

# Curriculum Committee Meeting Agenda

## Voting Committee Members

Chair – Andrea LoMonaco (Business)

Vice Chair – Pam Koop and Annette Byers (sub) (Math)

Jules Burton (sub-Science)

Anne Kelly (sub-Inst Dir)

Robert Wells-Clark (Tec/Trd)

Kristen Booth (Pre-College)

Mimi Pentz (Nurs/Hlth Occ)

Leigh Hancock (Art/Comm)

Stephen Shwiff (Soc Sci/Ed)

## Non-Voting Committee Members

Jarett Gilbert (VP Instructional Services)

vacant (Student Services)

Susan Lewis (Curriculum)

## Support Staff

Sara Wade (Instructional Services)

## Guests

Michael Becker, Mike Davis, Janie Griffin, Todd Meislahn

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## **April 17, 2025 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

## Approval of Minutes from March 6, 2025<sup>1</sup>

## Information Items (voting not required):

- Course inactivations<sup>2</sup>: CH 221, 222, 223

## Old Business:

1. 3-4 Credit Conversion policy (**postponed until retreat**)
2. Substitution of Courses policy (**postponed until retreat**)
3. Split Science Courses – Lecture/Lab – and Gen Ed Designations (**postponed until retreat**)

## Submissions<sup>3</sup>

1. Todd Meislahn (3:45 – 3:50pm)
  - BA 228 QuickBooks for Business (Course Revision: des, req, cont)
  - Entrepreneurship (Certificate Revision: courses)
2. Janie Griffin (3:50pm – 4:00pm)
  - APR 100 Introduction to Emergency Medical Services (Course Revision: #)
  - EMS 105 EMT Part I (Contact Hour Credit Change)
  - APR 105 EMT Part I (Course Revision: #)
  - APREMS 105 EMT Part I (Contact Hour Credit Change)
  - APR 106 EMT Part II (Course Revision: #, des, req, out, cont, txt/mat)
  - APREMS 106 EMT Part II (Contact Hour Credit Change)
3. Robert Wells-Clark (3:35 – 3:45pm)
  - USACE Level 2 - Mechanics (Certificate Suspension + Teach Out + Checklist)
  - USACE Level 2 - Mechanics (New Certificate)

4. Michael Becker, Mike Davis, Susan Lewis, Jarett Gilbert (4:00 - 4:45pm)
- AG 101 Introduction to Agriculture (New Course)
  - AG 102 Agricultural Safety (New Course)
  - AG 103 Agricultural Operations and Management I (New Course)
  - AG 104 Introduction to Fruit Crop and Dryland Wheat (New Course)
  - AG 105 Precision Agriculture - Basics (New Course)
  - AG 106 Introduction to Drone Operations and Autonomous Vehicles in Agriculture (New Course)
  - AG 201 Integrated Pest Management (New Course)
  - AG 202 Advanced Farm Management Systems (New Course)
  - AG 203 Agricultural Operations and Management II (New Course)
  - AG 204 Alternative Farming Models (New Course)
  - AG 205 Introduction to Geographic Information Systems and Remote Sensing (New Course)
  - AG 206 Agricultural Management Capstone (New Course)
  - AG 207 Precision Agriculture Capstone (New Course)
  - Integrated Agricultural Science & Technology (New Degree)
  - Agricultural Management (New Certificate)
  - Precision Agriculture (New Certificate)

New Business (decisions may be made)

1. None

Discussion Items

1. none

**Next Meeting: May 2, 2025 (Retreat) 9am – 12 noon, at the Hood River Center. In person attendance is expected. Snacks will be provided.**

Attachments: <sup>1</sup> March 6, 2025 Minutes; <sup>2</sup> 3 Course Inactivations; <sup>3</sup> Submissions: 13 New CTE Courses, 4 Course Revisions, 3 Contact Hour/Credit Changes, 1 Certificate Suspension, 1 Certificate Revision, 3 New Certificates, 1 New Degree

## Curriculum Committee Minutes

March 6, 2025

Location: TDC Boardroom 1.162 & HRC Conference Room 1.209

### PRESENT:

#### Voting Committee Members

Chair- Andrea LoMonaco (Business)

Annette Byers (Sub-Math)

Mimi Pentz (Nursing/Health)

Kristen Booth (Pre-Coll/ESOL)

Leigh Hancock (Art,Cult,Comm)

Anne Kelly (Sub-Inst Dean)

Robert Wells-Clark (Tech/Trade)

Stephen Shwiff (Social Science)

Jules Burton (Sub-Science)

#### Non-Voting Members

Jarett Gilbert (VP Instructional Services)

Susan Lewis (Curriculum)

Jared Dill (Student Services)

#### Support Staff

Sara Wade (Instructional Services)

#### Guests

Cat Graham, Jim Pytel, Kalie Brunton, Todd Meislahn, Bryan  
Despain, Sara Mustonen, Janie Griffin

#### Absent

#### Voting Members:

#### Non-Voting Member

Item	Discussion	Action
Call to Order:	Chair Andrea called the meeting to order at 3:35pm.	
Approval of February 20, 2025 Minutes	Motion: approve as written.	Motion: Stephen 2nds: Andrea 6 in favor – 0 opposed – 0 abstains
Submissions:		
EET 111 Electrical Circuit Analysis 1 (Course Revision: des)	Motion: approve as written.	Motion: Stephen 2nds: Mimi 6 in favor – 0 opposed – 0 abstains

<b>EET 251 Digital Electronics I: Programmable Logic Devices</b> (Course Revision: title, des, req, out, cont, txt/mat)	<b>Motion: approve as written.</b>	Motion: Andrea 2nds: Mimi 6 in favor – 0 opposed – 0 abstains
<b>EET 251 Digital Electronics I: Programmable Logic Devices</b> (Course Revision: title, des, req, out, cont, txt/mat)	<b>Motion: approve as written.</b>	Motion: Mimi 2nds: Andrea 6 in favor – 0 opposed – 0 abstains
<b>EET 273 Industrial Control</b> (Course Revision: title, des, req)	<b>Motion: approve as written.</b>	Motion: Stephen 2nds: Kristen 6 in favor – 0 opposed – 0 abstains
<b>MEC 120 Hydraulics and Pneumatics</b> (Course Revision: des)	<b>Motion: approve as written.</b>	Motion: Mimi 2nds: Stephen 6 in favor – 0 opposed – 0 abstains
<b>Electro-Mechanical Technology AAS</b> (Degree Revision: out, courses, credits)	<b>Motion: approve with an amendment to the course title for EET 273 in the degree course list description.</b>	Motion: Mimi 2nds: Kristen 6 in favor – 0 opposed – 0 abstains
<b>Electro-Mechanical Technology</b> (Certificate Revision: out)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Mimi 6 in favor – 0 opposed – 0 abstains
<b>USACE Level 2 – Operators Electricians</b> (Certificate Revision: course, credits)	<b>Motion: approve as written.</b>	Motion: Jules 2nds: Andrea 6 in favor – 0 opposed – 0 abstains
<b>MFG 210 Introduction to Computer Aided Design and Tolerancing</b> (Course Revision: des, req)	Robert explained that the Manufacturing is splitting the AAS degree into two certificates, so students have the option to take one or both certificates out of sequence. And these following course revisions are a result of that change. <b>Motion: approve as written.</b>	Motion: Mimi 2nds: Stephen 6 in favor – 0 opposed – 0 abstains
<b>MFG 220 Production Manufacturing 1</b> (Course Revision: des, req)	<b>Motion: approve as written.</b>	Motion: Andrea 2nds: Stephen 6 in favor – 0 opposed – 0 abstains

<b>MFG 230 Metrology 1</b> (New Course)	<b>Motion: approve as written.</b>	Motion: Mimi 2nds: Jules 6 in favor – 0 opposed – 0 abstains
<b>MFG 231 Metrology 2</b> (New Course)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Mimi 6 in favor – 0 opposed – 0 abstains
<b>MFG 232 Metrology 3</b> (New Course)	<b>Motion: approve as written.</b>	Motion: Andrea 2nds: Stephen 6 in favor – 0 opposed – 0 abstains
<b>Advanced Manufacturing and Fabrication</b> (Degree Revision: courses)	<b>Motion: approve as written.</b>	Motion: Mimi 2nds: Stephen 6 in favor – 0 opposed – 0 abstains
<b>CNC Manufacturing and Quality Control Processes</b> (New Certificate)	<b>Motion: approve as written.</b>	Motion: Stephen 2nds: Kristen 6 in favor – 0 opposed – 0 abstains
<b>CAS 123 Production Keyboarding</b> (Course Revision: title, des, req, out, con, txt/mat)	<b>Motion: approve with amendment to requisites. Add “Recommended: Keying 24 wpm by touch”.</b>	Motion: Stephen 2nds: Kristen 7 in favor – 0 opposed – 0 abstains
<b>CAS 123 Production Keyboarding</b> (Course Hours/Credit Change)	<b>Motion: approve as written.</b>	Motion: Stephen 2nds: Mimi 6 in favor – 0 opposed – 0 abstains
<b>CAS 140 Beginning Databases</b> (Course Revision: des, req, cont, txt/mat)	Todd explained that faculty in the Business department have noticed that students entering into the CAS 140 class have been struggling and could benefit from having a prerequisite to enter into the class.  <b>Motion: approve as written.</b>	Motion: Mimi 2nds: Kristen 7 in favor – 0 opposed – 0 abstains
<b>BA 169Z Data Analysis Using Microsoft Excel</b> (Course Revision: des, req)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Stephen 7 in favor – 0 opposed – 0 abstains

<b>BA 169Z Data Analysis Using Microsoft Excel</b> (Course Hours/Credit Change)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Stephen 6 in favor – 0 opposed – 0 abstains
<b>BA 208 Business Ethics</b> (Course Revision: des, req, out, cont txt/mat)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Leigh 7 in favor – 0 opposed – 0 abstains
<b>BA 208 Business Ethics</b> (Gen Ed Request + Transferability)	<b>Motion: approve as written.</b>	Motion: Mimi 2nds: Stephen 7 in favor – 0 opposed – 0 abstains
<b>Accounting AAS</b> (Degree Revision: courses)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Jules 7 in favor – 0 opposed – 0 abstains
<b>Accounting / Bookkeeping</b> (Certificate Revision: courses)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Mimi 7 in favor – 0 opposed – 0 abstains
<b>Administrative Professional AAS</b> (Degree Revision: courses)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Stephen 7 in favor – 0 opposed – 0 abstains
<b>Administrative Professional</b> (Certificate Revision: courses)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Mimi 7 in favor – 0 opposed – 0 abstains
<b>Entrepreneurship / Business Management AAS</b> (Degree Revision: courses)	<b>Motion: approve as written.</b>	Motion: Andrea 2nds: Kristen 7 in favor – 0 opposed – 0 abstains
<b>NRS 110 Foundation of Health Assessment and Health Promotion</b> (Course Revision: des)	<b>Motion: approve with amendment to outcome #6: “Demonstrate compliance with institutional policies and procedures.”</b>	Motion: Andrea 2nds: Kristen 7 in favor – 0 opposed – 0 abstains
<b>Nursing AAS</b> (Degree Revision: courses)	<b>Motion: approve as written.</b>	Motion: Kristen 2nds: Leigh 7 in favor – 0 opposed – 0 abstains

<b>New Business:</b>		
1. Maximum allowable P/NP credits in degrees and certificates	<p>Susan reached out to Student Services to check if Student Services on whether they were okay with the increase of Pass/No Pass to match the CPL acceptance of 66% that is set for both degrees and certificates. Student Services, the advising team, and the enrollment team saw no problem with the increase of the Pass/No Pass cap for degrees and certificates.</p> <p><b>** Because this was voted on in the February 20th meeting, contingent upon the discussion from Student Services, there is no further action needed from the committee.</b></p>	
<b>Meeting Adjourned: 4:42pm</b>	<b>All in favor, Chair Andrea closed the meeting at 4:42pm</b>	<b>Next Meeting: April 17, 2025</b>

# Columbia Gorge Community College

CC date        4.17.25  
CC decision    4.17.25  
CC vote        S. Lewis approved

## Course Inactivation

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Course prefix and number	CH 221	Course title	General Chemistry I
Department	Science	Submitter name: phone: email:	Rob Kovacich Rkovacich@cgcc.edu
Reason for Inactivation	Students were not enrolling in the course, and it hasn't been offered in several years. The CH 221-3 series is recommended for science majors. CGCC students take the CH 121-3 series instead, recommended for non-science majors. The 221-3 series was revised to be a CCN course with separate labs. Inactivating these unused courses also allows the college to avoid the technical issues related to a redesigned science lab format for the time being.		

### SECTION #2 IMPACT ON OTHER DEPARTMENTS

Does this inactivation have an impact on others	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, provide details	
Have you consulted with department chairs from other disciplines who may be using this course as part of a degree/certificate?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, provide details	
Implementation term	<input checked="" type="checkbox"/> Next available term after approval <input type="checkbox"/> Specific term (if after next available term):

### SECTION #3 DEPARTMENT APPROVAL

The department chair and department dean/director endorse this inactivation.		
Department Chair	Approved	Date
Rob Kovacich	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4/9/25
Department Dean/Director (unfilled position)	Approved	Date
Jarett Gilbert, VP Instructional Services	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4/9/25

Next steps:

1. Submit electronically to [curriculum@cgcc.cc.or.us](mailto:curriculum@cgcc.cc.or.us) or [slewis@cgcc.edu](mailto:slewis@cgcc.edu).
2. The Curriculum Office will obtain signatures from your department chair and dean/director.
3. Course Inactivations are not required to obtain Curriculum Committee approval. Inactivations will be placed on the CC agenda as information items only.



# Columbia Gorge Community College

CC date        4.17.25  
CC decision    4.17.25  
CC vote        S Lewis approved

## Course Inactivation

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION			
Course prefix and number	CH 222	Course title	General Chemistry II
Department	Science	Submitter name: phone: email:	Rob Kovacich Rkovacich@cgcc.edu
Reason for Inactivation	Students were not enrolling in the course, and it hasn't been offered in several years. The CH 221-3 series is recommended for science majors. CGCC students take the CH 121-3 series instead, recommended for non-science majors. The 221-3 series was revised to be a CCN course with separate labs. Inactivating these unused courses also allows the college to avoid the technical issues related to a redesigned science lab format for the time being.		

SECTION #2 IMPACT ON OTHER DEPARTMENTS	
Does this inactivation have an impact on others	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, provide details	
Have you consulted with department chairs from other disciplines who may be using this course as part of a degree/certificate?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, provide details	
Implementation term	<input checked="" type="checkbox"/> Next available term after approval <input type="checkbox"/> Specific term (if after next available term):

SECTION #3 DEPARTMENT APPROVAL		
The department chair and department dean/director endorse this inactivation.		
Department Chair	Approved	Date
Rob Kovacich	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4/9/25
Department Dean/Director (unfilled position)	Approved	Date
Jarett Gilbert, VP Instructional Services	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4/9/25

Next steps:

1. Submit electronically to [curriculum@cgcc.cc.or.us](mailto:curriculum@cgcc.cc.or.us) or [slewis@cgcc.edu](mailto:slewis@cgcc.edu).
2. The Curriculum Office will obtain signatures from your department chair and dean/director.
3. Course Inactivations are not required to obtain Curriculum Committee approval. Inactivations will be placed on the CC agenda as information items only.

# Columbia Gorge Community College

CC date        4.17.25  
CC decision    4.17.25  
CC vote        S Lewis approved

## Course Inactivation

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Course prefix and number	CH 223	Course title	General Chemistry III
Department	Science	Submitter name: phone: email:	Rob Kovacich Rkovacich@cgcc.edu
Reason for Inactivation	Students were not enrolling in the course, and it hasn't been offered in several years. The CH 221-3 series is recommended for science majors. CGCC students take the CH 121-3 series instead, recommended for non-science majors. The 221-3 series was revised to be a CCN course with separate labs. Inactivating these unused courses also allows the college to avoid the technical issues related to a redesigned science lab format for the time being.		

### SECTION #2 IMPACT ON OTHER DEPARTMENTS

Does this inactivation have an impact on others	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, provide details	
Have you consulted with department chairs from other disciplines who may be using this course as part of a degree/certificate?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, provide details	
Implementation term	<input checked="" type="checkbox"/> Next available term after approval <input type="checkbox"/> Specific term (if after next available term):

### SECTION #3 DEPARTMENT APPROVAL

The department chair and department dean/director endorse this inactivation.		
Department Chair	Approved	Date
Rob Kovacich	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4/9/25
Department Dean/Director (unfilled position)	Approved	Date
Jarett Gilbert, VP Instructional Services	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4/9/25

Next steps:

1. Submit electronically to [curriculum@cgcc.cc.or.us](mailto:curriculum@cgcc.cc.or.us) or [slewis@cgcc.edu](mailto:slewis@cgcc.edu).
2. The Curriculum Office will obtain signatures from your department chair and dean/director.
3. Course Inactivations are not required to obtain Curriculum Committee approval. Inactivations will be placed on the CC agenda as information items only.

**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 type="checkbox"/> Outcomes	<input checked="" type="checkbox"/> Content
<input checked="" type="checkbox"/> Description	<input type="checkbox"/> Repeatability	<input type="checkbox"/> Text / Materials

**SECTION #1 GENERAL INFORMATION & REVISIONS**

Department	Business	Submitter name Phone Email	Todd Meislahn 541-506-6124 tmeislahn@cgcc.edu
Reason for Revision	To update requisites, description and content.		
Current prefix and number	BA 228	Proposed prefix and number	No change
Current Course Title	QuickBooks for Business	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	Proposed Description
Introduces double-entry, fully-integrated computerized general ledger software. Includes general ledger, accounts receivable, accounts payable, payroll, fixed assets, bank reconciliations, inventory, and Financial Statement Analysis. Prerequisites: BA 111 or BA 211, Recommended: BA 104, CAS 133. Audit available.	Introduces double-entry, fully-integrated computerized general ledger software. Includes general ledger, accounts receivable, accounts payable, payroll, fixed assets, bank reconciliations, inventory, and financial statement analysis. Recommended: BA 104, BA 211Z. 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)

☐ Standard requisites – Prerequisite: placement into MTH 65 or MTH 98.  
Prerequisite/concurrent: WR 121Z.

☐ Placement into:

prefix & number: BA 111 or BA 211	<input checked="" type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number: Recommended: BA 104, CAS 133	<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 121Z.			
<input type="checkbox"/> Placement into:			
prefix & number: Recommended: BA 104, BA 211Z	<input checked="" 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
<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.) <b>***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.***</b>			
Current learning outcomes (required whether being revised or not)		New learning outcomes	
Upon successful completion of this course, students will be able to: 1. Organize accounting procedures using microcomputer software. 2. Communicate effectively using standard accounting terminology. 3. Interpret and prepare accounting reports and records.		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):	<b>Outcome #1:</b> Organize accounting procedures using microcomputer software. To address this outcome, students should be taught: <ul style="list-style-type: none"> <li>How to use the Sample Company in QBO to perform transactions</li> <li>How to set up a new company including employees, customers, vendors, and the appropriate chart of accounts</li> <li>How to process transactions for operating activities <ul style="list-style-type: none"> <li>Sales and cash receipts</li> <li>Purchases and cash payments</li> </ul> </li> <li>How to process transactions for investing and financing activities: <ul style="list-style-type: none"> <li>Fixed assets</li> <li>Long-term investments</li> <li>Common stock and dividends</li> <li>Long-term debt</li> <li>Fixed asset acquisitions with long-term debt</li> </ul> </li> <li>How to process payroll checks (using reports from third-party payroll processors)</li> <li>How to perform bank reconciliations</li> <li>How to process adjusting journal entries and close out an accounting period</li> </ul>		
	<b>Outcome #2:</b> Communicate effectively using standard accounting terminology. To address this outcome, students should be taught: <ul style="list-style-type: none"> <li>Basic accounting knowledge including common balance sheet and income statement items and how they fit in the accounting equation</li> <li>How to analyze and record the impact of basic business events on general</li> </ul>		

	<p>ledger accounts in accordance with U.S. Generally Accepted Accounting Principles.</p> <ul style="list-style-type: none"> <li>• How to set up the customer reference format applicable to the business to communicate appropriately with customers</li> <li>• The language used in QBO for specific functions: <ul style="list-style-type: none"> <li>○ Estimates</li> <li>○ Invoices</li> <li>○ Receipts</li> <li>○ Purchase Orders</li> <li>○ Bills</li> </ul> </li> </ul> <p><b>Outcome #3:</b> Interpret and prepare accounting reports and records.</p> <p>To address this outcome, students should be taught:</p> <ul style="list-style-type: none"> <li>• How to use and create budgets as well as analyze actual performance in comparison</li> <li>• How to create the income statement and balance sheet using account balances in accordance with U.S. Generally Accepted Accounting Principles</li> <li>• How to prepare other standard managerial reports</li> <li>• How to customize reports for managerial use</li> </ul>
Suggested Texts & Materials updates (specify if any texts or materials are required):	<p>(update as needed)</p> <p>No change</p>
Department Required Course Activities (optional)	<p>(update as needed)</p> <p>No change</p>
Department Notes (optional)	<p>(update as needed)</p> <p>No change</p>

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.	

