.com

- Thefabricator.com
- Aws.org
- Millerwelds.com
- Lincolnelectric.com
- Amatrol Learning Systems Curriculum

Students utilize on campus computer resources and software, e.g. CAD resources.

Department Notes

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Safety requirements are covered prior to work in the lab.



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Production Manufacturing 3

Course Number: MFG 222

Transcript Title: Production Manufacturing 3

Created: Aug 11, 2022

Updated: Jul 12, 2023

Total Credits: 3

Lecture Hours: 0

Lecture / Lab Hours: 60

Lab Hours: 0

Satisfies Cultural Literacy requirement: No

Satisfies General Education requirement: No

Grading Options A-F, P/NP, Audit

Default Grading Options A-F

Repeats available for credit: 0

Prerequisites

[MFG 221 \(/courses/mfg-221\)](/courses/mfg-221)

Course Description

Combines the use of CNC technology and other metalworking and welding techniques to create a simulated production fabrication environment from design to prototype. Utilizes numerous integrated math and technology aspects to accurately produce products. Explores manufacturing problem solving and critical thinking. Prerequisites: MFG 221. Audit available.

Course Outcomes

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

1. Design a blueprint and assembly drawing of a product that requires a full fabrication solution.
2. Create a prototype from blueprint and do real world testing to check design.
3. Fabricate a product that is production ready.
4. Produce a fixture for production fabrication utilizing lean practices and CNC machining efficiency.
5. Run a production run of a product.

Suggested Outcome Assessment Strategies

Outcomes are assessed through a mixture of hands on and written assessments. Priority is given to hands-on proficiency-based assessment in an environment that rewards demonstration of skill needed for success in industry.

- Lecture and in-booth coaching and direct instruction.
- Direct instruction in full class demonstration of skills.
- Written exams.
- Student proficiency through demonstration of learned strategies and skills in industry standard environment.
- Mock AWS Testing procedure (destructive testing) or mock local industry supported on-site testing procedures.
- Job readiness based on performance.
- In class lab experiments and testing using the scientific process with written result reporting.

Course Activities and Design

The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped classroom, dyads, oral presentation, role play, simulation scenarios, group projects,

service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry based instruction, differentiated instruction (learning centers), graphic organizers, etc.

Course Content

Outcome #1: Design a blueprint and assembly drawing of a product that requires a full fabrication solution.

- Create a research and development process to determine a needed product.
- Draw and create the solution using solid 3d modeling.
- Describe the fabrication and assembly process of the product; which must include a full fabrication process involving CNC, welding and other.

Outcome #2: Create a prototype from blueprint and do real world testing to check design.

- From the working model, produce a first production prototype.
- Check the prototype for tolerance and design error.
- Test prototype in real word work, collect any necessary data and make any changes.

Outcome #3: Fabricate a finalized product that is production ready.

- Create an efficient and material minimized fabrication process.
- Check final design adjustments for viability.

- Apply lean manufacturing principles to the fabrication process to utilize labor efficiently.

Outcome #4: Produce a fixture for production fabrication utilizing lean practices and CNC machining efficiency practices.

- Write a process and procedure sheet that utilizes a fixture.
- Create a fixture that speeds fabrication process.
- Utilize a fixture that enhances lean manufacturing principles.

Outcome #5: Run a single production run of a product.

- Produce multiple of the same product utilizing production aids.
- Check a production run for tolerance and similarity.
- Develop a marketing campaign for the product.

Suggested Texts and Materials

Resources are available openly on the web, but largely the curriculum adaptation needs to be done based on the instructors existing skill set. Since there are many ways to teach the content, the “teach what you know, and teach well what you do” is very appropriate for courses like this.

Suggested/recommended text:

- Print Reading for Welders 5th Edition Thomas E. Proctor, Jonathan F. Gosse

Suggested Resources:

- [AWS Structural Code Book 2020](#)
- [Aeospacewelding.com](#)
- [Thefabricator.com](#)
- [Aws.org](#)
- [Millerwelds.com](#)
- [Lincolnelectric.com](#)
- [Amatrol Learning Systems Curriculum](#)

Students utilize on campus computer resources and software, e.g. CAD resources.

Department Notes

Safety glasses are required at all times in the manufacturing lab, and are provided for students. Students may also purchase their own safety glasses from a local supplier. Long pants and closed toed shoes are required in the welding lab at all times. Appropriate clothing must be worn to work in the lab (no synthetic materials, ect.). Safety requirements are covered prior to work in the lab.



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Aluminum GTAW/TIG Fabrication Process 1

Course Number: MFG 281

Transcript Title: Aluminum GTAW/TIG Fabrication Process 1

Created: Aug 15, 2022

Updated: Jul 12, 2023

Total Credits: 3

Lecture Hours: 0

Lecture / Lab Hours: 60

Lab Hours: 0

Satisfies Cultural Literacy requirement: No

Satisfies General Education requirement: No

Grading Options A-F, P/NP, Audit

Default Grading Options A-F

Repeats available for credit: 0

Prerequisites

[MFG 280 \(/courses/mfg-280\)](/courses/mfg-280)

Course Description

Builds on the knowledge of MFG 280 by beginning structural code welding practice and deepening knowledge of GTAW AC processes as they pertain to welding aluminum and alloys. Provides experience creating multipart assemblies as in a production manufacturing environment. Corequisites: MFG 280. Audit available.