<b>SECTION #2 IMPACT ON OTHER DEPARTMENTS</b>	
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 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."*

Submitter	Email	Date
Todd Meislahn	<a href="mailto:tmeislahn@cgcc.edu">tmeislahn@cgcc.edu</a>	4.8.25
Department Chair (enter name of department chair): Todd Meislahn		
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 4.17.25  
CC decision  
CC vote

## CERTIFICATE REVISION

Submitted by: Todd Meislahn

Email: [tmeislahn@cgcc.edu](mailto:tmeislahn@cgcc.edu)

Phone: 541-506-6124

Department: Business

(Double click on check boxes to activate dialog box)

### SECTION #1 OVERVIEW

Current Title:	Entrepreneurship	Proposed Title:	No change
Current Credits:	50	Proposed Credits:	46
Overview and rationale for proposed changes:	To lessen the credit load in the fall term by removing one course that is not a necessary component of the certificate and better taken as part of the degree.		
List of specific changes being proposed which may include, addition or deletion of courses, title changes, credit changes, prerequisite changes, outcome changes, course changes etc. Use consistent words – Add, Remove, Increase, Decrease, Change	<ol style="list-style-type: none"> <li>1. REMOVE: BA 225</li> <li>2. DECREASE OVERALL CREDITS FROM 50 TO 46</li> <li>3. 8% change</li> </ol>		
Is this a Related Certificate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is this a Career Pathway?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, what is the base degree?	Entrepreneurship/Business Management AAS		
Will the proposed changes affect the base degree or certificate?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, how?			
Is this a statewide certificate?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, have the changes been approved by the consortium?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Does the revision impact other areas of instruction?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explanation of issues and how they are being resolved:	Has the revision been validated by the Advisory Committee?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, have you talked with impacted departments and resolved any and all possible issues?	<input type="checkbox"/> Yes <input type="checkbox"/> No		Date of Advisory Committee meeting:	
Requested Implementation Term	Summer, 2025			

## SECTION #2 REVISION AREAS

Does the revision involve changing certificate requisites? ☐ Yes ☒ No

Note that degree/certificate/program entry prerequisites are only enforceable in limited entry programs. Program prerequisites for open entry programs only have meaning when they are representative of prerequisites associated to specific courses within the program. Prerequisites that students are not able to test out of using Next Gen Accuplacer result in hidden degree/certificate requirements and should be avoided. (Courses that may be tested out of using Next Gen Accuplacer include: RD 90, RD 115, WR 90, WR 115, MTH 20, MTH 60, MTH 65, MTH 95, MTH 98, MTH 105, MTH 111, MTH 112.)

### CURRENT PREREQUISITES

(Required whether or not prerequisites are being changed.)

Course Number	Course Title or Placement level	Requisites (if any)	Credits
Placement into MTH 65 or MTH 98	Placement into Beginning Algebra or Quantitative Math	Placement into MTH 65 Placement into MTH 98 and (IRW 115 or WR 115)	4 4
IRW 115 or WR 115	Critical Reading and Writing or Introduction to Expository Writing	ABE 75 or ABE 70 or GED 70 or equivalent placement, Placement into WR 115	5 4

### PROPOSED PREREQUISITES

(No change, leave blank.)

Course Number	Course Title or Placement level	Requisites (if any)	Credits
	No change		

### CERTIFICATE OUTCOMES

All certificate outcomes will be reviewed by the committee regardless of whether or not outcomes have changed.



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.)

Does the revision involve changing certificate outcomes? ☐ Yes ☒ No

#### CURRENT CERTIFICATE OUTCOMES

(Required whether or not outcomes are being changed.)

*Students who complete this certificate will be able to:*

1. Develop a business plan which plans and allocate resources effectively, creates a budget/forecast and create a funding plan for prospective business, details operational information and a summary of business objectives.
2. Communicate effectively with customers, suppliers, employees, and other stakeholders, using standard business terminology.
3. Design a marketing/promotions plan based on a critical analysis of the factors influencing a particular business.
4. Evaluate the legal environment for business and what legal steps business owners can help protect their investment/business.
5. Establish a plan to manage employee and other business related items.

#### PROPOSED CERTIFICATE OUTCOMES

*Students who complete this certificate will be able to:*

No change

#### RELATED INSTRUCTION

Does the revision involve changing or adding Related Instruction? ☐ Yes ☒ No

If yes, complete the Related Instruction Template which may be found on the [curriculum website](#).

#### Additional Comments Or Changes

### SECTION #3 COURSE BY COURSE COMPARISON

List all courses (current AND proposed) in the term by term order that is to be displayed in the [catalog](#) certificate map. List course requisites under Course Title. Include elective list below.

If you are adding a course, place it in the preferred term, identify such a course with (add) and bold the text in the line.

If you want to rearrange the order of courses within the term-by-term sequence, do so on this form.

If you are removing a course, identify the course with (remove) and bold the text.

If the course title is changed, identify the course with (title change) and bold the text.

If the course credits have changed, identify the course with (increase or decrease credit) and bold the text.

Current Certificate Information						Proposed Certificate Information		
Course Number	Course Title / Requisites	Credits	Course Number	Course Title / Requisites	Credits			
FALL TERM (15 credits)			FALL TERM (16 credits)					
BA 101Z	Introduction to Business IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4	BA 101Z	Introduction to Business IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4			
BA 211Z	Principles of Financial Accounting IRW 115 or WR 115 or equiv place. Rec: place into MTH 65	4	BA 211Z	Principles of Financial Accounting IRW 115 or WR 115 or equiv place. Rec: place into MTH 65	4			
BA 104	Applied Business Math IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4	BA 104	Applied Business Math IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4			
BA 150	Introduction to Entrepreneurship IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4	BA 150	Introduction to Entrepreneurship IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4			
WINTER TERM (15 credits)			WINTER TERM (15 credits)					
BA 208	Business Ethics Place into MTH 65 or MTH 98. Pre/co: WR 121Z; Rec: BA 101Z	4	BA 208	Business Ethics Place into MTH 65 or MTH 98. Pre/co: WR 121Z; Rec: BA 101Z	4			
BA 131	Introduction to Business Technology IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98; CAS 121 or keyboarding by touch	4	BA 131	Introduction to Business Technology IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98; CAS 121 or keyboarding by touch	4			
BA 285	Human Relations in Organizations IRW 115 or RD 115 or equiv place; place into MTH 65 or MTH 98. Rec: pre/co: WR 121 or WR 121Z and BA 101	3	BA 285	Human Relations in Organizations IRW 115 or RD 115 or equiv place; place into MTH 65 or MTH 98. Rec: pre/co: WR 121 or WR 121Z and BA 101	3			
WR 121 or WR 121Z	Composition I IRW 115 or WR 115 or equiv place	4	WR 121 or WR 121Z	Composition I IRW 115 or WR 115 or equiv place	4			
SPRING TERM (19 credits)			SPRING TERM (15 credits)					
BA 170	Project Management Fundamentals BA 104 and BA 131	4	BA 170	Project Management Fundamentals BA 104 and BA 131	4			

BA 205	Business Communication IRW 115 or RD 115 or equiv place; place into MTH 65 or MTH 98. Rec: WR 121 or WR 121Z; BA 131 or CAS 133; BA 101	4	BA 205	Business Communication IRW 115 or RD 115 or equiv place; place into MTH 65 or MTH 98. Rec: WR 121 or WR 121Z; BA 131 or CAS 133; BA 101Z	4
BA 206	Management Fundamentals IRW 115 or RD 115 or equiv place; place into MTH 65 or MTH 98. Rec: BA 101, WR 121 or WR 121Z, and BA 131 or CAS 133	3	BA 206	Management Fundamentals IRW 115 or RD 115 or equiv place; place into MTH 65 or MTH 98. Rec: BA 101, WR 121 or WR 121Z, and BA 131 or CAS 133	3
BA 223	Principles of Marketing IRW 115 or WR 115 or equiv place. Place into MTH 65 or MTH 98. Rec: BA 101Z	4	BA 223	Principles of Marketing IRW 115 or WR 115 or equiv place. Place into MTH 65 or MTH 98. Rec: BA 101Z	4
BA 225	<b>Introduction to Entrepreneurship Law (REMOVE)</b> IRW 115 or WR 115 or equiv place. Place into MTH 65 or MTH 98	4			
<b>Credit total</b>		<b>50</b>		<b>Credit total</b>	<b>46</b>

#### ELECTIVE LIST

Include all electives. Identify elective changes by stating if the elective is to be added or deleted and bold the text.  
If you need more lines to accommodate the courses, right click and insert rows.

Current Electives			Proposed Electives		
Course Number	Course Title / Requisites	Credits	Course Number	Course Title / Requisites	Credits

#### SECTION #4 DEPARTMENT REVIEW

*"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 Degree or Certificate Signature Form signed by the department chair and dean."*

Submitter	Email	Date
Todd Meislahn	<a href="mailto:tmeislahn@cgcc.edu">tmeislahn@cgcc.edu</a>	4.10.25
Department Chair (enter name of department chair): Todd Meislahn		
Department Dean (enter name of department dean): Jarett Gilbert (interim)		

Next steps:

**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	Health	Submitter name Phone Email	Janie Griffin 541-506-6140 jgriffin@cgcc.edu
Reason for Revision	To update prefix of APR course to include EMS.		
Current prefix and number	APR 100	Proposed prefix and number	APREMS 100
Current Course Title	Introduction to Emergency Medical Services	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 and integrates knowledge of prehospital Emergency Medical Services (EMS) systems. Explores the history of emergency medical services. Introduces rolls and responsibilities of the provider levels as well as communication systems and documentation. Prerequisites: IRW 115 or WR 115 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 MTH65 or MTH 98  
Prerequisite/concurrent: WR121

☐ 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
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: WR121			
<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
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.) <b>***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.***</b>			
Current learning outcomes (required whether being revised or not)		New learning outcomes	
Upon successful completion of the course, students will be able to: 1. Demonstrate knowledge of the components, types, and oversight of EMS systems. 2. Demonstrate knowledge of the history of EMS systems. 3. Demonstrate knowledge of legislation and regulations related to EMS. 4. Identify the different levels of prehospital providers and the systems involved in the delivery of EMS. 5. Apply an introductory knowledge of prehospital communication and documentation. 6. Demonstrate knowledge of the organizational structure and functions, as well as the role of the EMT, on an emergency scene.		Upon successful completion of the course, students will be able to:  No change	
Course Content – organized by outcomes (list each outcome followed by an outline of the related content):	No change in outcomes		
Suggested Texts & Materials updates (specify if any texts or materials are required):	No change		
Department Required Course Activities (optional)	(update as needed) No change		
Department Notes (optional)	No change		
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?

☐ Yes  
☒ No

Please provide details, who was contacted and the resolution.

Updated for use in EMT/Firefighter apprenticeship program

Implementation term

- ☒ Start of next academic year (summer term)  
☐ 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 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."*

Submitter	Email	Date
Janie Griffin	jgriffin@cgcc.edu	3/31/2025

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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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

## Contact Hours / Credit Change

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION			
Department	Health	Submitter name: Phone: Email:	Janie Griffin 541-506-6140 jgriffin@cgcc.edu
Course prefix and number	EMS 105	Course title	EMT Part I
<b>Contact and Credit Hours</b> • 1 credit of lecture meets 1 hr /wk, plus 2 hrs/wk of study for 10 weeks = 30 hr • 1 credit of lec-lab meets 2 hr/wk, plus 1 hr of study, for 10 weeks = 30 hr • 1 credit of lab or cooperative ed meets 3 hrs/wk, with minimal outside study, for 10 wks = 30 hr			
Current Contact And Credit Hours		Proposed Contact And Credit Hours	
Lecture	3	Lecture	4
Lab	3	Lab	6
Lecture/Lab	4	Lecture/Lab	0
Total weekly contact hours	10	Total weekly contact hours	10
Total credits	6	Total credits	6
Reason for change:	The OHA's shift to a competency-based curriculum necessitates a deeper understanding and application of fundamental concepts and skills in managing emergency care and patient treatment. Students will now be evaluated using case scenarios where they must demonstrate the integration of their knowledge and skills in providing care. Assessment will no longer focus solely on return demonstrations of individual skills; instead, students must apply appropriate skills within varying scenarios, understanding when and why to adapt their approach. This activity and assessment will involve more time.		
<b>LEARNING OUTCOMES:</b> Are learning outcomes affected by this change. If you are adding or removing credits, then it is expected there will be a change in the outcomes.			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, then revise the course learning outcomes by completing a course revision form found on the curriculum website.		
<b>IMPACT ON DEGREE AND CERTIFICATES:</b> Are there degrees or certificates affected by this change?			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, complete a degree/certificate change form located on the curriculum website.		
<b>IMPACT ON OTHER DEPARTMENTS:</b> Are there changes that will impact other departments? Are there degrees or certificates that require this course as part of their program or as a prerequisite?			

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, please explain and describe how the impact was resolved	
Have you consulted with department chairs from other disciplines regarding potential course duplication, impact on enrollment or content overlap?		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, please describe	
Implementation term		<input checked="" type="checkbox"/> Next available term after approval – <b>RUSH for spring, 2025</b> <input type="checkbox"/> Specific term (if after next available term):

SECTION #2 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."</i>		
Submitter	Email	Date
Janie Griffin	jgriffin@cgcc.edu	3/31/2025
Department Chair (enter name of department chair):		
Department Dean (enter name of department dean): Janie Griffin MN, BSN, RN, PNP		

#### NEXT STEPS:

1. Save this document as ContHrChg.course prefix and course number (e.g. ContHrChg.HST 204). Send completed form electronically to [curriculum@cgcc.edu](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 director. 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

### 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"/> Title <input type="checkbox"/> Description	<input type="checkbox"/> Requisites <input type="checkbox"/> Outcomes <input type="checkbox"/> Repeatability	<input type="checkbox"/> Related Instruction <input type="checkbox"/> Content <input type="checkbox"/> Text / Materials
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### SECTION #1 GENERAL INFORMATION & REVISIONS

Department	Health	Submitter name	Janie Griffin
		Phone	541-506-6140
		Email	jgriffin@cgcc.edu
Reason for Revision	To update prefix to make the apprenticeship course more identifiable.		
Current prefix and number	APR 105	Proposed prefix and number	APREMS 105
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
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 Authority required performance competencies. First course of two-part series. Course sequence requires a mandatory orientation. Prerequisites: IRW 115 or WR 115 or equivalent placement; placement into MTH 65; passing a criminal background check and drug screen. 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.

<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			
<input type="checkbox"/> Standard requisites - Prerequisite: placement into MTH 65 or MTH 98. Prerequisite/concurrent: WR 121.			
<input type="checkbox"/> Placement into:			
prefix & number placement	<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"> <li>1. Apply knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care.</li> <li>2. Apply knowledge of the anatomy and function of all human systems to the practice of EMS.</li> <li>3. Analyze scene information and patient assessment findings to guide emergency management.</li> <li>4. Perform basic history and physical examination to identify acute complaints and monitor change using appropriate monitoring systems.</li> <li>5. Apply knowledge of life-span development to patient assessment and management.</li> <li>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.</li> <li>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.</li> <li>8. 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.</li> <li>9. Apply knowledge of public health principles, including epidemiology, public health emergencies, monitoring, and illness/injury prevention.</li> <li>10. Demonstrate professional behavior and ethical decision-making in various emergency medical situations.</li> </ol>	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):	No changes to outcomes
Suggested Texts & Materials updates (specify if any texts or materials are required):	No changes
Department Required Course Activities (optional)	(update as needed) No changes
Department Notes (optional)	No changes

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 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
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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.

# Columbia Gorge Community College

## Contact Hours / Credit Change

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION			
Department	Health	Submitter name: Phone: Email:	Janie Griffin 541-506-6140 jgriffin@cgcc.edu
Course prefix and number	APREMS 105	Course title	EMT Part I
<b>Contact and Credit Hours</b> • 1 credit of lecture meets 1 hr /wk, plus 2 hrs/wk of study for 10 weeks = 30 hr • 1 credit of lec-lab meets 2 hr/wk, plus 1 hr of study, for 10 weeks = 30 hr • 1 credit of lab or cooperative ed meets 3 hrs/wk, with minimal outside study, for 10 wks = 30 hr			
Current Contact And Credit Hours		Proposed Contact And Credit Hours	
Lecture	3	Lecture	4
Lab	3	Lab	6
Lecture/Lab	4	Lecture/Lab	0
Total weekly contact hours	10	Total weekly contact hours	10
Total credits	6	Total credits	6
Reason for change:	The OHA's shift to a competency-based curriculum necessitates a deeper understanding and application of fundamental concepts and skills in managing emergency care and patient treatment. Students will now be evaluated using case scenarios where they must demonstrate the integration of their knowledge and skills in providing care. Assessment will no longer focus solely on return demonstrations of individual skills; instead, students must apply appropriate skills within varying scenarios, understanding when and why to adapt their approach. This activity and assessment will involve more time.		
<b>LEARNING OUTCOMES:</b> Are learning outcomes affected by this change. If you are adding or removing credits, then it is expected there will be a change in the outcomes.			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, then revise the course learning outcomes by completing a course revision form found on the curriculum website.		
<b>IMPACT ON DEGREE AND CERTIFICATES:</b> Are there degrees or certificates affected by this change?			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, complete a degree/certificate change form located on the curriculum website.		
<b>IMPACT ON OTHER DEPARTMENTS:</b> Are there changes that will impact other departments? Are there degrees or certificates that require this course as part of their program or as a prerequisite?			

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, please explain and describe how the impact was resolved	
Have you consulted with department chairs from other disciplines regarding potential course duplication, impact on enrollment or content overlap?		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, please describe	
Implementation term		<input checked="" type="checkbox"/> Next available term after approval – <b>RUSH for spring, 2025</b> <input type="checkbox"/> Specific term (if after next available term):

SECTION #2 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."</i>		
Submitter	Email	Date
Janie Griffin	jgriffin@cgcc.edu	3/31/2025
Department Chair (enter name of department chair):		
Department Dean (enter name of department dean): Janie Griffin MN, BSN, RN, PNP		

#### NEXT STEPS:

1. Save this document as ContHrChg.course prefix and course number (e.g. ContHrChg.HST 204). Send completed form electronically to [curriculum@cgcc.edu](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 director. 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

### 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 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 Phone Email	Janie Griffin 541-506-6140 jgriffin@cgcc.edu
Reason for Revision	Oregon Administrative Rule 333, Section 264, has been revised to eliminate the requirement for a practical psychomotor exam at the conclusion of the EMT program. Instead, students must now demonstrate mastery of the core competencies defined by the Oregon Health Authority for entry-level EMTs by the end of the course. Student performance will be evaluated throughout the program using competency-based assessment tools to ensure proficiency. Updating APR 106 to match EMS 106.		
Current prefix and number	APR 106	Proposed prefix and number	APREMS 106
Current Course Title	EMT Part II	Proposed Course Title (75 characters max)	no change
Current Repeatability	o	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
Continues EMS 105. Develops the basic knowledge and skills necessary to treat victims of trauma, patients that present with special challenges, and sick and injured pediatrics. Expands knowledge and understanding of specific incidents that the Emergency Medical Technician may encounter in the field such as mass-casualty incidents, hazardous materials, motor vehicle collisions, and acts of terrorism. Includes preparation for state and national licensing exams. Requires meeting Oregon Health Authority Standards for health profession student clinical training, including immunizations, TB screening and the ability to pass a criminal background check and drug screen before placement into mandatory clinical observations in hospital emergency department and ambulance ride-along experience. Prerequisites: completion of EMS 105 with a "C" or better at CGCC within the previous 5 terms; current HCP CPR card.	Prepares students to meet entry-level Emergency Medical Technician (EMT) expectations in alignment with national and state standards. It encompasses an overview of the Emergency Medical Services (EMS) system, and the operational protocols required for safe and effective patient care. Emphasis is placed on core competencies outlined by the Oregon Health Authority, enabling EMTs to respond effectively to urgent and non-urgent medical care requests and facilitate medical transportation to and from emergency or healthcare facilities. Second course in a two-part series. Prerequisites: completion of EMS 105 with a "C" or better; current BLS Card for Health Care Provider and passing a criminal background check and drug screen.