Course Outcomes

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

1. Create Position 2 Fillet weldments using AC GTAW processes suitable for destructive testing as per AWS D1.2 code.
2. Create Position 2 Groove weldments using AC GTAW processes suitable for destructive testing as per AWS D1.2 code.
3. Identify and recognize the oxidation processes of aluminum components as they pertain to weld quality.
4. Identify common GTAW AC weld errors and their corrections.

5. Demonstrate knowledge of procedural changes needed for welding different alloys of aluminum.
6. Create multi-part assemblies from aluminum components with attention to tolerance and appropriate interpretation of a weld process sheet (WPS).

Suggested Outcome Assessment Strategies

Outcomes are assessed through a mixture of hands on and written assessments. Priority is given to hands-on proficiency based assessment in an environment that rewards demonstration of skill needed for success in industry.

1. Lecture and in booth coaching and direct instruction.
2. Direct instruction in full class demonstration of skills.
3. Written exams.
4. Student proficiency through demonstration of learned strategies and skills in industry standard environment.
5. Mock AWS Testing procedure (destructive testing) or mock local industry supported on-site testing procedures.
6. Job readiness based on performance.
7. In class lab experiments and testing using the scientific process with written result reporting.

Course Activities and Design

The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped classroom, dyads, oral presentation, role play, simulation scenarios, group projects, service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry based instruction, differentiated instruction (learning centers), graphic organizers, etc.

Course Content

Outcome #1: Create Position 2 Fillet weldments using AC GTAW processes suitable for destructive testing as per AWS D1.2 code.

- Understand American Welding Society (AWS) D1.2 structural code for aluminum GTAW fillet weld process in position 2.
- Prepare plate for welding according to structural standard.
- Weld plate to code specification.
- Prepare plate for destructive testing per AWS Code.
- Interpret destructive testing results.

Outcome #2: Create Position 2 Groove weldments using AC GTAW processes suitable for destructive testing as per AWS D1.2 code.

- Understand American Welding Society (AWS) D1.2 structural code for aluminum GTAW groove weld process in position 2.
- Prepare plate for welding according to structural standard.
- Weld plate to code specification.
- Prepare plate for destructive testing per AWS Code.
- Interpret destructive testing results.

Outcome #3: Identify and recognize the oxidation processes of aluminum components as they pertain to weld quality.

- Understand the chemical changes / reactions that happen when aluminum is exposed to oxygen in the air.
- Show understanding of appropriate cleanup and prep procedures based on type and extensiveness of oxidation formation on aluminum.
- Identify mechanical and chemical processes used to both prevent oxidation of different aluminum alloys and to clean up existing oxidation on aluminum surfaces.
- Recreate chemical reactions that cause oxidation, and reverse those oxidation reactions.

Outcome #4: Identify common GTAW AC weld errors and their corrections

- Look at different welds and identify problems in procedure, practice or weldment that have created poor weld quality.
- Find problems in weldment using destructive testing and determine cause.
- Using rubric, grade weld quality of peer's work in position 2 fillet and groove weldments, and recommend corrective actions to improve weld quality.

- Find problems in commercially available welded product and produce a corrective action report as a weld engineer or inspector would.

Outcome #5: Demonstrate knowledge of procedural changes needed for welding different alloys of aluminum.

- Demonstrate knowledge of different frequencies and AC balance to use for welding of 6061 aluminum alloy.
- Demonstrate knowledge of different frequencies and AC balance to use for welding 5052 aluminum alloy.
- Identify oxidation correction changes between 5000 series aluminum alloys and 6000 series aluminum alloys.
- Understand necessary procedural changes to avoid centerline cracking in 5000 series aluminum alloys.
- Identify oxidation correction procedures and pre-weldment treatment procedures for cast aluminum weldments.
- Understand procedural differences and best practices for welding “dirty” cast aluminum.

Outcome #6: Create multi-part assemblies from aluminum components with attention to tolerance and appropriate interpretation of a weld procedure specification (WPS).

- Demonstrate aluminum specific design processes in creation of a fabricated multi-part assembly
- Identify possible problems in the assembly and manufacturing of multi-part assemblies as they pertain to GTAW AC aluminum.

- Create a mock weld procedure specification (WPS) for a multi-part assembly, correctly identifying procedures for removal of oxidation and weldment prep and process preparation.
- Assemble to tolerance an aluminum multi-part assembly.

Suggested Texts and Materials

Resources are available openly on the web, but largely the curriculum adaptation needs to be done based on the instructors existing skill set. Since there are many ways to teach the content, the “teach what you know, and teach well what you do” is very appropriate for courses like this.

The following books are recommended:

- Welding Skills, 5th Edition, B.J. Moniz
- Welding Skills Workbook, 5th Edition, Jonathan F. Gosse

Some Suggested resources:

- AWS Structural Code Book 2020
- Aeospacewelding.com
- Thefabricator.com
- Aws.org
- Millerwelds.com
- Lincolnelectric.com

Department Notes

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Stainless Steel GTAW/TIG Welding

Course Number: MFG 285

Transcript Title: Stainless Steel GTAW/TIG Welding

Created: Aug 15, 2022

Updated: Jul 12, 2023

Total Credits: 3

Lecture Hours: 0

Lecture / Lab Hours: 60

Lab Hours: 0

Satisfies Cultural Literacy requirement: No

Satisfies General Education requirement: No

Grading Options A-F, P/NP, Audit

Default Grading Options A-F

Repeats available for credit: 0

Prerequisites

[MFG 150 \(/courses/mfg-150\)](/courses/mfg-150)

[MFG 195 \(/courses/mfg-195\)](/courses/mfg-195)

Course Description

Introduces the use of GTAW/TIG equipment on stainless steel alloys, and the methods and techniques for welding on them. Explores different techniques and special shielding gas requirements for pipe, fillet and butt weldment as well as covering prep of materials, consumables and tungsten. Prerequisites: MFG 150, MFG 195. Audit available.