<b>REQUISITES:</b> 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 MTH65 or MTH 98 Prerequisite/concurrent: WR121			
<input type="checkbox"/> Placement into:			
prefix & number:	<input type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number: EMS 105 with "C" or better at CGCC within the previous 5 terms	<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
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: WR121			
<input type="checkbox"/> Placement into:			
prefix & number: EMS 105 with a "C" or better	<input checked="" type="checkbox"/> Prerequisite	<input type="checkbox"/> Corequisite	<input type="checkbox"/> pre/con
prefix & number: Current BLS for Health care Providers card and passing a criminal background check and drug screen	<input checked="" 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
<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.) <b>***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.***</b>			
Current learning outcomes (required whether being revised or not)	New learning outcomes		
Upon successful completion of the course, students will be able to: 1. Identify and use tools needed to care for the sick and injured patient at an EMT level. 2. Perform proper medical/trauma patient assessment/management for various disorders/emergencies at the novice EMT level. 3. Properly administer appropriate medications within the EMT B Scope of Practice. 4. Demonstrate team leadership skills. 5. Communicate effectively and	Upon successful completion of the course, students will be able to: 1. Apply the basic elements of a prehospital patient assessment to a variety of common types of acute and non-acute patient conditions and safely perform interventions within the EMT scope of practice. 2. Evaluate patient presentations to determine clinical needs, utilize clinical knowledge and standing orders to formulate appropriate care decisions, and adapt these decisions as needed to comply with national-recognized standards of care. 3. Apply principles of therapeutic communication and cultural sensitivity effectively across diverse patient interactions. 4. Demonstrate an understanding of the EMS system,		

<p>construct a well-written “run report.”</p> <p>6. Abide by state, national, and local protocols governing EMTs.</p> <p>7. Be prepared to take the state and national EMT certification exams.</p>	<p>systems of care, and operational knowledge to ensure safe and effective practices that support patient care.</p> <p>5. Exhibit behavior aligned with professional standards while actively engaging in continuous development to enhance personal growth and professional practice.</p>
<p>Course Content – organized by outcomes (list each outcome followed by an outline of the related content):</p>	<p><b>Outcome #1:</b> Apply the basic elements of a prehospital patient assessment to a variety of common types of acute and non-acute patient conditions and safely perform interventions within the EMT scope of practice.</p> <ul style="list-style-type: none"> <li>Independently conducts a prehospital patient assessment and adapts elements of the scene, primary, secondary and ongoing assessment to a patient’s chief complaint, nature of illness or mechanism of injury.</li> <li>Initiates care that is correctly reflects the severity and priorities of the acute patient condition(s) in accordance with accepted prehospital standards of care.</li> <li>Performs interventions within the national and Oregon scope of practice without causing uncorrectable risk or harm to a patient.</li> </ul> <p><b>Outcome #2:</b> Evaluate patient presentations to determine clinical needs, utilize clinical knowledge and standing orders to formulate appropriate care decisions, and adapt these decisions as needed to comply with national-recognized standards of care.</p> <ul style="list-style-type: none"> <li>Generate a field impression that is logically based on the obvious, acute signs and symptoms presented by the patient and aligns with correct medical knowledge of the condition(s).</li> <li>Clinical knowledge and nationally recognized clinical standards, scope of practice, standing orders and/or medical directions when examining the risks and benefits of interventions and transport decisions.</li> <li>Actions regarding patient interventions reflect the correct indications, precautions and contraindications outlines in current medical standards and knowledge.</li> </ul> <p><b>Outcome #3:</b> Apply principles of therapeutic communication and cultural sensitivity effectively across diverse patient interactions.</p> <ul style="list-style-type: none"> <li>Principles of empathy, cultural sensitivity and responsiveness during interactions with patients and family members in real and simulated situations.</li> <li>Implement and practice therapeutic communication throughout a patient encounter, real or simulated situation.</li> <li>Examine personal barriers to effective communication practice and develop a plan for improvement.</li> <li>Contributes to the patient encounter as team member in ways that benefit the coordination and direction of the tasks required for care and transport.</li> <li>Leaderships responsibilities in different settings and communicating scene priorities, delegation of tasks and meaningful engagement with team members when practice as a team leader.</li> <li>Hand-off reports, clear and concise when transferring care.</li> <li>Documentation of patient encounter, accurately and in line with national and state standards.</li> </ul> <p><b>Outcome #4:</b> Demonstrates an understanding of the EMS system, systems of care, and operational knowledge to ensure safe and effective practices that</p>



	<p>support patient care.</p> <ul style="list-style-type: none"> <li>• Relevant hazards and safety risks during a patient encounter; communicate finding and actions to prevent or minimize said risks.</li> <li>• Identify the needs for additional resources or a higher level of care and request assistance in a timely manner.</li> <li>• Time sensitive emergency and when to initiate steps to activate a regional system of care.</li> </ul> <p><b>Outcome #5</b> Exhibit behavior aligned with professional standards while actively engaging in continuous development to enhance personal growth and professional practice.</p> <ul style="list-style-type: none"> <li>• Assessing own strengths and limitations in knowledge, abilities and performance as an EMT.</li> <li>• Setting realistic goals, feedback and self-reflections.</li> <li>• National and State Standards for professional behavior in all practice settings.</li> <li>• Correct ethical and medicolegal principles within the process of critical thinking when addressing situational, cultural, interpersonal or treatment-related ethical dilemmas.</li> <li>• Use of objective and constructive feedback when evaluating individual and team performance.</li> </ul>
Suggested Texts & Materials updates (specify if any texts or materials are required):	Text: Emergency Care and Transportation of the Sick and Injured (12 <sup>th</sup> ed) ISBN 9781284243748
Department Required Course Activities (optional)	(update as needed)
Department Notes (optional)	All OHA-EMS/TS performance outcomes, at their respective learning level must be met for the student to pass the course and be eligible to apply to take National Registry EMT certification exam.

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.	

<b>SECTION #2 IMPACT ON OTHER DEPARTMENTS</b>	
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) <b>RUSH for Spring, 2025</b>
Allow 2-3 months to complete the approval process before scheduling the course.	

**SECTION #3 DEPARTMENT REVIEW**

*"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."*

Submitter	Email	Date
Janie Griffin	jgriffin@cgcc.edu	3/31/2025
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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

## Contact Hours / Credit Change

(Double click on check boxes to activate dialog box)

SECTION #1 GENERAL INFORMATION			
Department	Health	Submitter name: Phone: Email:	Janie Griffin 541-506-6140 jgriffin@cgcc.edu
Course prefix and number	APREMS 106	Course title	EMT Part II
<b>Contact and Credit Hours</b> • 1 credit of lecture meets 1 hr /wk, plus 2 hrs/wk of study for 10 weeks = 30 hr • 1 credit of lec-lab meets 2 hr/wk, plus 1 hr of study, for 10 weeks = 30 hr • 1 credit of lab or cooperative ed meets 3 hrs/wk, with minimal outside study, for 10 wks = 30 hr			
Current Contact And Credit Hours		Proposed Contact And Credit Hours	
Lecture	3	Lecture	4
Lab	3	Lab	6
Lecture/Lab	4	Lecture/Lab	0
Total weekly contact hours	10	Total weekly contact hours	10
Total credits	6	Total credits	6
Reason for change:	The OHA's shift to a competency-based curriculum necessitates a deeper understanding and application of fundamental concepts and skills in managing emergency care and patient treatment. Students will now be evaluated using case scenarios where they must demonstrate the integration of their knowledge and skills in providing care. Assessment will no longer focus solely on return demonstrations of individual skills; instead, students must apply appropriate skills within varying scenarios, understanding when and why to adapt their approach. This activity and assessment will involve more time.		
<b>LEARNING OUTCOMES:</b> Are learning outcomes affected by this change. If you are adding or removing credits, then it is expected there will be a change in the outcomes.			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, then revise the course learning outcomes by completing a course revision form found on the curriculum website.		
<b>IMPACT ON DEGREE AND CERTIFICATES:</b> Are there degrees or certificates affected by this change?			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, complete a degree/certificate change form located on the curriculum website.		
<b>IMPACT ON OTHER DEPARTMENTS:</b> Are there changes that will impact other departments? Are there degrees or certificates that require this course as part of their program or as a prerequisite?			

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, please explain and describe how the impact was resolved	
Have you consulted with department chairs from other disciplines regarding potential course duplication, impact on enrollment or content overlap?		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, please describe	
Implementation term		<input checked="" type="checkbox"/> Next available term after approval – <b>RUSH for spring, 2025</b> <input type="checkbox"/> Specific term (if after next available term):

SECTION #2 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."</i>		
Submitter	Email	Date
Janie Griffin	jgriffin@cgcc.edu	3/26/2025
Department Chair (enter name of department chair):		
Department Dean (enter name of department dean): Janie Griffin MN, BSN, RN, PNP		

#### NEXT STEPS:

1. Save this document as ContHrChg.course prefix and course number (e.g. ContHrChg.HST 204). Send completed form electronically to [curriculum@cgcc.edu](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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

CC date 4.17.25  
CC decision  
CC vote

## CERTIFICATE SUSPENSION

Submitted by: Robert Wells-Clark

Email: [rclark@cgcc.edu](mailto:rclark@cgcc.edu)

Phone: 541-514-1589

Department: Tech & Trades -  
Manufacturing

(Double click on check boxes to activate dialog box)

### SECTION #1 OVERVIEW

Certificate Title:	USACE Level 2 – Mechanics		Credits:	39
Overview and rationale for suspension:	Certificate revision was over 30% necessitating a suspension and resubmission. Replacing MFG 201, 202, and 203 with new courses in Metrology, MFG 230, 231, and 232.			
Is this a Related Certificate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is this a Career Pathway?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If yes, what is the base degree?	Advanced Manufacturing and Fabrication			
Will the proposed suspension affect the base degree or certificate?			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, how?	The same course changes are being made in the base degree. This was already approved.			
Is this a statewide certificate?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, has the consortium been notified of the proposed suspension?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the suspension impact other areas of instruction?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explanation of issues and how they are being resolved:	Has the suspension been validated by the Advisory Committee?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, have you talked with impacted departments and resolved any and all possible issues?	<input type="checkbox"/> Yes <input type="checkbox"/> No		Date of Advisory Committee meeting:	2.27.25
Requested term for start of suspension	Summer, 2025			

## SECTION #2 CERTIFICATE COURSEWORK

Course Number	Course Title	Credits	Course to be inactivated upon suspension of program
MFG 195	Welding Technology I	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 150	Manufacturing Processes	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 151	Fabrication Processes 1	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 280	Aluminum GTAW/TIG Welding	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 285	Stainless Steel GTAW/TIG Welding	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 286	Stainless Steel GTAW/TIG Fabrication 1	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 155	Blueprint Reading	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 201	Tube and Pipe Fabrication 1	3	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other*
MFG 156	Integrated Manufacturing 1	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 281	Aluminum GTAW/TIG Fabrication Process 1	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 202	Tube Fabrication	3	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other*
MFG 157	Integrated Manufacturing 2	3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other*
MFG 203	Pipe Fabrication and Welding (REMOVE)	3	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other*

### Electives

Course Number	Course Title	Credits	Course to be inactivated upon suspension of program
	none		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other*

\*Provide explanation of "Other"

## SECTION #3 DEPARTMENT REVIEW

*"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 Degree or Certificate Signature Form signed by the department chair and dean/director."*

Submitter	Email	Date
Robert Wells-Clark	<a href="mailto:rclark@cgcc.edu">rclark@cgcc.edu</a>	4.17.25

Department Chair (enter name of department chair): Jim Pytel

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

## Teach Out Planning Document

Certificate/Degree Title: USACE Level 2 - Mechanics certificate			Date: 04/9/25
<b>Section 1: Instructional Department</b>			
<p>Coursework was updated to remove MFG 201, 202 and 202, the tube and pipe fabrication series, and replace them with MFG 230, 231 and 232 Metrology 1-3. The revision resulted in over 30% change to the certificate, necessitating a suspension and recreation.</p> <p>This is a limited entry program for the sole use of US Army Core of Engineers apprentices. To enter the Level Two certificates, apprentices must have completed the Level One certificate with a minimum 2.00 GPA. Zero students have started the Level 2 certificate at this time. Therefore, there will be no impact on students or need to Teach Out the certificate. The USACE is aware of the change and supportive.</p>			
Action	Details	Source of information	By when
Plans for students currently enrolled in the certificate/degree	Provide information on how CGCC will help students complete in a timely manner. <sup>1</sup>	Instructional Dean and Dept. Chair	4/9/25
	For students who will not be able to complete, provide options (change major, other schools that offer program, etc.) Provide details below. <sup>1</sup>		
Notification and presentation to the Curriculum Committee	Presentation must include teach out plan and checklist	Representative from the instructional dept. to present documents	4/17/25
Final plan and documentation submission	once plan has gone to the curriculum committee, stakeholders, etc., the final step is to send to VPIS, college president and Board of Education	Email with appropriate documentation attached	Submit 5/5/25 BoE mtg: 5/20/25
Notification to Program Instructors	Formal letter sent to all program instructors	Formal letter	N/A
<b>Section 2: Curriculum Office</b>			
Letter to CCWD signed by VPIS	Putting deg/cert in 3-year suspension	Instructional Dean and Curriculum Office	5/22/25
Update webforms			N/A
Formal announcement	Notifying stakeholders (Student Services, advising, financial aid, catalog) of the official start date for suspension and the "teach out" plan	Department chair emails USACE	5/22/25
Notify NWCCU	Electronic submission form		6/20/25
Update Catalog	Remove degree/cert map	website	N/A
Revise/update the webpage		email	N/A

Section 3: Registrar's Office			
Official notification to students enrolled in the certificate/degree	Notify the following: All students currently enrolled. Provide communication to students with specific information for: <ul style="list-style-type: none"> <li>• Students who 0-15 credits completed</li> <li>• Students who have completed more than 70 credits</li> <li>• Students completing their final requirements</li> </ul>	Send a letter and email to each student	N/A
Documentation of contact with students	Advisors will work with students and document in student record		N/A
	Registrar's office will scan letters to student record		N/A

<sup>1</sup>Zero students have completed the Level One certificate that is required for entry into the Level Two certificates. Therefore, there is no Teach Out requirement due to this suspension.

**Other Comments:**



## Termination of a Program Checklist

Certificate/Degree Title: USACE Level 2 - Mechanics certificate

What	Information Collected	Status
<b>Enrollment Information:</b> work with the Registrar's Office to provide enrollment information		
Number of students currently enrolled? Identify where they are in the program ( 1 <sup>st</sup> yr., 2 <sup>nd</sup> yr., within 8 credits, etc.)	none	Done
List the program courses that 2 <sup>nd</sup> year students have not completed	none	Done
Provide enrollment comparison of the past 3-5 years of the program	Students have not completed USACE - Level One certificate which is prerequisite to entering Level 2. Therefore, there are zero past or current students in this certificate.	Done
The program is being considered for termination due to low enrollment?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
A "Teach Out" Plan has been drafted for implementation? Since there aren't any students, there isn't a Teach Out Plan.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>Labor Market and Workforce Need:</b>		
list changes in employment opportunities or workforce needs unfavorable to the program	n/a	N/A
The program is being considered for termination due to a change in workforce needs?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>Funding/budgetary concerns:</b>		
External funding (grant?) is ending? If so identify the funding source, amount, and cause of termination	n/a	N/A
Insufficient internal resources to support program? Provide program budget.	Attach spread sheet	N/A
The program is being considered for termination due to lack of funding?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>Faculty Availability:</b>		
Difficult to recruit qualified instructors. If so please explain	n/a	N/A
Number of instructors teaching in the program. Provide list of the courses each instructor teaches	Provide attachment, if needed	N/A
The program is being considered for termination due to lack of qualified instructors?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Identify any potential curricular or academic consequences	None. Suspension is solely based on administrative requirement of suspending when there is 30%+ change.	N/A

# Columbia Gorge Community College

CC date 4.17.25  
CC decision  
CC vote

## NEW CERTIFICATE REQUEST

Submitted by: Robert Wells-Clark

Email: rclark@cgcc.edu

Phone: 541-514-1589

Department: Tech & Trades –  
Manufacturing

(Double click on check boxes to activate dialog box)

### SECTION #1 OVERVIEW

Proposed Title:	USACE Level 2 – Mechanics		Proposed Credits:	39
Reason for new certificate:	Course updates resulted in an over 30% change in the certificate, necessitating the suspension of the original and creation of the updated version. There is no change in intent or purpose for the certificate. The USACE is supportive of the update.		Requested implementation term:	Fall 2024
Is there impact on other areas of instruction?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explanation of issues and how they are being resolved:	Has the certificate been validated by the Advisory Committee?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, have you talked with impacted departments and resolved any and all possible issues?	<input type="checkbox"/> Yes <input type="checkbox"/> No		Date of Advisory Committee meeting:	2.27.25
Is this a Statewide Certificate?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If so, has the certificate been approved by the consortium?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Is this a Related Certificate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is this a Career Pathway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If this is a Related Certificate or a Career Pathway, what is the base degree?	Advanced Manufacturing and Fabrication AAS			

**SECTION #2 PREREQUISITES AND OUTCOMES**

Note that degree/certificate/program entry prerequisites are only enforceable in limited entry programs. Program prerequisites for open entry programs only have meaning when they are representative of prerequisites associated to specific courses within the program. Prerequisites that students are not able to test out of using multiple measures result in hidden degree/certificate requirements and should be avoided. (Courses that may be tested out of using multiple measures include: WR 115, MTH 65, MTH 95, MTH 98, MTH 105, MTH 111, MTH 112.)

**PROPOSED PRE and/or COREQUISITES**

Course Number	Course Title or Placement level	Requisites	Credits
	Completion of the USACE Level 1 certificate with a minimum 2.00 GPA		30
Is this a limited entry program? Students must apply, via the department for program entry.			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

**PROPOSED 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.)

*Students who successfully complete this certificate will be able to:*

1. Produce welds to AWS D1.2, 2.2 and 1.6 in fillet and grooves using GMAW, SMAW and GTAW process.
2. Demonstrate knowledge of basic CNC operations and G Code
3. Manufacture product from conceptualization to reality through research and development.
4. Apply basic metallurgical concepts and basic materials science as they pertain to metals, creating better production results in manufacturing processes.
5. Demonstrate knowledge of necessary mathematical concepts as they apply to manufacturing.

**SECTION #3 PROPOSED COURSEWORK**

List all courses (course number, title, requisites and credits) in the term by term order that is to be displayed in the [catalog](#) certificate map. Enter electives below if applicable. The information you provide on this form will be reflected in the CGCC catalog pages. Please ensure it is correct. (If you need more lines to accommodate the courses, right click and insert rows.)

Course Number	Course Title	Requisites	Credits
Fall Yr 1			
MFG 195	Welding Technology I	none	3
MFG 150	Manufacturing Processes	Pre/Co: MFG 195	3
Winter Yr 1			
MFG 151	Fabrication Processes 1	MFG 150	3
MFG 280	Aluminum GTAW/TIG Welding	MFG 150, MFG 195	3
MFG 285	Stainless Steel GTAW/TIG Welding	MFG 150, MFG 195	3

Spring Yr 1			
MFG 286	Stainless Steel GTAW/TIG Fabrication 1	MFG 285	3
Fall Yr 2			
MFG 155	Blueprint Reading	MFG 195	3
MFG 230	Metrology 1	none	3
Winter Yr 2			
MFG 156	Integrated Manufacturing 1	MFG 155	3
MFG 281	Aluminum GTAW/TIG Fabrication Process 1	MFG 280	3
MFG 231	Metrology 2	MFG 230	3
Spring Yr 2			
MFG 157	Integrated Manufacturing 2	MFG 156	3
MFG 232	Metrology 3	MFG 231	3
<b>Credit total</b>			39
<b>ELECTIVES</b> (if applicable)			
<b>Course Number</b>	<b>Course Title</b>	<b>Requisites</b>	<b>Credits</b>
	none		

#### SECTION #4 RELATED INSTRUCTION

**Certificates 45 credits or more require related instruction. Fill out a Template for Related Instruction located on the Curriculum web page.**

All courses identified as fulfilling the embedded related instruction requirement must have been reviewed and recommended by the Curriculum Committee and the details outlined on the CCOG.