Course Outcomes

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

1. Demonstrate understanding of the unique shielding gas and back purging procedures necessary when welding and manufacturing products from stainless steel.
2. Identify stainless steel alloy properties and common use as they pertain to manufacturing.
3. Manufacture DC GTAW stainless steel pipe, fillet and groove weldments.

4. Correctly clean and prep weldments and tungsten for DC GTAW on stainless steel.
5. Demonstrate understanding of DC GTAW machine operation, setup and assembly of torch parts.
6. Manufacture a basic stainless steel pressure vessel.

Suggested Outcome Assessment Strategies

Outcomes are assessed through a mixture of hands on and written assessments. Priority is given to hands-on proficiency based assessment in an environment that rewards demonstration of skill needed for success in industry.

- Lecture and in booth coaching and direct instruction.
- Direct instruction in full class demonstration of skills.
- Written exams.
- Student proficiency through demonstration of learned strategies and skills in industry standard environment.
- Mock AWS Testing procedure (destructive testing) or mock local industry supported on-site testing procedures.
- Job readiness based on performance.

Course Activities and Design

The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: lecture, small group/forum discussion, flipped classroom, dyads, oral presentation, role play, simulation scenarios, group projects, service learning projects, hands-on lab, peer review/workshops, cooperative learning (jigsaw, fishbowl), inquiry based instruction, differentiated instruction (learning centers), graphic organizers, etc.

Course Content

Outcome #1: Demonstrate understanding of the unique shielding gas and back purging procedures necessary when welding and manufacturing products from stainless steel.

- Identify different types of shielding gas and their application in welding processes and what gasses are used in GTAW welding of stainless steel alloys.
- Understand the use and necessity of back purging equipment in GTAW welding of stainless steel alloys.
- Demonstrate GTAW shielding gas techniques to minimize carbon contamination / corrosion / loss of austenitic properties in stainless steel.
- Demonstrate GTAW back purging to prevent “sugaring” oxidation on the back of stainless steel joints and pipe.

Outcome #2: Identify stainless steel alloy properties and common use as they pertain to manufacturing.

- Identify properties of 304 Stainless steel alloy, and it's uses in the manufacturing industry. Know the differences between 304SS from 308 and 316.
- Identify properties of 308 stainless steel alloy, and it's uses in the manufacturing industry. Know the differences between 308SS from 304 and 316.
- Identify properties of 316 stainless steel alloy and it's uses in the manufacturing industry. Know the difference between 316SS from 304 and 316.

Outcome #3: Manufacture DC GTAW stainless steel pipe, fillet and groove weldments.

- Perform pipe, butt, and fillet welds on aluminum of varying thicknesses using GTAW welder in lab.
- Perform 1G and 2G welds including correct prep of materials.
- Knowledge of necessary amperage adjustments to ensure full penetration of welds with a blind back side.

Outcome #4: Correctly clean and prep weldments and tungsten for DC GTAW on stainless steel.

- Clean and prepare materials for welding using chemical cleaning agents appropriate for stainless steel.
- Clean and prepare materials for welding using machine cleaning processes and procedures appropriate for stainless steel.

- Post clean materials using chemical agents or electrochemical process as done in industry applications.
- Know appropriate chemical MSDS and first aid.

Outcome #5: Demonstrate understanding of DC GTAW machine operation, setup and assembly of torch parts.

- Identify the correct tungsten types for use in DC GTAW and Stainless Steel welding.
- Identify the correct gas lens size and flow specific to DC GTAW welding on stainless steel.
- Prepare and assemble torch for DC GTAW welding.
- Identify parts used specifically for DC GTAW Welding.
- Identify correct amperage for different thicknesses and alloys of material.
- Setup DC GTAW equipment for welding stainless steel, including correct pulse settings.

Outcome #6: Manufacture a basic stainless steel pressure vessel.

- Manufacture a basic stainless steel pressure vessel from two different schedules of pipe and test to specification.
- Manufacture a basic stainless steel pressure vessel from plate and test to specification.

Suggested Texts and Materials

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Some Suggested resources:

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- Aws.org
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- Lincolnelectric.com

Department Notes

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Course Revision

(Double click on check boxes to activate dialog box)

What are you seeking to revise? Check all that apply

<input checked="" type="checkbox"/> Course number	<input type="checkbox"/> Requisites	<input type="checkbox"/> Related Instruction
<input type="checkbox"/> Title	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Content
<input type="checkbox"/> Description	<input type="checkbox"/> Repeatability	<input type="checkbox"/> Text / Materials

SECTION #1 GENERAL INFORMATION & REVISIONS

Department	Tech & Trades	Submitter name Phone Email	Susan Lewis slewis@cgcc.edu
Reason for Revision	HECC is requesting that we revise any courses in our catalog numbered as 180 or 280 as these numbers are reserved for CWE courses. Our using these numbers for other types of courses interferes with the FTE audit.		
Current prefix and number	EET 180	Proposed prefix and number	EET 181
Current Course Title	Industrial Computing	Proposed Course Title (75 characters max)	No change
Current Repeatability	0	Proposed Repeatability	No change

COURSE DESCRIPTION: To be used in the catalog and schedule of classes. Begin each sentence of the course description with an active verb. Avoid using the phrases: "This course will ..." and/or "Students will ..." Include course requisites in the description. Guidelines for writing concise descriptions can be found at [Writing Course Descriptions](#).