#### SECTION #5 DEPARTMENT REVIEW

*"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 Degree or Certificate Signature Form signed by the department chair and dean/director."*

Submitter	Email	Date
Robert Wells-Clark	<a href="mailto:rclark@cgcc.edu">rclark@cgcc.edu</a>	4.9.25
Department Chair (enter name of department chair): Jim Pytel		
Department Dean (enter name of department dean/director): Jarett Gilbert		

# Columbia Gorge Community College

CC date 4.17.25  
 CC decision \_\_\_\_\_  
 CC vote \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 101	Credits:	3
Course Title: (75 characters max, including spaces)	Introduction to Agriculture		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? 0	Contact hours: Lecture: 30 Lec/lab: 0 Lab: 0
Is this course equivalent to another? They must have the same description, outcomes and credit.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:	
Reason for the new course.	Required course in new Ag Tech AAS		
GRADE OPTIONS: Check as many or as few options as you'd like. <b>Choose the default grade option.</b> The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.			
	Check all that apply	Default (Choose one)	
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
REQUISITES: Identify prerequisite, corequisite and concurrent course(s)			
<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
<b>COURSE DESCRIPTION:</b> 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 <a href="#">Writing Course Descriptions</a> .			
Introduces the core principles of agriculture as well as a historical timeline of agricultural development. Reviews the current challenges in the global food supply; the use of scientific models and research to improve yield, variety and safety; regulatory agencies and their roles; and economic models employed in agribusiness. Explores career opportunities. Audit available.			

<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.)	
Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Track the development of the modern global food system within a historical and geographical timeline.
	2. Recognize the challenges to the global food system.
	3. Recognize the wide-ranging scope of modern agriculture.
	4. Identify and recognize the role of regional governmental agencies and regulatory bodies that deal with agricultural production and delivery.
	5. Use state and regional agricultural research networks for problem solving.
	6. Survey potential agricultural careers and develop a plan of study to achieve desired direction/specialty.
Outcomes assessment strategies:	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.
COURSE CONTENT, ACTIVITIES AND DESIGN	
<p>Activity &amp; Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each instructor.</p> <p>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.</p>	
Department required course activities (optional)	Visit regional Experiment Stations.
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Track the development of the modern global food system within a historical and geographical timeline.</p> <ul style="list-style-type: none"> <li>● Expansion and timelines of historical agricultural societies <ul style="list-style-type: none"> <li>○ Transition from hunter/gatherer to domestication of plant and animal species <ul style="list-style-type: none"> <li>■ Beginning in 10,000 BCE</li> <li>■ Independent centers of development in Fertile Crescent, East Africa,</li> </ul> </li> </ul> </li> </ul>

### East Asia, and the Americas

- Distinguish between hunter/gatherer societies and the cultural developments allowed by agriculture
  - seasonal movement and lack of full-time occupancy
  - art, population increases, trade centers, cities, technological developments
- Second Agricultural Revolution beginning in 17th Century leads to mechanization and increased production of food volume
- Industrial technical production capabilities post WWII changes in agriculture
- Production zones and origins worldwide for common food items
  - Coffee, sugar, wheat, spices, tea, corn, potatoes, barley

#### **Outcome #2:** Recognize the challenges to the global food system.

- Economic and environmental forces that can disrupt supply and demand
  - weather, disease, politics, trade, alliances, sharing and distribution of technology
- Complexities in transporting crops to market and specific issues by crop
  - Distances from production zones, refrigeration, safety, marketing
- Major geo-political issues in agriculture surrounding transport, safety, labeling, and finance
- Environmental concerns related to agriculture
  - Climate change, pests and diseases, energy, water consumption

#### **Outcome #3:** Recognize the wide-ranging scope of modern agriculture.

- Expansion of the traditional food, fiber, forest definition of agriculture
  - Food research and processing technological development
  - Growth and expansion in local agritourism market
  - Market forces' impact on scales of agricultural operations
    - Commodity production vs small niche products

#### **Outcome #4:** Identify and recognize the role of regional governmental agencies and regulatory bodies that deal with agricultural production and delivery.

- Historical need for regulation
- Regional agencies and their roles (ODA, DEQ, SWCD, CAFA, NRP)
- National agencies and their roles (USDA, EPA, FDA, CDC)

#### **Outcome #5:** Use state and regional agricultural research networks for problem solving.

- Purpose of the national land grant university system
  - The Merrell Act
  - Legislation to increase ag research, teaching, and extension to people who need it most to provide food for America
- Services and specialties of the 5 county extension offices closest to CGCC (Wasco, Sherman, Gilliam, Hood River, Klickitat)
- The role of private companies in food research and development in The Gorge.

	<p><b>Outcome #6:</b> Survey potential agricultural careers and develop a plan of study to achieve desired direction/specialty.</p> <ul style="list-style-type: none"> <li>• Introduce year-end capstone project for Agricultural Management certificate.</li> <li>• Comprehensive resource list to students for career and employment resources <ul style="list-style-type: none"> <li>◦ Develop through field visits, guest speakers and county extension agents</li> </ul> </li> <li>• Networking with farmers, ranchers, wineries, research centers and small businesses dedicated to agricultural production</li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<ul style="list-style-type: none"> <li>• Map sets of the world from ancient to modern</li> <li>• State and university web sites</li> <li>• <a href="#">Intro to AGRICULTURE [AP Human Geo Review–Unit 5 Topic 1]</a></li> <li>• <a href="#">How Agriculture BEGAN and DIFFUSED [AP Human Geo Review–Unit 5 Topic 3]</a></li> <li>• <a href="#">The SECOND Agricultural Revolution [AP Human Geo Review–Unit 5 Topic 4]</a></li> <li>• <a href="#">The GREEN Revolution [AP Human Geo Review–Unit 5 Topic 5]</a></li> </ul>
Department Notes (optional)	

## SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)

New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.

Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Agricultural Management	# credit: 38
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

## SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES

Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	Intro course fits many institutions coursework requirement and should be transferable
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IMPACT ON OTHER PROGRAMS AND DEPARTMENTS		
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No	
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No	
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A	
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026	
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>		

SECTION #4 DEPARTMENT REVIEW		
<p><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></p>		
Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	2.8.25
Department Chair (enter name of department chair): Jim Pytel		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		

# Columbia Gorge Community College

CC date 4.17.25  
 CC decision \_\_\_\_\_  
 CC vote \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 102	Credits:	3
Course Title: (75 characters max, including spaces)	Agricultural Safety		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 20 Lec/lab: 0 Lab: 30
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Required course in new Ag Tech AAS		

GRADE OPTIONS: Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REQUISITES: Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:
course prefix & number:	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input type="checkbox"/> pre/co

**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](#).

Provides an overview of issues in agricultural safety. Addresses hand and power tools, spray equipment and chemical hazards, hot and cold weather-related health concerns, tractors and implements. Audit available.

<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.)	
Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Identify and use safely a variety of agricultural hand and small power tools.
	2. Distinguish between different types of spray equipment and apply safety protocols in the use of each.
	3. Identify common chemicals used in agriculture and how to manage them safely.
	4. Recognize and address health concerns related to hot and cold weather situations.
	5. Apply a basic understanding of farm machinery use and safety.
Outcomes assessment strategies:	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.
COURSE CONTENT, ACTIVITIES AND DESIGN	
<p>Activity &amp; Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each instructor.</p> <p>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.</p>	
Department required course activities (optional)	
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Identify and use safely a variety of agricultural hand and small power tools.</p> <ul style="list-style-type: none"> <li>● Proper hand tool use, care, and maintenance including but not limited to:             <ul style="list-style-type: none"> <li>○ electric and gas trimmer, chain saw, rototiller, pruners.</li> <li>○ bladed pruner, lopper, scythe, fence tools</li> </ul> </li> <li>● Basics of small engine operation and troubleshooting             <ul style="list-style-type: none"> <li>○ fuel, spark and air requirements</li> </ul> </li> <li>● Personal care and safety kit             <ul style="list-style-type: none"> <li>○ work clothing</li> <li>○ foot wear</li> </ul> </li> </ul>

- eye and hearing protection
- field emergency kit

**Outcome #2:** Distinguish between different types of spray equipment and apply safety protocols in the use of each.

- Equipment by crop type
- Operation and maintenance of basic equipment
- Safety equipment
  - protective clothing
  - respirators
- Safety protocols

**Outcome #3:** Identify common chemicals used in agriculture and how to manage them safely.

- Chemicals and their use
  - Orchard
  - Dryland wheat
- Safety protocols
  - Storage
  - Mixing
  - Disposal
  - Application
  - accidents and exposures

**Outcome #4:** Recognize and address health concerns related to hot and cold weather situations.

- Signs/symptoms of heat and cold related health emergencies
  - frostbite, hypothermia, heat stroke and dehydration
- Prevention and treatment of hot and cold injuries
- OSHA regulations

**Outcome #5:** Apply a basic understanding of farm machinery use and safety.

- Tractor operation
  - Safety
  - equipment pre-checks
  - attaching and detaching
  - Basic maintenance
- ATV and side-by-side vehicles
- General vehicle safety
  - Pick-up trucks
  - School buses

Suggested Texts & Materials (specify if any texts or materials are required)	Use of listed Texts/Materials is not required unless so noted. <ul style="list-style-type: none"> <li>• <a href="https://www.redcross.org/local/oregon/take-a-class/first-aid?srsId=AfmBOoqwWxZtWReerjQxH8DeMks6LvMDkTOrN1jjkyb4TXiYJmjLBkXo">https://www.redcross.org/local/oregon/take-a-class/first-aid?srsId=AfmBOoqwWxZtWReerjQxH8DeMks6LvMDkTOrN1jjkyb4TXiYJmjLBkXo</a>, Oregon Red Cross First-Aid information</li> <li>• <a href="https://osha.oregon.gov/pages/topics/portable-power-tools.aspx">https://osha.oregon.gov/pages/topics/portable-power-tools.aspx</a>, OSHA Oregon Power tool reference page with video links</li> </ul>
Department Notes (optional)	

SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)		
New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.		
Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Agricultural Management	# credit: 38
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES	
Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	There are comparable courses at universities.
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS	
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No

Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>	

SECTION #4 DEPARTMENT REVIEW		
<p><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></p>		
Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	2.8.25
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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.

# Columbia Gorge Community College

CC date 4.17.25  
 CC decision \_\_\_\_\_  
 CC vote \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 103	Credits:	3
Course Title: (75 characters max, including spaces)	Agricultural Operations and Management I		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 20 Lec/lab: 0 Lab: 30
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Required course in new Ag Tech AAS		

**GRADE OPTIONS:** Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**REQUISITES:** Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co

**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](#).

Examines the agriculture systems of the Pacific Northwest and Columbia Basin. Covers regional products, transportation and distribution networks, weather and climate, soils and soil testing, plant science fundamentals, and pest management. Includes field experiences to a variety of regional agriculture businesses and producers. Audit available.

<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.)	
Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Apply predictive measurements in order to evaluate local weather conditions, and recognize forces that influence shifting climate patterns.
	2. Differentiate between commodity production and niche marketing in relationship to regional production and distribution.
	3. Conduct basic soil sampling, identification and testing.
	4. Develop conservation-minded irrigation plans that suit production needs and available water resources.
	5. Apply knowledge of plant life-cycles and limiting factors in crop management.
	6. Identify problems and create plans for leaf and stalk pest management.
Outcomes assessment strategies:	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.
<b>COURSE CONTENT, ACTIVITIES AND DESIGN</b>	
<p>Activity &amp; Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each instructor.</p> <p>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.</p>	
Department required course activities (optional)	
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Apply predictive measurements in order to evaluate local weather conditions, and recognize forces that influence shifting climate patterns.</p> <ul style="list-style-type: none"> <li>● Difference between weather and climate</li> <li>● Accessing local weather data and using it to make accurate forecasts               <ul style="list-style-type: none"> <li>○ NOAA data bases and trend models</li> </ul> </li> <li>● Climate pattern trends and key seasonal indicators for the region               <ul style="list-style-type: none"> <li>○ wind speed and direction</li> <li>○ range of temperature and humidity</li> </ul> </li> </ul>



- first and last frost
- historical records of extremes
- Resilience strategies for seasonal variation and climate change.
  - seasonality shifts
  - mitigation techniques for plant development
    - variation in species
    - adaptation to change in season
    - greenhouse and cold-frame production
- Water cycle and weather events development

**Outcome #2:** Differentiate between commodity production and niche marketing in relationship to regional production and distribution.

- Differences between commodity production and niche marketing
- Path to consumers for local products
  - beer, wine, wheat, apples, pears, cherries etc.
- Business development factors as scale factors occur.
  - growth issues and funding
  - employee needs
  - land acquisition

**Outcome #3:** Conduct basic soil sampling, identification and testing.

- Soil types and profiles
  - <https://www.nesdis.noaa.gov/learn-about-soil-types>
- Problems and benefits associated with different soil types
- Field sampling and testing
- Comparison of field results to lab results

**Outcome #4:** Develop conservation-minded irrigation plans that suit production needs and available water resources.

- Irrigation systems
  - Design types and products
    - sensor driven, low flow, center pivot, drip lines and timers
  - Scaling to need
- Assembly of different systems
- Soil water testing and use of sensors for precision irrigation demands

**Outcome #5:** Apply knowledge of plant life cycles and limiting factors in crop management

- Differences between perennial and annual life cycle traits
- Plant form, function and reproduction cycles
  - Key production species of the Pacific Northwest and Columbia Basin: wheat, cherries, pears, grapes, hops, annual vegetables
- Key nutrition needs for main crops of the Pacific Northwest and the Columbia Basin
  - Adjust ph – gypsum, lime
  - Calcium

	<ul style="list-style-type: none"> <li>○ Magnesium</li> <li>● Key disruptors to the growth process <ul style="list-style-type: none"> <li>○ storms, wind, hail, excessive rain</li> <li>○ soil issues</li> <li>○ timing with supplements</li> <li>○ pesticides</li> </ul> </li> </ul> <p><b>Outcome #6:</b> Identify problems and create plans for leaf and stalk pest management.</p> <ul style="list-style-type: none"> <li>● Key pest species and control models in the Columbia Basin <ul style="list-style-type: none"> <li>○ <a href="https://www.usda.gov/about-usda/news/blog/busting-bugs-usda-creates-online-tools-id-pests">https://www.usda.gov/about-usda/news/blog/busting-bugs-usda-creates-online-tools-id-pests</a></li> </ul> </li> <li>● Pest information resources <ul style="list-style-type: none"> <li>○ OSU Extension Office</li> <li>○ Agricultural sales agents</li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<p>Use of listed Texts/Materials is not required unless so noted.</p> <ul style="list-style-type: none"> <li>● <a href="https://www.usda.gov/about-usda/news/blog/busting-bugs-usda-creates-online-tools-id-pests">https://www.usda.gov/about-usda/news/blog/busting-bugs-usda-creates-online-tools-id-pests</a></li> <li>● <a href="https://www.soilfoodweb.com/">https://www.soilfoodweb.com/</a></li> <li>● Dr Elaine Ingham Soils info</li> <li>● <a href="https://www.soilfoodweb.com/resources/animations-videos/?vID=372925873&amp;h=707aa77aa3">https://www.soilfoodweb.com/resources/animations-videos/?vID=372925873&amp;h=707aa77aa3</a></li> <li>● Series of Soil Food Web Videos from Dr. Ingham</li> </ul>
Department Notes (optional)	

SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)		
New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.		
Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Agricultural Management	# credit: 38
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	

Is this course used to supply related instruction for a certificate?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.	

SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES	
Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	Intro course fits many institutions coursework requirement and should be transferable
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS	
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>	

SECTION #4 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</i>

*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.”*

Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	4.8.25
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 CC 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 4.17.25  
 CC decision \_\_\_\_\_  
 CC vote \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 104	Credits:	3
Course Title: (75 characters max, including spaces)	Introduction to Fruit Crop and Dryland Wheat		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 20 Lec/lab: 0 Lab: 30
Is this course equivalent to another? They must have the same description, outcomes and credit.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:	
Reason for the new course.	Required course in new Ag Tech AAS		
GRADE OPTIONS: Check as many or as few options as you'd like. <b>Choose the default grade option.</b> The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.			
	Check all that apply	Default (Choose one)	
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
REQUISITES: Identify prerequisite, corequisite and concurrent course(s)			
<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
<b>COURSE DESCRIPTION:</b> 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 <a href="#">Writing Course Descriptions</a> .			
Delves into specific and regional information for two of the area's largest agricultural production crops: dryland wheat systems in Wasco and Morrow counties and cherry and pear trees in Wasco and Hood river counties. Introduces the vast breadth of skills and tools needed to operate within these two giant industries, while			

investigating the timing, technology and productivity of each production cycle, from pruning and grafting to irrigation and seed drills. Includes historical background as well as modern changes, and examines current market trends. Provides opportunities to meet with key players in research, production, packaging, support services, oversight, marketing, and distribution during onsite field trips. Audit available.	
<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.)	
Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Apply understanding of complex phenology needed to manage fruit tree and dryland wheat systems.
	2. Articulate form and function of plant parts and cycles as they apply to fruit trees and dryland wheat.
	3. Identify problems and create plans for soil and root pest management.
	4. Design and manage common irrigation systems used in tree production and irrigated field systems.
	5. Provide appropriate seasonal tree care skills for orchards.
	6. Develop field management plans for annual wheat crops.
	7. Evaluate and manage N-P-K and C-cycles in the soil, and recognize issues around deficiencies for specific crops.
Outcomes assessment strategies:	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.
COURSE CONTENT, ACTIVITIES AND DESIGN	
<p>Activity &amp; Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each instructor.</p> <p>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.</p>	
Department required course activities (optional)	Field experiences.

Course Content – organized by outcomes (list each outcome followed by an outline of the related content)

**Outcome #1:** Apply understanding of complex phenology needed to manage fruit tree and dryland wheat systems.

- predictive weather and climate knowledge and tools
  - NOAA and local forecast services
  - frost reports
- Species selection to mitigate changes in climate patterns
- Role of elevation, slope and topography
  - microclimates and their pros/cons
- Abatement technology to protect crops
  - heaters, fans, and covers
- Monitoring and quantifying seasonal chill and fruit set
  - identifying parameter of acceptable conditions

**Outcome #2:** Articulate form and function of plant parts and cycles for fruit trees and dryland wheat.

- plant anatomy and function
- Identifying healthy root structures and soil measures
- Increasing production using pollination strategies
  - Bees/bee business
  - Options in the area
- Seeding cycles and perennial lifespans
- Species transition processes

**Outcome #3:** Identify problems and create plans for soil and root pest management.

- Field Identification – skills and resources
- Difference between life cycles of pest and prey species
- Prevention skills that limit introduction and cross contamination
- Spray applications and soil treatments
- Case studies provided by local field managers

**Outcome #4:** Design and manage common irrigation systems used in tree production and irrigated field systems.

- Differences in tree and field irrigation systems: <https://www.fidhr.org/index.php/en/>
- Latest technological advances in efficient irrigation systems
- System construction
  - Pipe sizing and flow rates
  - Pump selection
  - Gravity systems
  - Above and below ground delivery
  - General construction techniques

**Outcome #5:** Provide appropriate seasonal tree care skills for orchards.

- Maintenance of orchard crops
  - Planting, pruning, pest identification, pollination, fruit set

	<ul style="list-style-type: none"> <li>○ Spray cycle vs pest life cycle considerations</li> <li>○ Technological advances in trellis and tree production</li> <li>○ Harvest skills and techniques</li> <li>● Soil water sensors for irrigation needs</li> </ul> <p><b>Outcome #6:</b> Develop field management plans for annual wheat crops.</p> <ul style="list-style-type: none"> <li>● Wheat crop management <ul style="list-style-type: none"> <li>○ stages of wheat development</li> <li>○ predictive factors for health and harvest timing</li> <li>○ Harvest skills and techniques</li> </ul> </li> <li>● Soil water sensors for irrigation needs</li> </ul> <p><b>Outcome #7:</b> Evaluate and manage N-P-K and C-cycles in the soil, and recognize issues around deficiencies for specific crops.</p> <ul style="list-style-type: none"> <li>● N-P-K and Carbon testing</li> <li>● Nitrogen fixation</li> <li>● The cycles and sources for each of N-P-K and C <ul style="list-style-type: none"> <li>○ Desired levels for each</li> <li>○ Modifying soils to have ideal levels</li> </ul> </li> <li>● Recognizing deficiencies – plant issues and signs</li> <li>● Strategies for long term maintenance of soil health <ul style="list-style-type: none"> <li>○ Carbon sequestration</li> <li>○ Increase of organic material</li> <li>○ Strategic intervention in pest life-cycle</li> <li>○ No till strategies</li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<p>Use of listed Texts/Materials is not required unless so noted.</p> <ul style="list-style-type: none"> <li>● <a href="#">Nutrient Cycling   Soil Food Web School</a>, Dr. Elaine Ingham from OSU</li> <li>● <a href="#">Soil Cycles: A Mini-Doc About Sustainability Initiative in Harrisonburg</a>. Small business development story about nutrient cycles</li> <li>● <a href="https://oregonaitc.org/resources/oregon-resources/oregon-grown-commodities/wheat/">https://oregonaitc.org/resources/oregon-resources/oregon-grown-commodities/wheat/</a></li> </ul>
Department Notes (optional)	

SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)	
New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.	
Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):	# credit:
Name of degree(s):	# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No



Name of new certificate(s):	Agricultural Management	# credit: 38
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES		
Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.		
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS		
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No	
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No	
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A	
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026	

Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.

#### SECTION #4 DEPARTMENT REVIEW

*"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."*

Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	4.8.25
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 CC 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      4.17.25  
CC decision      \_\_\_\_\_  
CC vote      \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trade – Ag Tech	Submitter name: Phone: Email:	Mike Davis 503-680-6384 mdavis@cgcc.edu
Prefix and Course Number:	AG 105	Credits:	3
Course Title: (75 characters max, including spaces)	Precision Agriculture - Basics		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: 10am – 2pm  Lecture: 20 Lec/lab: 20 Lab:
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Part of new Ag-Tech AAS.		

**GRADE OPTIONS:** Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**REQUISITES:** Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co

**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](#).

Explores principles and practices of precision agriculture, emphasizing advanced technologies including drones, GPS, and IoT for site-specific farm management. Includes practical applications such as soil and crop monitoring, variable-rate input application, and sustainability. Incorporates hands-on labs and case studies to prepare students for workplace decision-making in agriculture. Audit available.

<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.)	
Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Demonstrate knowledge of the history, significance, and technologies of precision agriculture in workplace applications.
	2. Apply spatial and temporal mapping tools to analyze soil and crop variability effectively.
	3. Utilize agricultural sensors to monitor soil, crop health, and weather for decision-making.
	4. Process and interpret remote sensing data, including multispectral and hyperspectral imaging, for actionable insights in crop health management.
	5. Develop a comprehensive precision agriculture plan to address workplace challenges, emphasizing sustainability and productivity.
Outcomes assessment strategies:	<p>The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.</p> <p>Required: A capstone project in the form of a comprehensive farm management plan, assessed uniformly across all sections.</p>
COURSE CONTENT, ACTIVITIES AND DESIGN	
<p>Activity &amp; Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each instructor.</p> <p>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.</p>	
Department required course activities (optional)	
Course Content – organized by outcomes (list	<b>Outcome #1:</b> Demonstrate knowledge of the history, significance, and technologies of precision agriculture in workplace applications.

each outcome followed by an outline of the related content)

- Historical Milestones:
  - Identification and analysis of key historical developments in precision agriculture.
    - The introduction of GPS technology to farming.
    - The development and use of yield monitors.
    - The rise of variable rate application techniques.
    - Adoption of remote sensing technologies
  - Examination of the impact of technological advancements on agricultural practices.
  - Case studies highlighting transformative moments in agricultural innovation.
    - The Green Revolution.
    - Introduction of precision planting technologies.
    - Advances in drone-based crop monitoring
- Core Technologies:
  - Comprehensive understanding of:
    - GPS and GIS for spatial data management.
    - Drones for aerial imaging and monitoring.
    - Internet of Things (IoT) devices for real-time data collection.
  - Exploration of how each technology integrates to optimize farming operations with real-world examples demonstrating successful applications.

**Outcome #2:** Apply spatial and temporal mapping tools to analyze soil and crop variability effectively.

Key Concepts and Topics:

- Understanding Variability:
  - Differentiation between spatial and temporal variability.
  - Importance of identifying variability for agricultural decision-making.
- Mapping and Analysis Tools:
  - Overview of commonly used tools for spatial and temporal mapping.
    - GIS software (e.g., ArcGIS, QGIS).
    - Precision farming platforms (e.g., Trimble, Ag Leader).
    - Soil Sampling and analysis kits.
  - Practical applications through hands-on case studies.
    - Field zoning based on soil analysis.
    - Variable rate irrigation strategies.
    - Yield mapping and forecast adjustments.
  - Integration.
    - Integration of mapping tools with technologies like drones and LoT for enhanced precision in analysis.

**Outcome #3:** Utilize agricultural sensors to monitor soil, crop health, and weather for decision-making.

Key Concepts and Topics:

- Sensor Types and Applications:
  - Soil Moisture sensors (e.g., TDR, capacitance probes).
  - Crop health sensors (e.g., chlorophyll meters).
  - Weather monitoring systems (e.g., automated weather stations).
- Data Interpretation:
  - Methods for translating sensor data into actionable insights.
  - Best practices for incorporating sensor data into farm management strategies.
    - Cross-referencing sensor data with historical trends.
    - Automating responses through smart irrigation systems.

**Outcome #4:** Process and interpret remote sensing data, including multispectral and hyperspectral imaging, for actionable insights in crop health management.

Key Concepts and Topics:

- Data Processing Techniques:
  - Steps for analyzing multispectral and hyperspectral imagery.
    - Data pre-processing (calibration, noise reduction).
    - Spectral analysis for specific crop health indicators.
    - Image classification and interpretation.
  - Tools and software commonly used for data processing.
    - ENVI
    - Pix4D.
    - Agisoft Metashape.
- Vegetation Indices:
  - Calculation and application of vegetation indices, such as:
    - NDVI (Normalized Difference Vegetation Index).
    - EVI (Enhanced Vegetation Index).
  - Case studies demonstrating the impact of remote sensing data on crop management.

**Outcome #5:** Develop a comprehensive precision agriculture plan to address workplace challenges, emphasizing sustainability and productivity.

Key Concepts and Topics:

- Plan Development:
  - Framework for synthesizing learned technologies and methodologies into actionable plans.
  - Strategies for addressing real-world agricultural challenges.
- Sustainability and Productivity:
  - Sustainable farming practices, such as:
    - Crop Rotation

	<ul style="list-style-type: none"> <li>▪ Reduced tillage</li> <li>▪ Precision irrigation.</li> <li>○ Methods to balance productivity with conservation, such as: <ul style="list-style-type: none"> <li>▪ Leveraging real-time data for minimal input wastage.</li> <li>▪ Implementing renewable energy solutions on farms.</li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<ul style="list-style-type: none"> <li>• Primary Textbook: Shannon, D. Kent, et al., <i>Precision Agriculture Basics</i>. ASA-CSSA-SSSA, 2020.</li> <li>• Supplemental readings: Weekly articles from journals like <i>Precision Agriculture</i> and case studies.</li> <li>• Equipment: Drones equipped with multispectral cameras, GIS software, and soil analysis kits.</li> </ul>
Department Notes (optional)	

## SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)

New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.

Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Precision Agriculture	# credit: 34
Name of new degree(s):	Integrated Agricultural Science & Technology	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	Required	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

## SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES

Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	OSU: AG280, AG230 WSU: AFS101, AFS102
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS	

Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: Summer 2026
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>	

SECTION #4 DEPARTMENT REVIEW		
<p><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></p>		
Submitter	Email	Date
Mike Davis	<a href="mailto:mdavis@cgcc.edu">mdavis@cgcc.edu</a>	1.25.25
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto:slewis@cgcc.edu).



# Columbia Gorge Community College

CC date 4.17.25  
 CC decision \_\_\_\_\_  
 CC vote \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades: Ag Tech	Submitter name: Phone: Email:	Mike Davis 503-680-6384 mdavis@cgcc.edu
Prefix and Course Number:	AG 106	Credits:	4
Course Title: (75 characters max, including spaces)	Introduction to Drone Operations and Autonomous Vehicles in Agriculture		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? 0	Contact hours: 50 Lecture: 30 Lec/lab: 20 Lab:
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Part of new Ag-Tech AAS.		

GRADE OPTIONS: Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REQUISITES: Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:
course prefix & number: AT 105	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input checked="" type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input type="checkbox"/> pre/co

**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](#).

Explores the integration of drones and autonomous vehicles in agriculture, emphasizing practical applications and safety in operational environments. Includes advanced sensor technologies (Thermal, RGB, NDVI, and LiDAR), mission planning, flight programming, and data analysis. Hands-on labs and fieldwork provide experience in precision farming, environmental monitoring, and sustainable management techniques. Prerequisite/concurrent: AT 105. Audit available.

**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.)

Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Operate drones and autonomous vehicles for mission planning and data acquisition.
	2. Evaluate effectiveness of sensor data (Thermal, RGB, NDVI, and LiDAR) for agricultural applications.
	3. Develop effective field routing and flight programming techniques.
	4. Prepare data-driven approaches that apply to water management, pest control, and crop monitoring
Outcomes assessment strategies:	<ul style="list-style-type: none"> <li>Required: A capstone project in the form of a comprehensive farm management plan, assessed uniformly across all sections.</li> </ul>

## COURSE CONTENT, ACTIVITIES AND DESIGN

**Activity & Design:** The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each 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.

Department required course activities (optional)	<p>Required Course Activities (Labs &amp; Practical Exercises)</p> <ul style="list-style-type: none"> <li>Data Integration Labs: <ul style="list-style-type: none"> <li>Combining RGB, NDVI, LiDAR, and thermal data for decision-making</li> </ul> </li> <li>Mission Execution Scenarios: <ul style="list-style-type: none"> <li>Planning and executing drone/autonomous vehicle missions in real-world agricultural settings</li> </ul> </li> <li>Sustainability Projects: <ul style="list-style-type: none"> <li>Assessing and implementing precision agriculture solutions</li> </ul> </li> </ul>
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Operate drones and autonomous vehicles for mission planning and data acquisition.</p> <ul style="list-style-type: none"> <li>Regulatory and Safety Considerations <ul style="list-style-type: none"> <li>FAA regulations and legal considerations for drone and autonomous vehicle operators</li> <li>Compliance with federal, state, and local laws governing UAVs and autonomous</li> </ul> </li> </ul>

ground vehicles

- Safety Protocols
  - General operational safety for drones and autonomous vehicles
  - Specific protocols for:
    - Drones: Airspace awareness, weather conditions, battery management, emergency landings
    - Autonomous Vehicles: Obstacle detection, traffic awareness, vehicle control failure procedures
- Pre-Flight and Operational Readiness
  - Drone setup and calibration
  - Pre-flight inspections and system diagnostics
  - Flight safety procedures and vehicle start-up protocols
- Operation Techniques
  - Drone Piloting Techniques:
    - Manual vs. autonomous control
    - Navigating various environmental conditions
  - Autonomous Programming for Precision Tasks:
    - Flight path automation
    - Pre-set routing for vehicles and drones
- Emergency Protocols and Troubleshooting
  - Common system failures and resolutions:
    - Communication failures (loss of signal, GPS malfunction)
    - Mechanical failures (propeller damage, motor failure)
    - Battery issues (low charge, overheating)
    - Software failures (firmware corruption, sensor misalignment)
    - Navigation errors (incorrect waypoints, environmental obstacles)

**Outcome #2:** Evaluate effectiveness of sensor data (Thermal, RGB, NDVI, and LiDAR) for agricultural applications.

- Sensor Types and Applications
  - RGB Sensors: Visual mapping and object identification
  - NDVI Sensors: Vegetation health monitoring
  - LiDAR Sensors: Terrain mapping and structure assessment
  - Thermal Sensors: Crop stress detection and pest infestation analysis
- Sensor Calibration, Data Acquisition, and Evaluation
  - Calibration Procedures: Ensuring accuracy and consistency in sensor readings
  - Data Collection Methods: Differences in drone vs. autonomous vehicle data acquisition
  - Data Processing: Converting raw sensor data into actionable insights

- Practical Applications
  - Crop health assessment and stress monitoring
  - Detecting pest infestations and applying corrective measures
  - Evaluating soil conditions and moisture levels

**Outcome #3:** Develop effective field routing and flight programming techniques.

- Field Routing vs. Flight Programming
  - Field Routing (Autonomous Vehicles):
    - Route optimization for efficient data collection
    - Obstacle avoidance and sensor-based navigation
    - Integration with GIS-based mapping software
  - Flight Programming (Drones):
    - Waypoint planning for mission execution
    - Airspace and terrain considerations in flight programming
    - Automation for large-scale agricultural monitoring
- Routing Models and Mapping Software
  - Routing Models:
    - Grid-based path planning
    - AI-driven adaptive routing
    - Coverage path optimization
  - Mapping Software:
    - ArcGIS for data visualization
    - Pix4D for drone-based photogrammetry
    - Agisoft Metashape for 3D modeling
    - DJI Terra for automated drone mission planning
- Executing Complex Missions
  - Key components of a complex mission:
    - Multi-sensor data integration
    - Automated vs. manual control transitions
    - Large-area coverage strategies

**Outcome #4:** Prepare data-driven approaches that apply to water management, pest control, and crop monitoring.

- Regulatory considerations for environmental impact
- Water Management Techniques
  - Precision irrigation planning using GIS-based analysis
  - Monitoring soil moisture variations with remote sensing
  - Flood risk assessment using LiDAR data
- Pest Control Methodologies

	<ul style="list-style-type: none"> <li>○ Early detection using thermal and NDVI sensors</li> <li>○ Targeted spraying using drone-enabled application</li> <li>○ AI-based pest movement prediction</li> <li>● Crop Health Monitoring <ul style="list-style-type: none"> <li>○ Stress detection using multispectral and hyperspectral imaging</li> <li>○ Long-term trend analysis with historical drone data</li> <li>○ Integration with farm management software</li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<ul style="list-style-type: none"> <li>● Primary Textbook: I.M. Davis, <i>Drone in Agriculture</i>, American Technical Publications.</li> <li>● Supplemental Readings: Weekly journal articles and case studies. Journals recommended: Journal of Precision Agriculture (Springer), Remote Sensing Applications (Elsevier), Agricultural Systems (Elsevier). Books: Smart Agriculture (M. Naeem &amp; A. Khosla), Precision Agriculture for Sustainability (J. Stafford).</li> <li>● Equipment: Drones equipped with RGB and thermal sensors, GIS software, and calibration tools.</li> </ul>
Department Notes (optional)	

## SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)

New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.

Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Precision Agriculture	# credit: 34
Name of new degree(s):	Integrated Agricultural Science & Technology	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):		
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

**SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES**

Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.

OSU: AG230, AG111  
WSU: AFS103, AFS201, AGTM305

**IMPACT ON OTHER PROGRAMS AND DEPARTMENTS**

Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.

No

Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.

No

Is there any potential impact on another department?  
Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.

☐ Yes

☒ No

Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.

N/A

Has the Library director been notified regarding the addition of this course and the need for any potential resources?

☒ Yes – date: 1.25.25

☐ No

Implementation term:

☐ Start of next academic year (summer term)

☒ Specific term (if BEFORE next academic year): summer, 2026

Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.

**SECTION #4 DEPARTMENT REVIEW**

*"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."*

Submitter

Email

Date

Mike Davis

[mdavis@cgcc.edu](mailto:mdavis@cgcc.edu)

4.1.25

Department Chair (enter name of department chair): Jim Pytel

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

# Columbia Gorge Community College

CC date        2.20.25  
 CC decision    \_\_\_\_\_  
 CC vote        \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 201	Credits:	4
Course Title: (75 characters max, including spaces)	Integrated Pest Management		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 30 Lec/lab: 0 Lab: 30
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Required course in new Ag Tech AAS		

**GRADE OPTIONS:** Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**REQUISITES:** Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co

**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](#).

Covers the four steps of the EPA's Integrated Pest Management model. Addresses common pesticides, herbicides, fungicides and insecticides used in the Columbia Basin. Focuses on safety, calibration, application methods, indicators for use, and disposal of applied materials. Includes study of major plant and animal pest species of the region and their characteristics. Prepares students to take the Spray Handlers License certification exam. Audit available.



<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.)	
Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Identify and apply the four-step US Environmental Protection Agency (EPA’s) Integrated Pest Management model.
	2. Identify major plant, fungi, and animal pest species of the local bio-region.
	3. Recognize the life cycles and timeframes of pest reproduction.
	4. Recognize the predator/prey relationship at the micro and macro level and apply it as a pest control strategy.
	5. Apply pesticide, herbicide, and fungicide control products using best practices.
	6. Apply to take the Pesticide Handlers License exam.
Outcomes assessment strategies:	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.
COURSE CONTENT, ACTIVITIES AND DESIGN	
<p>Activity &amp; Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each instructor.</p> <p>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.</p>	
Department required course activities (optional)	Meet with Extension agents, Field Representatives, Ag sales professionals and local farmers to learn about the wide-ranging products and practices.
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Identify and apply the four-step US Environmental Protection Agency (EPA’s) Integrated Pest Management model.</p> <ul style="list-style-type: none"> <li>• EPA’s four-step IPM model and available resources             <ul style="list-style-type: none"> <li>○ Identify Pests &amp; Monitor: recognizing the pests present and regularly monitoring their populations and the environment to determine if a problem exists</li> <li>○ Set Action thresholds: Determine the point at which pest populations or</li> </ul> </li> </ul>



environmental conditions warrant pest control action.

- Prevent: Implement strategies to prevent pest problems from occurring in the first place, such as using pest-resistant varieties, maintaining good sanitation, and removing pest harborage.
- Control: If necessary, implement control measures, using a variety of methods, including biological, cultural, and, as a last resort, chemical controls.
- Case studies for varying scenarios
  - <https://extension.oregonstate.edu/catalog/pub/em-8203-pest-management-guide-tree-fruits-hood-river-dalles-white-salmon-rogue-valley>
- Model variations
  - other universities and agencies add steps for clarification
  - other state variations

**Outcome #2:** Identify major plant, fungi, and animal pest species of the local bio-region.

- Identification skills
  - Identification keys
  - Computer apps
  - Where to locate lists of pest and plant species
- Developing a photo catalog
- State Extension office service in pest management

**Outcome #3:** Recognize the life cycles and timeframes of pest reproduction.

- Stages of development
  - egg, larva, pupae, adult
- Optimal intervention stages
- Signs and symptoms of pests on plants
  - <https://extension.oregonstate.edu/gallery/common-insects-cause-plant-damage-central-oregon>

**Outcome #4:** Recognize and integrate the predator/prey relationship at the micro and macro level of pest control strategies.