Current Description (required whether being revised or not)	Proposed Description
Explores computers and computer applications in an industrial environment. Discusses computer hardware, software, and maintenance, operating systems and file management, networking, databases, and word processing, spreadsheet, and presentation software. Prerequisite: MTH 65 or equivalent placement. Audit available.	No change

REQUISITES: Note: If this course has been approved for the Gen Ed list, it will have, as a default the following requisites: "Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121." If the department wants to set the WR and/or MTH prerequisites at a lower level, you will need to submit the Opt-out of Standard Prerequisites Request form.

Current prerequisites, corequisites and concurrent (if no change, leave blank)

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
 Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
Proposed prerequisites, corequisites and concurrent			
<input type="checkbox"/> Standard requisites - Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121.			
<input type="checkbox"/> Placement into:			
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
LEARNING OUTCOMES: Describe what the student will be able to do “out there” (in their life roles as worker, family member, community citizen, global citizen or lifelong learners). Outcomes must be measurable through the application of direct and/or indirect assessment strategies. Three to six outcomes are recommended. Start each outcome with an active verb, completing the sentence starter provided. (See Writing Learning Outcomes on the curriculum website.) ***NOTE: Gen Ed Courses revising outcomes are required to submit a new Gen Ed Request form. A new Cultural Literacy Request form will also be required of any course with a Cultural Literacy designation.***			
Current learning outcomes (required whether being revised or not)		New learning outcomes	
Upon successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Demonstrate an understanding of computer hardware by being able to physically locate, identify the purpose, and interpret technical data of major components within a computer. 2. Demonstrate the ability to use an operating system by being able to create, save, manage, transfer, and open files in various computer operating system platforms. 3. Demonstrate an understanding of spreadsheet application by utilizing a spreadsheet program to create and manipulate worksheet data to calculate and plot properties of electro-mechanical systems. 4. Demonstrate an understanding of word processing and presentation creation software by being able to communicate technical data and create uncomplicated presentations. 5. Demonstrate the use of a database by being able to interact with data tables to enter, retrieve, manage and interpret data as information. 6. Demonstrate an understanding of networks by being able to identify basic operations of computer networks and apply networking concepts and standards. 		Upon successful completion of this course, students will be able to: No change	

Course Content – organized by outcomes (list each outcome followed by an outline of the related content):	(required if revising outcomes) N/A
Suggested Texts & Materials updates (specify if any texts or materials are required):	(update as needed) N/A
Department Required Course Activities (optional)	(update as needed) N/A
Department Notes (optional)	(update as needed) N/A

Is this course used for related instruction?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, then check to see if the hours of student learning should be amended in the related instruction template to reflect the revision. This may require a related instruction curriculum revision.	

SECTION #2 IMPACT ON OTHER DEPARTMENTS	
Are there changes being requested that may impact other departments, such as academic programs that require this course as a prerequisite for courses, degrees, or certificates?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Please provide details, who was contacted and the resolution.	
EM-Tech AAS will need to update the course number for EET 180.	
Implementation term	<input checked="" type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year)
Allow 2-3 months to complete the approval process before scheduling the course.	

SECTION #3 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean/director and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Susan Lewis	slewis@cgcc.edu	10/24/24
Department Chair (enter name of department chair): Jim Pytel		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		

Columbia Gorge Community College

Course Revision

(Double click on check boxes to activate dialog box)

What are you seeking to revise? Check all that apply

<input checked="" type="checkbox"/> Course number	<input type="checkbox"/> Requisites	<input type="checkbox"/> Related Instruction
<input type="checkbox"/> Title	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Content
<input type="checkbox"/> Description	<input type="checkbox"/> Repeatability	<input type="checkbox"/> Text / Materials

SECTION #1 GENERAL INFORMATION & REVISIONS

Department	Tech & Trades	Submitter name Phone Email	Susan Lewis slewis@cgcc.edu
Reason for Revision	HECC is requesting that we revise any courses in our catalog numbered as 180 or 280 as these numbers are reserved for CWE courses. Our using these numbers for other types of courses interferes with the FTE audit.		
Current prefix and number	MFG 280	Proposed prefix and number	MFG 279
Current Course Title	Aluminum GTAW/TIG Welding	Proposed Course Title (75 characters max)	No change
Current Repeatability	0	Proposed Repeatability	No change

COURSE DESCRIPTION: To be used in the catalog and schedule of classes. Begin each sentence of the course description with an active verb. Avoid using the phrases: "This course will ..." and/or "Students will ..." Include course requisites in the description. Guidelines for writing concise descriptions can be found at [Writing Course Descriptions](#).