- Means of biological control
- Optimize timing for application of controls
- Unintended consequences of pesticide use
  - water quality, overspray, unintentional kill of beneficial species
- Unintended consequences of biological controls
  - Introduction of new species, competition for food sources, predation on non-pest species

**Outcome #5:** Apply pesticide, fungicide, and herbicide control products using best practices.

- Pest control products
  - Chemical [https://www.researchgate.net/figure/Pesticides-commonly-used-on-agricultural-crops-in-the-Hood-River-basin-2009-10\\_tbl1\\_261358368](https://www.researchgate.net/figure/Pesticides-commonly-used-on-agricultural-crops-in-the-Hood-River-basin-2009-10_tbl1_261358368)
  - Biological habitat modification, Pheromone disruption and Exclusion

	<ul style="list-style-type: none"> <li>• Fungi control: copper, sulfur, myclobutanil</li> <li>• Herbicide control: <a href="https://extension.oregonstate.edu/catalog/pub/ec-631-managing-diseases-insects-home-orchards">https://extension.oregonstate.edu/catalog/pub/ec-631-managing-diseases-insects-home-orchards</a></li> <li>• Best practices and case studies: <a href="https://columbiainsight.org/pesticides-like-onions-they-haunt-you/">https://columbiainsight.org/pesticides-like-onions-they-haunt-you/</a></li> </ul> <p><b>Outcome #6:</b> Apply to take the Pesticide Handlers License exam.</p> <ul style="list-style-type: none"> <li>• Required knowledge and skills <ul style="list-style-type: none"> <li>○ Topics addressed on the test <ul style="list-style-type: none"> <li>■ label comprehension</li> <li>■ personal protective equipment (PPE)</li> <li>■ laws and regulations</li> <li>■ integrated pest management (IPM)</li> <li>■ protecting waterways</li> <li>■ reducing drift</li> <li>■ pesticide transport, storage, and disposal</li> </ul> </li> <li>○ Skills addressed on the test <ul style="list-style-type: none"> <li>■ Links provided under Suggested Texts &amp; Materials</li> </ul> </li> <li>○ Test prep and sample questions provided under Suggested Texts &amp; Materials</li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<p>Use of listed Texts/Materials is not required unless so noted.</p> <ul style="list-style-type: none"> <li>• US EPA Fact Sheet: <a href="https://19january2021snapshot.epa.gov/sites/static/files/2017-08/documents/ipm-factsheet.pdf">https://19january2021snapshot.epa.gov/sites/static/files/2017-08/documents/ipm-factsheet.pdf</a></li> <li>• Oregon Pesticide License: <a href="https://www.oregon.gov/oda/pesticides/licensing/pages/get-license.aspx">https://www.oregon.gov/oda/pesticides/licensing/pages/get-license.aspx</a></li> <li>• understanding the life cycle of common pests: <a href="https://mynatureguard.com/blog/understanding-the-life-cycle-of-common-pests/">https://mynatureguard.com/blog/understanding-the-life-cycle-of-common-pests/</a></li> <li>• Pesticide Handler's License on-line resources from OSU <a href="https://workspace.oregonstate.edu/course/pesticide-applicator-pre-certification-training-laws-safety">https://workspace.oregonstate.edu/course/pesticide-applicator-pre-certification-training-laws-safety</a></li> <li>• <a href="http://www.cgfg.org/grower-issues/best-management-practices">http://www.cgfg.org/grower-issues/best-management-practices</a></li> <li>• <a href="https://hoodriverswcd.org/wp-content/uploads/2024/08/Living-Among-Orchards.pdf">https://hoodriverswcd.org/wp-content/uploads/2024/08/Living-Among-Orchards.pdf</a></li> <li>• <a href="https://www.certifiedtraininginstitute.com/pesticide/oregon/faq/">https://www.certifiedtraininginstitute.com/pesticide/oregon/faq/</a></li> <li>• <a href="https://www.usda.gov/about-usda/news/blog/busting-bugs-usda-creates-online-tools-id-pests">https://www.usda.gov/about-usda/news/blog/busting-bugs-usda-creates-online-tools-id-pests</a></li> </ul>
Department Notes (optional)	

## SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)

New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.

Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?

☐ Yes

☒ No

Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Precision Agriculture	# credit: 34
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES		
Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	Commonly accepted at many universities.	
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS		
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No	
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No	
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A	
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No	

Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>	

SECTION #4 DEPARTMENT REVIEW		
<p><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></p>		
Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	4.8.25
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 CC 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            4.17.25  
 CC decision      \_\_\_\_\_  
 CC vote            \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 202	Credits:	3
Course Title: (75 characters max, including spaces)	Advanced Farm Management Systems		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 20 Lec/lab: 0 Lab: 30
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Required course in new Ag Tech AAS		

**GRADE OPTIONS:** Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**REQUISITES:** Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:
course prefix & number:	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite <input type="checkbox"/> corequisite <input type="checkbox"/> pre/co

**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](#).

Examines the increasing use of technology in agriculture management systems. Explores the use of precision irrigation, automation, sensors and drones. Addresses contemporary issues in North West agriculture, and covers basic business practices such as management, marketing and employees. Audit available.

<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.)	
Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Apply a business mindset to agricultural operations.
	2. Identify key issues in local agricultural production systems.
	3. Identify and evaluate a wide array of new technology available for use in modern agriculture.
	4. Apply advanced farm management systems to the development of an agricultural business plan.
Outcomes assessment strategies:	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.
COURSE CONTENT, ACTIVITIES AND DESIGN	
<p>Activity &amp; Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each instructor.</p> <p>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.</p>	
Department required course activities (optional)	Meet with Extension agents, Field Representatives, Ag sales professionals and local farmers to learn about the wide-ranging products and practices.
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Apply a business mindset to agricultural operations.</p> <ul style="list-style-type: none"> <li>● Employee management             <ul style="list-style-type: none"> <li>○ safety, hiring, retention, training</li> </ul> </li> <li>● Business operations             <ul style="list-style-type: none"> <li>○ Marketing plans, budgets, timeframes, consumer awareness</li> </ul> </li> <li>● Long term management concerns             <ul style="list-style-type: none"> <li>○ Machinery and equipment costs, land acquisition, infrastructure redevelopment costs and timelines, changing tech</li> </ul> </li> </ul> <p><b>Outcome #2:</b> Identify key issues in local agricultural production systems.</p>

- Current issues and concerns
  - Fruit Crop: local and regional (list?)
    - competition
    - water management
    - increasing disease vector
    - seasonal temperature range changes
    - decrease in access to bees as pollinators
    - consumers changing preference
  - Dryland Wheat: local and regional (list?)
    - competition
    - aging farmer population
    - decreasing number of wheat consumers
- Potential arising future issues and concerns
  - Changing environmental conditions: shifting seasons, significant weather events, water availability
  - Changing governmental restrictions/regulations: import/export taxes, subsidies

**Outcome #3:** Identify and evaluate a wide array of new technology available for use in modern agriculture.

- Irrigation technology
  - Precision
  - Sensors
  - water stress detection
- Drones and autonomous vehicles
  - data collectors
  - delivery tools
  - samplers
  - problem finders
- Weather data
  - online and direct source data
- Photographic sorting machines

**Outcome #4:** Apply advanced farm management systems to the development of an agricultural business plan.

Develop business plans that can be applied to modern agricultural enterprises.

- Building off of existing business plans
  - Identify and evaluate successful practices
  - Determine range of scale and future potential
- Develop new business plans
  - address emerging issues/concerns
  - evaluate the inclusion of traditional people's strategies and management

	<ul style="list-style-type: none"> <li>○ evaluate the inclusion of new technologies</li> <li>○ explore new agricultural models: niche marketing, agrovoltatics, etc.</li> <li>○ Sustainability and risk management</li> <li>○ Personnel and safety</li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<p>Use of listed Texts/Materials is not required unless so noted.</p> <ul style="list-style-type: none"> <li>• <a href="https://online.hbs.edu/blog/post/what-is-the-triple-bottom-line">https://online.hbs.edu/blog/post/what-is-the-triple-bottom-line</a> Link to Harvard Business school resources about Triple Bottom Line</li> <li>• <a href="#">Quit your Job and Farm Full Time: Joel Salatin's Recipe for Success</a> Joel Salatin advice</li> <li>• <a href="#">He Farms 35 Hours a Week By Himself and Makes 6 Figures</a></li> <li>• <a href="#">Unlock the Secret to Maximum Profits: The Top 5 Most Lucrative Crops for Market Gardeners Revealed!</a> small business exploration</li> </ul>
Department Notes (optional)	

SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)		
New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.		
Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Precision Agriculture	# credit: 34
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES	
Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	No



IMPACT ON OTHER PROGRAMS AND DEPARTMENTS		
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No	
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No	
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A	
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026	
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>		

SECTION #4 DEPARTMENT REVIEW		
<p><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></p>		
Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	4.8.25
Department Chair (enter name of department chair): Jim Pytel		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		

# Columbia Gorge Community College

CC date      4.17.25  
 CC decision      \_\_\_\_\_  
 CC vote      \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 203	Credits:	3
Course Title: (75 characters max, including spaces)	Agricultural Operations and Management II		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 20 Lec/lab: 0 Lab: 30
Is this course equivalent to another? They must have the same description, outcomes and credit.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:	
Reason for the new course.	Required course in new Ag Tech AAS		

**GRADE OPTIONS:** Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**REQUISITES:** Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number: AG 103	<input checked="" type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co

**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](#).

Continues study begun in AG 103 around organizational structures and operations. Includes: business operations, marketing and finance; law and liability around products and employee safety; pest management and identification; crop rotation, species selection and long-term soil management strategies. Prerequisite: AG 103. Audit available.

<b>LEARNING OUTCOMES:</b> 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 <a href="#">Writing Learning Outcomes</a> on the curriculum website.)	
Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Apply an understanding of complexities of finance and marketing within agribusiness operations.
	2. Identify problems and create management plans for maturing grain and fruit pest management.
	3. Identify and manage issues around product and employee liability and safety.
	4. Develop and implement long-term soil management strategies.
Outcomes assessment strategies:	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.
<b>COURSE CONTENT, ACTIVITIES AND DESIGN</b>	
<p>Activity &amp; Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each instructor.</p> <p>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.</p>	
Department required course activities (optional)	<ul style="list-style-type: none"> <li>• Field experiences, hands-on activities (will need arrangements with local farmers willing to host training modules)</li> <li>• Includes capstone project development</li> </ul>
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Apply an understanding of complexities of finance and marketing within agribusiness operations.</p> <ul style="list-style-type: none"> <li>• Local farm credit agencies             <ul style="list-style-type: none"> <li>○ requirements for funding</li> <li>○ establishing revolving farm credit strategies</li> </ul> </li> <li>• Marketing plans             <ul style="list-style-type: none"> <li>○ Variety available</li> <li>○ Successes/challenges</li> </ul> </li> <li>• direct to consumer, co-op, specialty marketing</li> </ul>

	<ul style="list-style-type: none"> <li>• Marketing professionals <ul style="list-style-type: none"> <li>◦ farm credit bureau, packing houses, co-ops</li> </ul> </li> </ul> <p><b>Outcome #2:</b> Identify problems and create management plans for maturing grain and fruit pest management.</p> <ul style="list-style-type: none"> <li>• Recognize symptoms/ problems of common plant and animal pests</li> <li>• research products and their uses <ul style="list-style-type: none"> <li>◦ evaluation of products</li> <li>◦ application uses</li> </ul> </li> <li>• Resources: extension agents, chemical sales reps</li> </ul> <p><b>Outcome #3:</b> Identify and manage liability and safety issues for both agricultural products and employees.</p> <ul style="list-style-type: none"> <li>• Employee rights and responsibilities</li> <li>• Migrant labor issues <ul style="list-style-type: none"> <li>◦ availability, visas, housing, medical care, families</li> </ul> </li> <li>• Safety protocols and laws <ul style="list-style-type: none"> <li>◦ labels, poison control, tri-county hazardous waste</li> </ul> </li> <li>• Local/regional supervising agencies <ul style="list-style-type: none"> <li>◦ Oregon OSHA, Oregon AgLink, SAIF, ODA</li> </ul> </li> </ul> <p><b>Outcome #4:</b> Develop and implement long-term soil management strategies.</p> <ul style="list-style-type: none"> <li>• Species selection <ul style="list-style-type: none"> <li>◦ Scheduling/time frames for optimal planting</li> <li>◦ Nitrogen fixation and companion planting</li> <li>◦ Crop rotation</li> <li>◦ Cover crops</li> </ul> </li> <li>• Fallow schedules</li> <li>• Water management and hydrology techniques <ul style="list-style-type: none"> <li>◦ hydro sensors</li> <li>◦ contour plowing and planting</li> <li>◦ seasonal run-off</li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<p>Use of listed Texts/Materials is not required unless so noted.</p> <ul style="list-style-type: none"> <li>• <a href="#">How to Start a Small Farm   A Step-by-Step Guide</a> business background</li> <li>• <a href="#">Everything You Need to Know: Agribusiness</a> business background</li> <li>• <a href="#">How He Turned Desert Sand Into Fertile Farm Land In 3 Months!</a>, case study of using marginal spaces to lower cost of entry in market</li> </ul>
Department Notes (optional)	

**SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)**

New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.

Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Agricultural Managment	# credit: 38
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

**SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES**

Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	No
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS	
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A

Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>	

SECTION #4 DEPARTMENT REVIEW		
<p><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></p>		
Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	4.8.25
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 CC 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 4.17.25  
 CC decision \_\_\_\_\_  
 CC vote \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 204	Credits:	3
Course Title: (75 characters max, including spaces)	Alternative Farming Models		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 20 Lec/lab: 0 Lab: 30
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Required course in new Ag Tech AAS		

GRADE OPTIONS: Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REQUISITES: Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co

**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](#).

Examines the social, economic and ecological consequences of modern, industrial agriculture. Investigates viable management techniques to decrease the impacts of climate effects to and from agriculture. Surveys alternative methods to address sustainability, economic and environmental outcomes while increasing yield. Audit available.



**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.)

Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Identify sustainability concepts and how they relate to culture, agriculture, and the environment from a modern and historical perspective.
	2. Identify the appropriate use of traditional, sustainable and regenerative agricultural methodologies.
	3. Identify technological advances that have the potential to limit environmental impacts on agribusiness.
	4. Evaluate a wide array of alternative agricultural farming models currently in operation, and analyze their merits and shortfalls.
	5. Develop sustainable action plans that address energy and climate related issues in agriculture.
Outcomes assessment strategies:	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.

## COURSE CONTENT, ACTIVITIES AND DESIGN

**Activity & Design:** The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each 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.

Department required course activities (optional)	
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Identify sustainability concepts and how they relate to culture, agriculture, and the environment from a modern and historical perspective.</p> <ul style="list-style-type: none"> <li>● Agricultural, Industrial and Economic development timeline <ul style="list-style-type: none"> <li>○ 1<sup>st</sup> Agricultural Revolutions and their impacts <ul style="list-style-type: none"> <li>■ Domestication of plants and animals</li> <li>■ Growth of city states</li> </ul> </li> </ul> </li> </ul>



- Transition from hunter gatherer to sedentary
  - 2nd Agricultural Revolutions and their impacts
    - Mechanization
    - Growth of transportation
    - Refrigeration and packaging
- Sustainability as a functional component of ecology, economy and industry
  - triple bottom line
  - 1% for the planet
  - blue sign design
  - biomimicry
- Green Revolution technologies and their application to main agricultural industries of the Columbia Basin
  - Use of pesticides
  - crossbred seeds and synthetic fertilizers
  - increased yields from US
  - Spread worldwide

**Outcome #2:** Identify the appropriate use of traditional, sustainable and regenerative agricultural methodologies.

- traditional tribal land management techniques of the Columbia Basin
  - benefits of fish culture
  - hunter gatherer
  - seasonally nomadic
- Concepts of zero waste, net zero energy, steady state economics in agricultural systems
- Difference between sustainable and regenerative
  - Remaining static vs. capacity for growth

**Outcome #3:** Identify technological advances that have the potential to limit environmental impacts on agribusiness.

- Solar systems for fencing, pumping and lighting.
  - panels, charge controllers, batteries, inverters and 12-volt direct use
- Electric vs. fossil fuel motors in agriculture
  - maintenance costs, noise, lifespan, torque, tax credits
- Pros/cons of no-till systems
- Pros/cons of precision irrigation and water sensors
  - cost of the system vs water savings over time
  - environmental benefits

**Outcome #4:** Evaluate a wide array of alternative agricultural farming models currently in operation, and analyze their merits and shortfalls.

- Regenerative ag
- agroecology

	<ul style="list-style-type: none"> <li>• Agrovoltatics,</li> <li>• Community Supported Agriculture (CSA)</li> <li>• permaculture</li> <li>• certified organic</li> <li>• Holistic Range Management</li> <li>• Aquaculture,</li> <li>• Green Cities of the Future</li> </ul> <p><b>Outcome #5:</b> Develop sustainable action plans that address energy and climate related issues in agriculture.</p> <ul style="list-style-type: none"> <li>• Designing an Action Plan <ul style="list-style-type: none"> <li>○ Problem statement</li> <li>○ Research current models <ul style="list-style-type: none"> <li>■ Gather data (soil, climate, economic)</li> <li>■ Interview local pioneers of alternative and historic methodologies</li> </ul> </li> <li>○ Solution options <ul style="list-style-type: none"> <li>■ Prepare 2 or 3 options</li> <li>■ Include pro/cons for each</li> </ul> </li> <li>○ Recommendation / conclusion <ul style="list-style-type: none"> <li>■ Describe process for decision making</li> <li>■ Recommendation choice and why <ul style="list-style-type: none"> <li>• Economic sustainability</li> <li>• Environmental sustainability</li> <li>• Positive integration into local culture</li> </ul> </li> </ul> </li> <li>○ Implementation plan <ul style="list-style-type: none"> <li>■ Timeline</li> <li>■ Actions</li> <li>■ Inclusion of local contracts/contractors</li> <li>■ Costs / budget</li> </ul> </li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<p>Use of listed Texts/Materials is not required unless so noted.</p> <ul style="list-style-type: none"> <li>• <a href="https://kissthegroundmovie.com/">https://kissthegroundmovie.com/</a>, Link to regenerative farming movie and discussion</li> </ul>
Department Notes (optional)	

## SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)

New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.

Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?

☐ Yes

		<input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Agricultural Management	# credit: 38
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES		
Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	No	
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS		
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No	
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No	
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A	
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No	

Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>	

SECTION #4 DEPARTMENT REVIEW		
<p><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></p>		
Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	4.8.25
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 CC 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      4.17.25  
 CC decision      \_\_\_\_\_  
 CC vote      \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades: Ag Tech	Submitter name: Phone: Email:	Mike Davis 503-680-6384 mdavis@cgcc.edu
Prefix and Course Number:	AG 205	Credits:	4
Course Title: (75 characters max, including spaces)	Introduction to Geographic Information Systems and Remote Sensing		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 20 Lec/lab: 40 Lab:
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Part of new Ag-Tech AAS.		
GRADE OPTIONS: Check as many or as few options as you'd like. <b>Choose the default grade option.</b> The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.			
	Check all that apply	Default (Choose one)	
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Audit in consultation with faculty	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
REQUISITES: Identify prerequisite, corequisite and concurrent course(s)			
<input type="checkbox"/> placement into:		<input type="checkbox"/> placement into:	
course prefix & number: AT 105	<input checked="" type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
<b>COURSE DESCRIPTION:</b> 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 <a href="#">Writing Course Descriptions</a> .			
Integrates the principles and applications of remote sensing and geographic information science (GIS). Covers the electromagnetic spectrum, sensor platforms, spatial data models, image processing, and environmental applications. Hands-on labs and case studies develop practical skills in interpreting remote sensing data and integrating GIS for spatial analysis and decision-making. Prerequisites: AT 105. Audit available.			

**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.)

Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Gather agricultural remote sensing data and apply it to Global Information Systems (GIS).
	2. Apply GIS tools and spatial mapping techniques to analyze environmental and agricultural variability.
	3. Utilize remote sensing sensors to monitor environmental changes, crop health, and land use.
	4. Process and evaluate remote sensing imagery and GIS data to enable the development of actionable plans.
	5. Develop a comprehensive GIS and remote sensing agricultural plan.
Outcomes assessment strategies:	<p>The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios.</p> <p>Required: A capstone project in the form of a comprehensive farm management plan, assessed uniformly across all sections.</p>

#### COURSE CONTENT, ACTIVITIES AND DESIGN

Activity & Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each 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.

Department required course activities (optional)	Required activity: Capstone project.
Course Content – organized by outcomes (list each outcome followed by an	<p><b>Outcome #1:</b> Gather agricultural remote sensing data and apply it to Global Information Systems (GIS).</p> <ul style="list-style-type: none"> <li>• Principles of GIS and remote sensing <ul style="list-style-type: none"> <li>○ Historical development and practical applications</li> </ul> </li> </ul>

outline of the  
related content)

- Ground based robotic sensing
- Integration of GIS within Ground Based vehicles
  - Overview of the electromagnetic spectrum
- Key technologies and methodologies in spatial analysis
  - Spatial Database for agriculture monitoring
  - Artificial Intelligence & Machine Learning in Spatial Analysis
  - Spatial Interpolation for modeling and monitoring
  - 3D spatial analysis for geological survey.
- Labs:
  - Introduction to GIS software
  - Basic remote sensing tools

**Outcome #2:** Apply GIS tools and spatial mapping techniques to analyze environmental and agricultural variability.

- Spatial data models and visualization techniques
  - Introduction to data analysis and spatial data
  - Collection, processing and evaluation of data for meaningful insights
- GIS software applications in environmental monitoring
  - ArcGIS, QGIS, Google Earth Engine, ERDAS Image, TerrSet, SAGA GISs
  - Monitoring Temperature, atmospheric and changes in ecosystems.
- Labs:
  - Spatial data analysis and interpretation
  - Visualization of spatial datasets

**Outcome #3:** Utilize remote sensing sensors to monitor environmental changes, crop health, and land use.

- Types of remote sensors and platforms
  - Multispectral, hyperspectral, and thermal imaging
- Applications in agriculture and environmental management
  - GIS Soil Mapping, Parcel mapping and zoning
  - Optimize crop rotation strategies
- Labs:
  - Data acquisition using remote sensing tools
  - Practical analysis exercises

**Outcome #4:** Process and evaluate remote sensing imagery and GIS data to enable the development of actionable plans.

- Variable Rate Application
- Early Detection of crop diseases and pests.
- Yield Forecasting

	<ul style="list-style-type: none"> <li>• Soil Moisture Mapping</li> <li>• Drought Monitoring</li> </ul> <p><b>Outcome #5:</b> Develop a comprehensive GIS and remote sensing agricultural plan.</p> <ul style="list-style-type: none"> <li>• Clearly articulating the issue</li> <li>• Measurable goals and objectives for GIS and remote sensing</li> <li>• Select appropriate GIS datasets</li> <li>• Data cleaning techniques (georeferencing, projection correction, cloud masking and noise reductions.</li> <li>• GIS spatial analysis techniques including buffer analysis, overlay analysis and interpolation methods.</li> <li>• Interpret maps and spatial outputs using classification validation and ground truthing techniques (field data collection to verify results)</li> <li>• Translate GIS findings into recommendations by using proposed policy changes, mitigation strategies and monitoring plans. <ul style="list-style-type: none"> <li>○ Continuous monitoring and data updates.</li> </ul> </li> <li>• Automation techniques such as Google Earth, Periodic aerial surveys and AI models.</li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	<ul style="list-style-type: none"> <li>• Campbell, J. B., &amp; Wynne, R. H. <i>Introduction to Remote Sensing, Sixth Edition</i>. Guilford Press. (Chapters: 1, 2, 4, 5, 6, and 17)</li> <li>• Longley, P. A., et al. <i>Geographic Information Science and Systems, Fourth Edition</i>. Wiley. (Chapters: 1, 2, 3, 4, and 6)</li> </ul> <p>Equipment: Access to GIS software and remote sensing tools.</p>
Department Notes (optional)	

SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)		
New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.		
Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Precision Agriculture	# credit: 34
Name of new degree(s):	Integrated Agricultural Science & Technology	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	



Is this course used to supply related instruction for a certificate?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.	

SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES	
Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	OSU: GEOG 380, WSU: ESCI-442 UofW: GEOG-327
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS	
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	NO
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input type="checkbox"/> Yes – date: <input type="checkbox"/> No
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term (if BEFORE next academic year): summer, 2026
Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.	

SECTION #4 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</i>

*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.”*

Submitter	Email	Date
Mike Davis	<a href="mailto:mdavis@cgcc.edu">mdavis@cgcc.edu</a>	4.1.25
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](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 CC 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      4.17.25  
 CC decision      \_\_\_\_\_  
 CC vote      \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Michael Becker 541-490-5911 <a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>
Prefix and Course Number:	AG 206	Credits:	3
Course Title: (75 characters max, including spaces)	Agricultural Management Capstone		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? <div style="text-align: center;">0</div>	Contact hours: Lecture: 0 Lec/lab: 60 Lab: 0
Is this course equivalent to another? They must have the same description, outcomes and credit.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:	
Reason for the new course.	Required course in new Ag Tech AAS		
GRADE OPTIONS: Check as many or as few options as you'd like. <b>Choose the default grade option.</b> The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.			
	Check all that apply	Default (Choose one)	
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Audit in consultation with faculty	<input type="checkbox"/>	<input type="checkbox"/>	
REQUISITES: Identify prerequisite, corequisite and concurrent course(s)			
<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number: AG 101, AG 102, AG 103, AG 104	<input checked="" type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
<b>COURSE DESCRIPTION:</b> 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 <a href="#">Writing Course Descriptions</a> .			
Provides a culminating, hands-on internship in which students take a deep dive into an area of agricultural production and/or management of their choosing. Includes significant time in cooperative work-experience placements with local orchardists and farmers. Requires regular check-ins and updates, culminating in an end-of-the-term presentation to all members of the class as well as participating agricultural partners. Prerequisites: AG 101, AG 102, AG 103, AG 104.			

**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.)

Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Identify an area of specialization.
	2. Work independently and as part of a team in an agricultural setting.
	3. Communicate agricultural concepts and ideas effectively, both verbally and in writing.
	4. Listen for understanding and provide constructive feedback.
	5. Synthesize content from courses in the Agricultural Management certificate.
Outcomes assessment strategies:	6. Demonstrate leadership skills.
	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios. Required: in-person capstone presentation

## COURSE CONTENT, ACTIVITIES AND DESIGN

Activity & Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each 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.

Department required course activities (optional)	<p>Capstone Project includes:</p> <ul style="list-style-type: none"> <li>• Initiating and managing an agricultural project from conception to completion</li> <li>• Practicum fieldwork in chosen area of interest (arrangement with industry professional mentor required)</li> <li>• Presentation on practicum experience</li> </ul>
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Identify an area of specialization.</p> <ul style="list-style-type: none"> <li>• Introduction to Specialization in Agriculture <ul style="list-style-type: none"> <li>○ Overview of diverse sectors within agriculture: orchard management, viticulture, grain production, berry farming, nursery operations, greenhouse/floriculture, agricultural sales, equipment repair, and ag</li> </ul> </li> </ul>

technology.

- Industry trends and emerging fields in precision agriculture.
- Career Exploration & Self-Assessment
  - Guided self-assessment of student interests, skills, and long-term goals.
  - Research and analysis of potential career paths aligned with personal strengths and industry demand.
- Research and Decision-Making
  - Techniques for researching potential mentors, host farms, and agribusinesses.
  - Evaluation of specialization options based on location, relevance, skill match, and learning outcomes.
  - Writing a justification statement for chosen specialization.
- Capstone Proposal Development
  - Developing a written plan including:
  - Description of area of specialization.
  - Desired learning outcomes and specific goals.
  - Skills to develop and methods for evaluation.
  - Timeline and estimated hours in the field.
  - Submission of proposal for instructor approval.

**Outcome #2:** Work independently and as part of a team in an agricultural setting.

- Working independently
  - Self-discipline and sense of responsibility
    - Fulfilling commitments
    - Time management
    - Integrity of work
  - Recognizing limitations and when to ask for help
    - Physical limitations
    - Knowledge limitations
  - Recognizing when you have the ability necessary to do the job
    - Self-confidence
    - Trust in what you have learned
- Working as part of a team
  - Listening
  - Fulfilling your part of the task
  - Cooperation and collaboration

**Outcome #3:** Communicate agricultural concepts and ideas effectively, both verbally and in writing.

- Communicating at the orchard or farm

- Professionalism
- Different communication needs
  - Cultural differences
  - Language differences
- Making a presentation
  - Presentation method
    - PowerPoint
    - Video
    - Written report / business plan
  - Clarity of expression
    - Vocabulary
    - Simple is often the best – avoid complex explanations
  - Staying on topic – be concise
  - Use of visuals – a picture can be worth a thousand words
  - Express enthusiasm

**Outcome #4:** Listen for understanding and provide constructive feedback.

- Active Listening Techniques:
  - Engaging with speakers through attentive listening.
  - Clarifying and summarizing points to ensure comprehension.
- Providing Constructive Feedback:
  - Offering feedback that is specific, actionable, and supportive.
  - Balancing positive remarks with areas for improvement.
- Peer Review Sessions:
  - Participating in structured peer evaluations of project work.
  - Implementing feedback to refine and enhance project outcomes.

**Outcome #5:** Synthesize content from courses in the Agricultural Management certificate.

- Definition of synthesis
- Review program outcomes
- Relating course content
  - Review course outcomes
  - Outline how course content intersects
  - Connect to program outcomes
- Model examples of synthesis related solutions

**Outcome #6:** Demonstrate leadership skills.

- Project Initiation:
  - Identifying a relevant agricultural issue or opportunity.

	<ul style="list-style-type: none"> <li>○ Developing a project proposal outlining objectives, scope, and resources.</li> <li>• Project Planning and Management: <ul style="list-style-type: none"> <li>○ Creating detailed timelines and work plans.</li> <li>○ Assigning roles and responsibilities within a team.</li> </ul> </li> <li>• Implementation and Execution: <ul style="list-style-type: none"> <li>○ Coordinating tasks and ensuring adherence to the project plan.</li> <li>○ Monitoring progress and adjusting as necessary.</li> </ul> </li> <li>• Evaluation and Reflection: <ul style="list-style-type: none"> <li>○ Assessing project outcomes against initial objectives.</li> <li>○ Reflecting on leadership experiences and identifying lessons learned.</li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	Use of listed Texts/Materials is not required unless so noted.
Department Notes (optional)	

SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)		
New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.		
Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Agricultural Management	# credit: 38
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES		
Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.	No	
IMPACT ON OTHER PROGRAMS AND DEPARTMENTS		
Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.	No	
Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.	No	
Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.	N/A	
Has the Library director been notified regarding the addition of this course and the need for any potential resources?	<input checked="" type="checkbox"/> Yes – date: 1.25.25 <input type="checkbox"/> No	
Implementation term:	<input type="checkbox"/> Start of next academic year (summer term) <input checked="" type="checkbox"/> Specific term: summer, 2026	
<p>Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.</p>		

SECTION #4 DEPARTMENT REVIEW		
<p><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></p>		
Submitter	Email	Date
Michael Becker	<a href="mailto:Ottersystems@gmail.com">Ottersystems@gmail.com</a>	4.8.25
Department Chair (enter name of department chair): Jim Pytel		
Department Dean/Director (enter name of department dean/director): Jarett Gilbert		



# Columbia Gorge Community College

CC date 4.17.25  
 CC decision \_\_\_\_\_  
 CC vote \_\_\_\_\_

## New Course Career Technical Education (CTE)

(Double click on check boxes to activate dialog box)

### SECTION #1 GENERAL INFORMATION

Department:	Technology & Trades Ag-Tech	Submitter name: Phone: Email:	Mike Davis 503-680-6384 <a href="mailto:mdavis@cgcc.edu">mdavis@cgcc.edu</a>
Prefix and Course Number:	AG 207	Credits:	3
Course Title: (75 characters max, including spaces)	Precision Agriculture Capstone		
May this course be repeated for credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	For how many times? 0	Contact hours: Lecture: 0 Lec/lab: 60 Lab: 0
Is this course equivalent to another? They must have the same description, outcomes and credit.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Prefix, number and title:
Reason for the new course.	Required course in new Ag Tech AAS		

**GRADE OPTIONS:** Check as many or as few options as you'd like. **Choose the default grade option.** The default grade refers to the option that is listed at the top of the dropdown menu for the CRN. Students who do not make a choice or do not make a change in the dropdown menu will automatically be assigned to the default grade option.

	Check all that apply	Default (Choose one)
A-F (letter grade)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pass/No pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Audit in consultation with faculty	<input type="checkbox"/>	<input type="checkbox"/>

**REQUISITES:** Identify prerequisite, corequisite and concurrent course(s)

<input type="checkbox"/> placement into:	<input type="checkbox"/> placement into:		
course prefix & number: AG 105, AG 106, AG 201, AG 205	<input checked="" type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co
course prefix & number:	<input type="checkbox"/> prerequisite	<input type="checkbox"/> corequisite	<input type="checkbox"/> pre/co

**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](#).

Provides a culminating, hands-on internship in which students take a deep dive into an area of precision agricultural of their choosing. Includes significant time in cooperative work-experience placements with local orchardists and farmers. Requires regular check-ins and updates, culminating in an end-of-the-term presentation to all members of the class as well as participating agricultural partners. Prerequisites: AG 105, AG 106, AG 201, AG 205.

**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.)

Outcomes: (Use observable and measurable verbs)	Upon successful completion of this course, students will be able to:
	1. Identify an area of specialization.
	2. Work independently and as part of a team in an agricultural setting.
	3. Communicate agricultural concepts and ideas effectively, both verbally and in writing.
	4. Listen for understanding and provide constructive feedback.
	5. Synthesize content from courses in the Precision Agriculture certificate.
Outcomes assessment strategies:	6. Demonstrate leadership skills.
	The determination of assessment strategies is generally left to the discretion of the instructor. Here are some strategies that you might consider when designing your course: writings (journals, self-reflections, pre-writing exercises, essays), quizzes, tests, midterm and final exams, group projects, presentations (in person, videos, etc.), self-assessments, experimentations, lab reports, peer critiques, responses (to texts, podcasts, videos, films, etc.), student generated questions, Escape Room, interviews, and/or portfolios. Required: in-person capstone presentation

## COURSE CONTENT, ACTIVITIES AND DESIGN

Activity & Design: The determination of teaching strategies used in the delivery of outcomes is generally left to the discretion of the instructor. On occasion, a department may decide that the inclusion of a particular strategy will be required (specify in “required activities” box below). For example, a department may determine that a course will be required to incorporate a service learning project into its curriculum delivery. However, for the most part, delivery mechanisms fall under academic freedom and so the individuality and creativity of each 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.

Department required course activities (optional)	<p>Capstone Project includes:</p> <ul style="list-style-type: none"> <li>• Initiating and managing an agricultural project from conception to completion</li> <li>• Practicum fieldwork in chosen area of interest (arrangement with industry professional mentor required)</li> <li>• Presentation on practicum experience</li> </ul>
Course Content – organized by outcomes (list each outcome followed by an outline of the related content)	<p><b>Outcome #1:</b> Identify an area of specialization.</p> <ul style="list-style-type: none"> <li>• Introduction to Specialization in Agriculture <ul style="list-style-type: none"> <li>○ Overview of diverse sectors within agriculture: orchard management, viticulture, grain production, berry farming, nursery operations, greenhouse/floriculture, agricultural sales, equipment repair, and ag</li> </ul> </li> </ul>

technology.

- Industry trends and emerging fields in precision agriculture.
- Career Exploration & Self-Assessment
  - Guided self-assessment of student interests, skills, and long-term goals.
  - Research and analysis of potential career paths aligned with personal strengths and industry demand.
- Research and Decision-Making
  - Techniques for researching potential mentors, host farms, and agribusinesses.
  - Evaluation of specialization options based on location, relevance, skill match, and learning outcomes.
  - Writing a justification statement for chosen specialization.
- Capstone Proposal Development
  - Developing a written plan including:
  - Description of area of specialization.
  - Desired learning outcomes and specific goals.
  - Skills to develop and methods for evaluation.
  - Timeline and estimated hours in the field.
  - Submission of proposal for instructor approval.

**Outcome #2:** Work independently and as part of a team in an agricultural setting.

- Working independently
  - Self-discipline and sense of responsibility
    - Fulfilling commitments
    - Time management
    - Integrity of work
  - Recognizing limitations and when to ask for help
    - Physical limitations
    - Knowledge limitations
  - Recognizing when you have the ability necessary to do the job
    - Self-confidence
    - Trust in what you have learned
- Working as part of a team
  - Listening
  - Fulfilling your part of the task
  - Cooperation and collaboration

**Outcome #3:** Communicate agricultural concepts and ideas effectively, both verbally and in writing.

- Communicating at the orchard or farm

- Professionalism
- Different communication needs
  - Cultural differences
  - Language differences
- Making a presentation
  - Presentation method
    - PowerPoint
    - Video
    - Written report / business plan
  - Clarity of expression
    - Vocabulary
    - Simple is often the best – avoid complex explanations
  - Staying on topic – be concise
  - Use of visuals – a picture can be worth a thousand words
  - Express enthusiasm

**Outcome #4:** Listen for understanding and provide constructive feedback.

- Active Listening Techniques:
  - Engaging with speakers through attentive listening.
  - Clarifying and summarizing points to ensure comprehension.
- Providing Constructive Feedback:
  - Offering feedback that is specific, actionable, and supportive.
  - Balancing positive remarks with areas for improvement.
- Peer Review Sessions:
  - Participating in structured peer evaluations of project work.
  - Implementing feedback to refine and enhance project outcomes.

**Outcome #5:** Synthesize content from courses in the Precision Agriculture certificate.

- Definition of synthesis
- Review program outcomes
- Relating course content
  - Review course outcomes
  - Outline how course content intersects
  - Connect to program outcomes
- Model examples of synthesis related solutions

**Outcome #6:** Demonstrate leadership skills.

- Project Initiation:
  - Identifying a relevant agricultural issue or opportunity.

	<ul style="list-style-type: none"> <li>○ Developing a project proposal outlining objectives, scope, and resources.</li> <li>• Project Planning and Management: <ul style="list-style-type: none"> <li>○ Creating detailed timelines and work plans.</li> <li>○ Assigning roles and responsibilities within a team.</li> </ul> </li> <li>• Implementation and Execution: <ul style="list-style-type: none"> <li>○ Coordinating tasks and ensuring adherence to the project plan.</li> <li>○ Monitoring progress and adjusting as necessary.</li> </ul> </li> <li>• Evaluation and Reflection: <ul style="list-style-type: none"> <li>○ Assessing project outcomes against initial objectives.</li> <li>○ Reflecting on leadership experiences and identifying lessons learned.</li> </ul> </li> </ul>
Suggested Texts & Materials (specify if any texts or materials are required)	Use of listed Texts/Materials is not required unless so noted.
Department Notes (optional)	

SECTION #2 FUNCTION OF COURSE WITHIN EXISTING AND/OR NEW PROGRAM(S)		
New CTE courses must be attached to a degree and/or certificate. They cannot be offered until the degree or certificate is approved. Please answer below, as appropriate.		
Will this new course be part of existing, currently approved CGCC certificate(s) and/or degree(s)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of certificate(s):		# credit:
Name of degree(s):		# credit:
Will this new course be part of a new, proposed CGCC certificate or degree?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Name of new certificate(s):	Precision Agriculture	# credit: 34
Name of new degree(s):	Integrated Agricultural Science & Technology AAS	# credit: 91
Briefly explain how this course fits into the new or existing degrees /certificates noted above (i.e. requirement or elective):	requirement	
Is this course used to supply related instruction for a certificate?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If <b>yes</b> , the related instruction <a href="#">form</a> , available on the curriculum office website, must be completed and submitted together with this form.		

**SECTION #3 ADDITIONAL INFORMATION FOR NEW CTE COURSES**

Transferability: Will this course transfer to another academic institution? Identify and describe the nature of the transfer.

No

**IMPACT ON OTHER PROGRAMS AND DEPARTMENTS**

Are there degrees and/or certificates that are affected by the instruction of this course? If so, provide details.

No

Are there similar courses existing in other programs or disciplines at CGCC? If yes, provide details and/or describe the nature of acknowledgments and/or agreements that have been reached.

No

Is there any potential impact on another department? Identify and consult with Department chairs whose courses may be impacted by this course, such as: content overlap, course duplication, prerequisite need, enrollment increase or decrease, etc.

☐ Yes

☒ No

Explain and/or describe the nature of acknowledgments and/or agreements that have been reached.

N/A

Has the Library director been notified regarding the addition of this course and the need for any potential resources?

☒ Yes – date: 1.25.25

☐ No

Implementation term:

☐ Start of next academic year (summer term)

☒ Specific term: summer, 2026

Course approval is dependent on approval of the related certificate/degree submission which documents the placement of the new course. Degree/certificate status will impact the speed of the process. The Curriculum Office will notify the submitter, department chair, and department director when the course has completed the approval process and is available to be scheduled. Curriculum changes generally go into effect at the beginning of the next academic year (summer term). Mid-year revisions/additions are discouraged but accommodated when possible if there is a specific, identifiable need.