Current Description (required whether being revised or not)	Proposed Description
Introduces students to the use of GTAW/TIG equipment on aluminum alloys, and the methods and techniques for welding on them. Explores different electrical waveforms and frequencies needed for joint, pipe and butt weldment as well as covering prep of materials, consumables and tungsten. Prerequisites: MFG 150, MFG 195. Audit available.	No change

REQUISITES: Note: If this course has been approved for the Gen Ed list, it will have, as a default the following requisites: "Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121." If the department wants to set the WR and/or MTH prerequisites at a lower level, you will need to submit the Opt-out of Standard Prerequisites Request form.

Current prerequisites, corequisites and concurrent (if no change, leave blank)

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
 Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con

Proposed prerequisites, corequisites and concurrent			
<input type="checkbox"/> Standard requisites - Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121.			
<input type="checkbox"/> Placement into:			
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
LEARNING OUTCOMES: Describe what the student will be able to do “out there” (in their life roles as worker, family member, community citizen, global citizen or lifelong learners). Outcomes must be measurable through the application of direct and/or indirect assessment strategies. Three to six outcomes are recommended. Start each outcome with an active verb, completing the sentence starter provided. (See Writing Learning Outcomes on the curriculum website.) ***NOTE: Gen Ed Courses revising outcomes are required to submit a new Gen Ed Request form. A new Cultural Literacy Request form will also be required of any course with a Cultural Literacy designation.***			
Current learning outcomes (required whether being revised or not)		New learning outcomes	
Upon successful completion of this course, students will be able to: 1. Demonstrate understanding of AC GTAW wavelengths, frequencies and welder setup for aluminum weldments in manufacturing. 2. Identify the different types, properties and common uses of different aluminum alloys as they pertain to manufacturing. 3. Manufacture aluminum butt, fillet and pipe welds with correct filler selection. 4. Correctly clean and prep aluminum weldments and consumables including tungsten. 5. Understand AC GTAW machine operation, setup and assembly of torch parts. 6. Manufacture a basic aluminum pressure vessel.		Upon successful completion of this course, students will be able to: No change	
Course Content – organized by outcomes (list each outcome followed by an outline of the related content):	(required if revising outcomes) N/A		
Suggested Texts & Materials updates (specify if any texts or materials are required):	(update as needed) N/A		
Department Required Course Activities (optional)	(update as needed) N/A		
Department Notes (optional)	(update as needed) N/A		

Is this course used for related instruction?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If yes, then check to see if the hours of student learning should be amended in the related instruction template to reflect the revision. This may require a related instruction curriculum revision.		

SECTION #2 IMPACT ON OTHER DEPARTMENTS		
Are there changes being requested that may impact other departments, such as academic programs that require this course as a prerequisite for courses, degrees, or certificates?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Please provide details, who was contacted and the resolution.		
Advanced Manufacturing and Fabrication AAS and Advanced Manufacturing Technology certificate will need to update the course number for MFG 280.		
Implementation term	<input checked="" type="checkbox"/> Start of next academic year (summer term)	<input type="checkbox"/> Specify term (if BEFORE start of next academic year)
Allow 2-3 months to complete the approval process before scheduling the course.		

SECTION #3 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean/director and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Susan Lewis	slewis@cgcc.edu	10/24/24
Department Chair (enter name of department chair): Jim Pytel		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee [meeting schedule and submission deadlines](#). You are encouraged to send submissions prior to the deadline so that the Curriculum Office may review and provide feedback.
3. Submissions will be placed on the next agenda with available time slots, and you will be notified of your submission's estimated time for review. The Curriculum Office will send a signature page to your department chair and department dean/director that may be completed electronically. Signature pages must be received by the Curriculum Office the day before the Curriculum Committee meeting for which the submission is scheduled. Submissions without signed signature pages will be postponed.
4. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

Columbia Gorge Community College

Course Revision

(Double click on check boxes to activate dialog box)

What are you seeking to revise? Check all that apply		
<input checked="" type="checkbox"/> Course number	<input type="checkbox"/> Requisites	<input type="checkbox"/> Related Instruction
<input type="checkbox"/> Title	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Content
<input type="checkbox"/> Description	<input type="checkbox"/> Repeatability	<input type="checkbox"/> Text / Materials

SECTION #1 GENERAL INFORMATION & REVISIONS

Department	Arts, Cult & Comm	Submitter name Phone Email	Susan Lewis slewis@cgcc.edu
Reason for Revision	HECC is requesting that we revise any courses in our catalog numbered as 180 or 280 as these numbers are reserved for CWE courses. Our using these numbers for other types of courses interferes with the FTE audit.		
Current prefix and number	TA 180A	Proposed prefix and number	TA 181A
Current Course Title	Theater Rehearsal and Performance	Proposed Course Title (75 characters max)	No change
Current Repeatability	0	Proposed Repeatability	No change

COURSE DESCRIPTION: To be used in the catalog and schedule of classes. Begin each sentence of the course description with an active verb. Avoid using the phrases: "This course will ..." and/or "Students will ..." Include course requisites in the description. Guidelines for writing concise descriptions can be found at [Writing Course Descriptions](#).

Current Description (required whether being revised or not)	Proposed Description
Trains for performance in theater production in a small ensemble role, if cast. Incorporates first-hand experience in performance techniques. Audition required. Audit available.	No change

REQUISITES: Note: If this course has been approved for the Gen Ed list, it will have, as a default the following requisites: "Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121." If the department wants to set the WR and/or MTH prerequisites at a lower level, you will need to submit the Opt-out of Standard Prerequisites Request form.

Current prerequisites, corequisites and concurrent (if no change, leave blank)			
<input type="checkbox"/> Standard requisites - Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121.			
<input type="checkbox"/> Placement into:			
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con

Proposed prerequisites, corequisites and concurrent

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
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prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
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LEARNING OUTCOMES: Describe what the student will be able to do “out there” (in their life roles as worker, family member, community citizen, global citizen or lifelong learners). Outcomes must be measurable through the application of direct and/or indirect assessment strategies. Three to six outcomes are recommended. Start each outcome with an active verb, completing the sentence starter provided. (See [Writing Learning Outcomes](#) on the curriculum website.)

*****NOTE: Gen Ed Courses revising outcomes are required to submit a new Gen Ed Request form. A new Cultural Literacy Request form will also be required of any course with a Cultural Literacy designation.*****

Current learning outcomes (required whether being revised or not)	New learning outcomes
Upon successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Demonstrate a strong work ethic within a professional framework of collaboration. 2. Perform as an ensemble member in a small assigned role. 3. Rehearse and memorize a role and the blocking. 4. Analyze a play from his/her point of view as a company member. 5. Demonstrate an understanding and appreciation of the cultural and historical context of the play. 	Upon successful completion of this course, students will be able to: No change

Course Content – organized by outcomes (list each outcome followed by an outline of the related content):	
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Suggested Texts & Materials updates (specify if any texts or materials are required):	
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Department Required Course Activities (optional)	(update as needed) N/A
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Department Notes (optional)	(update as needed) N/A
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Is this course used for related instruction?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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If yes, then check to see if the hours of student learning should be amended in the related instruction template to reflect the revision. This may require a related instruction curriculum revision.

SECTION #2 IMPACT ON OTHER DEPARTMENTS	
Are there changes being requested that may impact other departments, such as academic programs that require this course as a prerequisite for courses, degrees, or certificates?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Please provide details, who was contacted and the resolution.	
College Now courses with this number will need to be updated as well – TA 180ACN.	
Implementation term	<input checked="" type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year)
Allow 2-3 months to complete the approval process before scheduling the course.	

SECTION #3 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean/director and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Susan Lewis	slewis@cgcc.edu	10/24/24
Department Chair (enter name of department chair): Leigh Hancock		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee [meeting schedule and submission deadlines](#). You are encouraged to send submissions prior to the deadline so that the Curriculum Office may review and provide feedback.
3. Submissions will be placed on the next agenda with available time slots, and you will be notified of your submission's estimated time for review. The Curriculum Office will send a signature page to your department chair and department dean/director that may be completed electronically. Signature pages must be received by the Curriculum Office the day before the Curriculum Committee meeting for which the submission is scheduled. Submissions without signed signature pages will be postponed.
4. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

Columbia Gorge Community College

Course Revision

(Double click on check boxes to activate dialog box)

What are you seeking to revise? Check all that apply

<input checked="" type="checkbox"/> Course number	<input type="checkbox"/> Requisites	<input type="checkbox"/> Related Instruction
<input type="checkbox"/> Title	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Content
<input type="checkbox"/> Description	<input type="checkbox"/> Repeatability	<input type="checkbox"/> Text / Materials

SECTION #1 GENERAL INFORMATION & REVISIONS

Department	Arts, Cult & Comm	Submitter name Phone Email	Susan Lewis slewis@cgcc.edu
Reason for Revision	HECC is requesting that we revise any courses in our catalog numbered as 180 or 280 as these numbers are reserved for CWE courses. Our using these numbers for other types of courses interferes with the FTE audit.		
Current prefix and number	TA 180B	Proposed prefix and number	TA 181B
Current Course Title	Theater Rehearsal and Performance	Proposed Course Title (75 characters max)	No change
Current Repeatability	0	Proposed Repeatability	No change

COURSE DESCRIPTION: To be used in the catalog and schedule of classes. Begin each sentence of the course description with an active verb. Avoid using the phrases: "This course will ..." and/or "Students will ..." Include course requisites in the description. Guidelines for writing concise descriptions can be found at [Writing Course Descriptions](#).

Current Description (required whether being revised or not)	Proposed Description
Trains for performance in theater production in a small ensemble role, if cast. Incorporates first-hand experience in performance techniques. Audition required. Audit available.	No change

REQUISITES: Note: If this course has been approved for the Gen Ed list, it will have, as a default the following requisites: "Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121." If the department wants to set the WR and/or MTH prerequisites at a lower level, you will need to submit the Opt-out of Standard Prerequisites Request form.

Current prerequisites, corequisites and concurrent (if no change, leave blank)

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con

Proposed prerequisites, corequisites and concurrent

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
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prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
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LEARNING OUTCOMES: Describe what the student will be able to do “out there” (in their life roles as worker, family member, community citizen, global citizen or lifelong learners). Outcomes must be measurable through the application of direct and/or indirect assessment strategies. Three to six outcomes are recommended. Start each outcome with an active verb, completing the sentence starter provided. (See [Writing Learning Outcomes](#) on the curriculum website.)

*****NOTE: Gen Ed Courses revising outcomes are required to submit a new Gen Ed Request form. A new Cultural Literacy Request form will also be required of any course with a Cultural Literacy designation.*****

Current learning outcomes (required whether being revised or not)	New learning outcomes
Upon successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Demonstrate a strong work ethic within a professional framework of collaboration. 2. Perform as an ensemble member in a small assigned role. 3. Rehearse and memorize a role and the blocking. 4. Analyze a play from his/her point of view as a company member. 5. Demonstrate an understanding and appreciation of the cultural and historical context of the play. 	Upon successful completion of this course, students will be able to: No change

Course Content – organized by outcomes (list each outcome followed by an outline of the related content):	
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Suggested Texts & Materials updates (specify if any texts or materials are required):	
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Department Required Course Activities (optional)	(update as needed) N/A
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Department Notes (optional)	(update as needed) N/A
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Is this course used for related instruction?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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If yes, then check to see if the hours of student learning should be amended in the related instruction template to reflect the revision. This may require a related instruction curriculum revision.

SECTION #2 IMPACT ON OTHER DEPARTMENTS	
Are there changes being requested that may impact other departments, such as academic programs that require this course as a prerequisite for courses, degrees, or certificates?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Please provide details, who was contacted and the resolution.	
Implementation term	<input checked="" type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year)
Allow 2-3 months to complete the approval process before scheduling the course.	

SECTION #3 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean/director and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Susan Lewis	slewis@cgcc.edu	10/24/24
Department Chair (enter name of department chair): Leigh Hancock		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee [meeting schedule and submission deadlines](#). You are encouraged to send submissions prior to the deadline so that the Curriculum Office may review and provide feedback.
3. Submissions will be placed on the next agenda with available time slots, and you will be notified of your submission's estimated time for review. The Curriculum Office will send a signature page to your department chair and department dean/director that may be completed electronically. Signature pages must be received by the Curriculum Office the day before the Curriculum Committee meeting for which the submission is scheduled. Submissions without signed signature pages will be postponed.
4. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

Columbia Gorge Community College

Course Revision

(Double click on check boxes to activate dialog box)

What are you seeking to revise? Check all that apply

<input checked="" type="checkbox"/> Course number	<input type="checkbox"/> Requisites	<input type="checkbox"/> Related Instruction
<input type="checkbox"/> Title	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Content
<input type="checkbox"/> Description	<input type="checkbox"/> Repeatability	<input type="checkbox"/> Text / Materials

SECTION #1 GENERAL INFORMATION & REVISIONS

Department	Arts, Cult & Comm	Submitter name Phone Email	Susan Lewis slewis@cgcc.edu
Reason for Revision	HECC is requesting that we revise any courses in our catalog numbered as 180 or 280 as these numbers are reserved for CWE courses. Our using these numbers for other types of courses interferes with the FTE audit.		
Current prefix and number	TA 180C	Proposed prefix and number	TA 181C
Current Course Title	Theater Rehearsal and Performance	Proposed Course Title (75 characters max)	No change
Current Repeatability	0	Proposed Repeatability	No change

COURSE DESCRIPTION: To be used in the catalog and schedule of classes. Begin each sentence of the course description with an active verb. Avoid using the phrases: "This course will ..." and/or "Students will ..." Include course requisites in the description. Guidelines for writing concise descriptions can be found at [Writing Course Descriptions](#).

Current Description (required whether being revised or not)	Proposed Description
Trains for performance in theater production in a leading role, if cast. Incorporates first-hand experience in performance techniques. Audition required. Audit available.	No change

REQUISITES: Note: If this course has been approved for the Gen Ed list, it will have, as a default the following requisites: "Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121." If the department wants to set the WR and/or MTH prerequisites at a lower level, you will need to submit the Opt-out of Standard Prerequisites Request form.

Current prerequisites, corequisites and concurrent (if no change, leave blank)

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
 Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con

Proposed prerequisites, corequisites and concurrent

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
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prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
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LEARNING OUTCOMES: Describe what the student will be able to do “out there” (in their life roles as worker, family member, community citizen, global citizen or lifelong learners). Outcomes must be measurable through the application of direct and/or indirect assessment strategies. Three to six outcomes are recommended. Start each outcome with an active verb, completing the sentence starter provided. (See [Writing Learning Outcomes](#) on the curriculum website.)

*****NOTE: Gen Ed Courses revising outcomes are required to submit a new Gen Ed Request form. A new Cultural Literacy Request form will also be required of any course with a Cultural Literacy designation.*****

Current learning outcomes (required whether being revised or not)	New learning outcomes
Upon successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Demonstrate a strong work ethic within a professional framework of collaboration. 2. Perform as an ensemble member in a leading role. 3. Rehearse and memorize a role and the blocking. 4. Analyze a play from his/her point of view as a company member. 5. Demonstrate an understanding and appreciation of the cultural and historical context of the play. 	Upon successful completion of this course, students will be able to: No change

Course Content – organized by outcomes (list each outcome followed by an outline of the related content):	
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Suggested Texts & Materials updates (specify if any texts or materials are required):	
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Department Required Course Activities (optional)	(update as needed) N/A
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Department Notes (optional)	(update as needed) N/A
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Is this course used for related instruction?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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If yes, then check to see if the hours of student learning should be amended in the related instruction template to reflect the revision. This may require a related instruction curriculum revision.

SECTION #2 IMPACT ON OTHER DEPARTMENTS	
Are there changes being requested that may impact other departments, such as academic programs that require this course as a prerequisite for courses, degrees, or certificates?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Please provide details, who was contacted and the resolution.	
College Now courses with this number will need to be updated to new number – TA 180CCN	
Implementation term	<input checked="" type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year)
Allow 2-3 months to complete the approval process before scheduling the course.	

SECTION #3 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean/director and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Susan Lewis	slewis@cgcc.edu	10/24/24
Department Chair (enter name of department chair): Leigh Hancock		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		

NEXT STEPS:

1. Save this document as the course prefix and number (e.g. MTH 65 or HST 104). Send completed form electronically to curriculum@cgcc.edu or slewis@cgcc.edu.
2. Refer to the curriculum office website for the Curriculum Committee [meeting schedule and submission deadlines](#). You are encouraged to send submissions prior to the deadline so that the Curriculum Office may review and provide feedback.
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Columbia Gorge Community College

Course Revision

(Double click on check boxes to activate dialog box)

What are you seeking to revise? Check all that apply

<input checked="" type="checkbox"/> Course number	<input type="checkbox"/> Requisites	<input type="checkbox"/> Related Instruction
<input type="checkbox"/> Title	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Content
<input type="checkbox"/> Description	<input type="checkbox"/> Repeatability	<input type="checkbox"/> Text / Materials

SECTION #1 GENERAL INFORMATION & REVISIONS

Department	Arts, Cult & Comm	Submitter name Phone Email	Susan Lewis slewis@cgcc.edu
Reason for Revision	HECC is requesting that we revise any courses in our catalog numbered as 180 or 280 as these numbers are reserved for CWE courses. Our using these numbers for other types of courses interferes with the FTE audit.		
Current prefix and number	TA 180D	Proposed prefix and number	TA 181D
Current Course Title	Theater Rehearsal and Performance	Proposed Course Title (75 characters max)	No change
Current Repeatability	0	Proposed Repeatability	No change

COURSE DESCRIPTION: To be used in the catalog and schedule of classes. Begin each sentence of the course description with an active verb. Avoid using the phrases: "This course will ..." and/or "Students will ..." Include course requisites in the description. Guidelines for writing concise descriptions can be found at [Writing Course Descriptions](#).

Current Description (required whether being revised or not)	Proposed Description
Trains for performance in theater production in a large leading role, if cast. Incorporates first-hand experience in performance techniques. Audition required. Audit available.	No change

REQUISITES: Note: If this course has been approved for the Gen Ed list, it will have, as a default the following requisites: "Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121." If the department wants to set the WR and/or MTH prerequisites at a lower level, you will need to submit the Opt-out of Standard Prerequisites Request form.

Current prerequisites, corequisites and concurrent (if no change, leave blank)

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con

Proposed prerequisites, corequisites and concurrent

Standard requisites - Prerequisite: placement into MTH 65 or MTH 98.
Prerequisite/concurrent: WR 121.

Placement into:

prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
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prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
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LEARNING OUTCOMES: Describe what the student will be able to do “out there” (in their life roles as worker, family member, community citizen, global citizen or lifelong learners). Outcomes must be measurable through the application of direct and/or indirect assessment strategies. Three to six outcomes are recommended. Start each outcome with an active verb, completing the sentence starter provided. (See [Writing Learning Outcomes](#) on the curriculum website.)

*****NOTE: Gen Ed Courses revising outcomes are required to submit a new Gen Ed Request form. A new Cultural Literacy Request form will also be required of any course with a Cultural Literacy designation.*****

Current learning outcomes (required whether being revised or not)	New learning outcomes
Upon successful completion of this course, students will be able to: <ol style="list-style-type: none"> 1. Demonstrate a strong work ethic within a professional framework of collaboration. 2. Perform as an ensemble member in a large leading role. 3. Rehearse and memorize a role and the blocking. 4. Analyze a play from his/her point of view as a company member. 5. Demonstrate an understanding and appreciation of the cultural and historical context of the play. 	Upon successful completion of this course, students will be able to: No change

Course Content – organized by outcomes (list each outcome followed by an outline of the related content):	
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Suggested Texts & Materials updates (specify if any texts or materials are required):	
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Department Required Course Activities (optional)	(update as needed) N/A
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Department Notes (optional)	(update as needed) N/A
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Is this course used for related instruction?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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If yes, then check to see if the hours of student learning should be amended in the related instruction template to reflect the revision. This may require a related instruction curriculum revision.

SECTION #2 IMPACT ON OTHER DEPARTMENTS	
Are there changes being requested that may impact other departments, such as academic programs that require this course as a prerequisite for courses, degrees, or certificates?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Please provide details, who was contacted and the resolution.	
Implementation term	<input checked="" type="checkbox"/> Start of next academic year (summer term) <input type="checkbox"/> Specify term (if BEFORE start of next academic year)
Allow 2-3 months to complete the approval process before scheduling the course.	

SECTION #3 DEPARTMENT REVIEW		
<i>"I vouch that this submission has been reviewed by the affiliated department chair and department dean/director and that they have given initial authorization for this submission. I am requesting that it be placed on the next Curriculum Committee agenda with available time slots. I understand that I am required to complete and submit, prior to the day my submission is reviewed by the Curriculum Committee, a Course Signature Form signed by the department chair and dean/director."</i>		
Submitter	Email	Date
Susan Lewis	slewis@cgcc.edu	10/24/24
Department Chair (enter name of department chair): Leigh Hancock		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		

NEXT STEPS:

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