**SECTION #4 DEPARTMENT REVIEW**

*"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."*

Submitter

Email

Date

Michael Becker

[Ottersystems@gmail.com](mailto:Ottersystems@gmail.com)

4.8.25

Department Chair (enter name of department chair): Jim Pytel

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

# Columbia Gorge Community College

CC date 4.17.25  
CC decision \_\_\_\_\_  
CC vote \_\_\_\_\_

## NEW DEGREE REQUEST Check one: ☒ AAS ☐ AS ☐ ASOT ☐ MTM

Submitted by: Susan Lewis & Jarett Gilbert

Email: [slewis@cgcc.edu](mailto:slewis@cgcc.edu)  
[jgilbert@cgcc.edu](mailto:jgilbert@cgcc.edu)

Phone: 541-506-6047  
541-506-6030

Department: Tech & Trades: Ag

(Double click on check boxes to activate dialog box)

### SECTION #1 OVERVIEW

Proposed Title:	Integrated Agricultural Science & Technology		Proposed Credits:	91
Reason for new degree:	Several years ago, our community partners shared with us their aspiration for a program that would prepare the modern agricultural worker for our local context. In the intervening years, with the support and input of our Agriculture-Technology-Education Alliance, and generous grant funding support, we developed curriculum for an applied associate's degree in integrated agricultural sciences, with two embedded certificates. This academically and industry relevant curriculum will prepare learners with the knowledge, skills, and competencies in farm management and operations, and precision agriculture, that will help them thrive across the sector.		Requested implementation term:	Summer, 2026
Is there impact on other areas of instruction?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Explanation of issues and how they are being resolved:  Term offering of certain existing courses were discussed with department chairs. We were able to match schedules that currently exist for most. Some courses have not been regularly offered in the past year or two. In these cases requests were made for offer in a specific term.	Has the degree been validated by the Advisory Committee?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, have you talked with impacted departments and resolved any and all possible issues?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Date of Advisory Committee meeting:	Fall, 2024
Is this a Statewide Degree?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If so, has the degree been approved by the consortium?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Are there Related Certificates or Career Pathways associated with this degree?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If so, list all: Agricultural Management; Precision Agriculture		

## SECTION #2 REQUISITES AND OUTCOMES

Note that degree/certificate/program entry prerequisites are only enforceable in limited entry programs. Program prerequisites for open entry programs only have meaning when they are representative of prerequisites associated to specific courses within the program. Prerequisites that students are not able to test out of using multiple measures result in hidden degree/certificate requirements and should be avoided. (Courses that may be tested out of using multiple measures include: WR 115, MTH 65, MTH 95, MTH 98, MTH 105, MTH 111, MTH 112.)

### PROPOSED PRE and/or COREQUISITES

Course Number	Course Title or Placement level	Requisites	Credits
IRW 115 or WR 115 or equiv placement	Critical Reading & Writing <i>or</i> Introduction to Expository Writing	Placement into IRW 115 Placement into WR 115	5 4
MTH 95 <i>or</i> equiv placement MTH 65 <i>or</i> MTH 98 <i>or</i> equiv placement	Intermediate Algebra <i>or</i> Beginning Algebra or Quantitative Math	MTH 65 or equiv placement; place into WR 115 Placement into MTH 98 and IRW 115 or WR 115	4
	Keyboarding by touch		

**Is this a limited entry program?** Students must apply, via the department for program entry.

☐ Yes ☒ No

### PROPOSED 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.)

*Students who successfully complete this degree will be able to:*

1. Apply safe practices in all agricultural work activities.
2. Apply knowledge of plant life-cycles, soil maintenance, and irrigation needs in the management of crops.
3. Develop sustainable action plans that address energy and climate related issues in agriculture.
4. Identify and apply the appropriate interventions to mitigate plant, fungi, and animal pests.
5. Operate drones and autonomous vehicles for mission planning and data acquisition.
6. Process and evaluate remote sensing imagery and GIS data to enable the development of a comprehensive agricultural plan.
7. Apply a business mindset to the operation of agricultural enterprises.
8. Work independently and as part of a team in an agricultural job setting.
9. Provide effective leadership that utilizes both verbal and written communication.



### SECTION #3 PROPOSED COURSEWORK

All candidates for the Associate of Applied Science (AAS) Degree must complete 16 credits of General Education from the General Education/Discipline Studies list. The categories are: 1) Arts and Letters, 2) Social Science, and 3) Science/Math/Computer Science. These credits must include at least one course from each category and no more than two courses or eight credits from any one category. For information regarding Gen Ed requirements for the AS, ASOT and for MTM majors, please contact the Curriculum Office.

List all courses in the term by term order that is to be displayed in the [catalog](#) degree map. Include elective list below. The information you provide on this form will be reflected in the CGCC catalog pages. Please ensure it is correct. (If you need more lines to accommodate the courses, right click and insert rows.)

Course Number	Course Title	Requisites	Credits
FALL (15 credits)			
AG 101	Introduction to Agriculture	None	3
AG 102	Agricultural Safety	None	3
BA 101Z	Introduction to Business	IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4
WR 121Z	Composition I	IRW 115 or WR 115 or equiv place	4
HE 113	First Aid & CPR/AED Professional Rescuers/Healthcare Providers	Rec: IRW 115 or equiv place	1
WINTER (14 credits)			
AG 103	Agricultural Operations & Management I	None	3
AG 104	Introduction to Fruit Crop & Dryland Wheat	None	3
	Agricultural Management Electives	Varied	4
MTH 105Z or MTH 111Z	Math in Society Precalculus I: Functions	MTH 65 or MTH 98 or equiv place; place into WR 115 MTH 95 or equiv place; Pre/co: WR 121Z	4
SPRING (17 credits)			
AG 203	Agricultural Operations & Management II	AG 103	3
AG 204	Alternative Farming Models	None	3
AG 206	Agricultural Management Capstone	AG 101, 102, 103, 104	3
	Agricultural Management Electives	Varied	4
COMM 111	Public Speaking	WR 121Z; place into MTH 65 or MTH 98	4
FALL (15 credits)			
AG 105	Precision Agriculture - Basics	None	3
AG 106	Introduction to Drone Operations & Autonomous Vehicles in Agriculture	None	4

GS 109	Physical Science (Meteorology)	MTH 65 or equiv place; pre/co: WR 121Z	4
SPA 101	First Year Spanish – First Term (or higher) (CPL)	Place into MTH 65 or MTH 98; pre/co: WR 121Z	4
<b>WINTER (16 credits)</b>			
AG 201	Integrated Pest Management	None	4
AG 205	Introduction to Geographic Information Systems & Remote Sensing	None	4
	Precision Agriculture Electives	Varied	4
SPA 102	First Year Spanish – Second Term (or higher) (CPL)	SPA 101 or instructor permission; place into MTH 65 or MTH 98; pre/co: WR 121Z	4
<b>SPRING (14 credits)</b>			
AG 202	Advanced Farm Management Systems	None	3
AG 207	Precision Agriculture Capstone	AG 105, 106, 201, 205	3
	Precision Agriculture Electives	Varied	4
SPA 103	First Year Spanish – Third Term (or higher) (CPL)	SPA 102 or instructor permission; place into MTH 65 or MTH 98; pre/co: WR 121Z	4
<b>Credit total</b>			91
<b>ELECTIVES (if applicable)</b>			
<b>Course Number</b>	<b>Course Title</b>	<b>Requisites</b>	<b>Credits</b>
<b>Agricultural Management Electives</b>			
<b>Business / Leadership Track</b>			
FYE 100	College Planning and Survival Skills (F, W, SP, SU)	Placement into WR 115	4
BA 131	Introduction to Business Technology (W)	IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98; keyboarding by touch	4
BA206	Management Fundamentals (SP)	Rec: BA 101Z, WR 121Z, BA 131. Prereq: IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	3
BA 208	Business Ethics (W)	Place into MTH 65 or MTH 98; Pre/co: WR121Z	4
BA 228	QuickBooks (SP)	Rec: BA 104, BA 211Z	3
COMM 215	Small Group Communication: Process & Theory (?)	Place into MTH 65 or MTH 98; Pre/co: WR121Z	4

Science Track			
CH 121	General Chemistry I (F, W, SP)	Pre/co: MTH 95 or equiv place, WR 121Z	5
BI 101	Biology (F, W, SP, SU)	MTH 65 or MTH 98 or place; CH 100 or higher; Pre/co: WR121Z	4
BI 211	Principles of Biology (F, W, SP, SU)	MTH 95 or place; Pre/co: WR121Z	5
G 184	Global Climate Change (SP)	Place into MTH 65 or MTH 98; Pre/co: WR121Z	4
ESR 140	Introduction to Environmental Sustainability (W)	IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4
Mechanics Track			
MFG 195	Welding Technology I (F)	None	3
MEC 120	Hydraulics and Pneumatics (W)	MTH 65 or equiv place	5
MEC 124	Mechatronic Systems in Advanced Manufacturing (SP)	IRW 115 or WR 115, MTH 65 or equiv place	3

#### SECTION #4 DEPARTMENT REVIEW

*"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 Degree or Certificate Signature Form signed by the department chair and dean/director."*

Submitter	Email	Date
Susan Lewis and Jarett Gilbert	<a href="mailto:slewis@cgcc.edu">slewis@cgcc.edu</a> <a href="mailto:jgilbert@cgcc.edu">jgilbert@cgcc.edu</a>	4.10.25
Department Chair (enter name of department chair): Jim Pytel		
Department Dean (enter name of department dean/director): Jarett Gilbert		

#### Next steps:

1. Save the completed New Degree Request Form and submit as an e-mail attachment to [curriculum@cgcc.edu](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto: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 required for a representative to attend the Curriculum Committee meeting in which your submission is scheduled for review. The representative will be asked to describe the proposal and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

# Columbia Gorge Community College

CC date 4.17.25  
 CC decision \_\_\_\_\_  
 CC vote \_\_\_\_\_

## NEW CERTIFICATE REQUEST

Submitted by: Susan Lewis & Jarett Gilbert

Email: [slewis@cgcc.edu](mailto:slewis@cgcc.edu)  
[jgilbert@cgcc.edu](mailto:jgilbert@cgcc.edu)

Phone: 541-506-6047  
 541-506-6030

Department: Tech & Trades: Ag

(Double click on check boxes to activate dialog box)

### SECTION #1 OVERVIEW

Proposed Title:	Agricultural Management		Proposed Credits:	38
Reason for new certificate:	The Integrated Agricultural Science & Technology AAS contains two less-than-one-year stackable certificates that include primarily the career and technical courses from each year of the AAS. This certificate allows students to complete the technical knowledge without taking the general education courses required in the degree.		Requested implementation term:	Summer, 2026
Is there impact on other areas of instruction?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Explanation of issues and how they are being resolved:  Term offering of certain existing courses were discussed with department chairs. We were able to match schedules that currently exist for most. Some courses have not been regularly offered in the past year or two. In these cases, requests were made for offer in a specific term.	Has the certificate been validated by the Advisory Committee?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, have you talked with impacted departments and resolved any and all possible issues?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Date of Advisory Committee meeting:	Fall, 2024
Is this a Statewide Certificate?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If so, has the certificate been approved by the consortium?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Is this a Related Certificate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is this a Career Pathway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If this is a Related Certificate or a Career Pathway, what is the base degree?	Integrated Agricultural Science & Technology AAS			

## SECTION #2 PREREQUISITES AND OUTCOMES

Note that degree/certificate/program entry prerequisites are only enforceable in limited entry programs. Program prerequisites for open entry programs only have meaning when they are representative of prerequisites associated to specific courses within the program. Prerequisites that students are not able to test out of using multiple measures result in hidden degree/certificate requirements and should be avoided. (Courses that may be tested out of using multiple measures include: WR 115, MTH 65, MTH 95, MTH 98, MTH 105, MTH 111, MTH 112.)

### PROPOSED PRE and/or COREQUISITES

Course Number	Course Title or Placement level	Requisites	Credits
IRW 115 or WR 115 or equiv placement	Critical Reading & Writing or Introduction to Expository Writing	Placement into IRW 115 Placement into WR 115	5 4
MTH 95 or equiv placement MTH 65 or MTH 98 or equiv placement	Intermediate Algebra Beginning Algebra or Quantitative Math	MTH 65 or equiv placement; place into WR 115 Placement into MTH 98 and IRW 115 or WR 115	4
	Keyboarding by touch		

**Is this a limited entry program?** Students must apply, via the department for program entry.

☐ Yes ☒ No

### PROPOSED 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.)

*Students who successfully complete this certificate will be able to:*

1. Apply safe practices in all agricultural work activities.
2. Apply knowledge of plant life-cycles, soil maintenance, and irrigation needs in the management of crops.
3. Develop sustainable action plans that address energy and climate related issues in agriculture.
4. Apply a business mindset to the operation of agricultural enterprises.
5. Work independently and as part of a team in an agricultural job setting.
6. Provide effective leadership that utilizes both verbal and written communication.

### SECTION #3 PROPOSED COURSEWORK

List all courses (course number, title, requisites and credits) in the term by term order that is to be displayed in the [catalog](#) certificate map. Enter electives below if applicable. The information you provide on this form will be reflected in the CGCC catalog pages. Please ensure it is correct. (If you need more lines to accommodate the courses, right click and insert rows.)

Course Number	Course Title	Requisites	Credits
<b>FALL</b>			<b>15</b>
AG 101	Introduction to Agriculture	None	3
AG 102	Agricultural Safety	None	3
BA 101Z	Introduction to Business	IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4
WR 121Z	Composition I	IRW 115 or WR 115 or equiv place	4
HE 113	First Aid & CPR/AED Professional Rescuers/Healthcare Providers	Rec: IRW 115 or equiv place	1
<b>WINTER</b>			<b>10</b>
Ag 103	Agricultural Operations & Management I	None	3
AG 104	Introduction to Fruit Crop & Dryland Wheat	None	3
	Agricultural Management Electives	Varied	4
<b>SPRING</b>			<b>13</b>
AG 203	Agricultural Operations & Management II	AG 103	3
AG 204	Alternative Farming Models	None	3
AG 206	Agricultural Management Capstone	AG 101, 102, 103, 104	3
	Agricultural Management Electives	Varied	4
<b>Credit total</b>			<b>38</b>
<b>ELECTIVES (if applicable)</b>			
Course Number	Course Title	Requisites	Credits
<b>Agricultural Management Electives</b>			
<b>Business / Leadership Track</b>			
FYE 100	College Planning and Survival Skills (F, W, SP, SU)	Placement into WR 115	4
BA 131	Introduction to Business Technology (W)	IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98; keyboarding by touch	4
BA206	Management Fundamentals (SP)	Rec: BA 101Z, WR 121Z, BA 131. Prereq: IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	3

BA 208	Business Ethics (W)	Place into MTH 65 or MTH 98; Pre/co: WR121Z	4
BA 228	QuickBooks (SP)	Rec: BA 104, BA 211Z	3
COMM 215	Small Group Communication: Process & Theory (?)	Place into MTH 65 or MTH 98; Pre/co: WR121Z	4
<b>Science Track</b>			
CH 121	General Chemistry I (F, W, SP)	Pre/co: MTH 95 or equiv place, WR 121Z	5
BI 101	Biology (F, W, SP, SU)	MTH 65 or MTH 98 or place; CH 100 or higher; Pre/co: WR121Z	4
BI 211	Principles of Biology (F, W, SP, SU)	MTH 95 or place; Pre/co: WR121Z	5
G 184	Global Climate Change (SP)	Place into MTH 65 or MTH 98; Pre/co: WR121Z	4
ESR 140	Introduction to Environmental Sustainability (W)	IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	4

#### SECTION #4 RELATED INSTRUCTION

Certificates 45 credits or more require related instruction. Fill out a Template for Related Instruction found on the Curriculum webpage. All courses identified as fulfilling the embedded related instruction requirement must have been reviewed and recommended by the Curriculum Committee and the details outlined on the CCOG.

#### SECTION #5 DEPARTMENT REVIEW

*"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 Degree or Certificate Signature Form signed by the department chair and dean/director."*

Submitter	Email	Date
Susan Lewis and Jarett Gilbert	<a href="mailto:slewis@cgcc.edu">slewis@cgcc.edu</a> <a href="mailto:jgilbert@cgcc.edu">jgilbert@cgcc.edu</a>	4.10.25
Department Chair (enter name of department chair): Jim Pytel		
Department Dean (enter name of department dean/director): Jarett Gilbert		

Next steps:

1. Save the completed Certificate Request Form and submit as an e-mail attachment to [curriculum@cgcc.edu](mailto:curriculum@cgcc.edu) or [slewis@cgcc.edu](mailto:slewis@cgcc.edu).
2. If needed, attach the completed Related Instruction Template to the same e-mail.
3. 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.
4. 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

# Columbia Gorge Community College

CC date	4.17.25
CC decision	_____
CC vote	_____

## NEW CERTIFICATE REQUEST

Submitted by: Susan Lewis & Jarett Gilbert

Email: [slewis@cgcc.edu](mailto:slewis@cgcc.edu)  
[jgilbert@cgcc.edu](mailto:jgilbert@cgcc.edu)

Phone: 541-506-6047  
 541-506-6030

Department: Tech & Trades: Ag

(Double click on check boxes to activate dialog box)

### SECTION #1 OVERVIEW

Proposed Title:	Precision Agricultural		Proposed Credits:	34
Reason for new certificate:	The Integrated Agricultural Science & Technology AAS contains two less-than-one-year stackable certificates that include primarily the career and technical courses from each year of the AAS. This certificate allows students to complete the technical knowledge without taking the general education courses required in the degree.		Requested implementation term:	Summer, 2026
Is there impact on other areas of instruction?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Explanation of issues and how they are being resolved:  Term offering of certain existing courses were discussed with department chairs. We were able to match schedules that currently exist for most. Some courses have not been regularly offered in the past year or two. In these cases, requests were made for offer in a specific term.	Has the certificate been validated by the Advisory Committee?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, have you talked with impacted departments and resolved any and all possible issues?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Date of Advisory Committee meeting:	Fall, 2024
Is this a Statewide Certificate?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If so, has the certificate been approved by the consortium?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Is this a Related Certificate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is this a Career Pathway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If this is a Related Certificate or a Career Pathway, what is the base degree?	Integrated Agricultural Science & Technology AAS			



## SECTION #2 PREREQUISITES AND OUTCOMES

Note that degree/certificate/program entry prerequisites are only enforceable in limited entry programs. Program prerequisites for open entry programs only have meaning when they are representative of prerequisites associated to specific courses within the program. Prerequisites that students are not able to test out of using multiple measures result in hidden degree/certificate requirements and should be avoided. (Courses that may be tested out of using multiple measures include: WR 115, MTH 65, MTH 95, MTH 98, MTH 105, MTH 111, MTH 112.)

### PROPOSED PRE and/or COREQUISITES

Course Number	Course Title or Placement level	Requisites	Credits
IRW 115 or WR 115 or equiv placement	Critical Reading & Writing or Introduction to Expository Writing	Placement into IRW 115 Placement into WR 115	5 4
MTH 95 or equiv placement MTH 65 or MTH 98 or equiv placement	Intermediate Algebra Beginning Algebra or Quantitative Math	MTH 65 or equiv placement; place into WR 115 Placement into MTH 98 and IRW 115 or WR 115	4
	Keyboarding by touch		

**Is this a limited entry program?** Students must apply, via the department for program entry.

☐ Yes ☒ No

### PROPOSED 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.)

*Students who successfully complete this certificate will be able to:*

1. Apply safe practices in all agricultural work activities.
2. Operate drones and autonomous vehicles for mission planning and data acquisition.
3. Process and evaluate remote sensing imagery and GIS data to enable the development of a comprehensive agricultural plan.
4. Identify and apply the appropriate interventions to mitigate plant, fungi, and animal pests.
5. Work independently and as part of a team in an agricultural job setting.
6. Provide effective leadership that utilizes both verbal and written communication.

### SECTION #3 PROPOSED COURSEWORK

List all courses (course number, title, requisites and credits) in the term by term order that is to be displayed in the [catalog](#) certificate map. Enter electives below if applicable. The information you provide on this form will be reflected in the CGCC catalog pages. Please ensure it is correct. (If you need more lines to accommodate the courses, right click and insert rows.)

Course Number	Course Title	Requisites	Credits
<b>FALL</b>			<b>12</b>
AG 105	Precision Agriculture - Basics	None	3
AG 106	Introduction to Drone Operations & Autonomous Vehicles in Agriculture	None	4
WR 121Z	Composition I	IRW 115 or WR 115 or equiv place	4
HE 113	First Aid & CPR/AED Professional Rescuers/Healthcare Providers	Rec: IRW 115 or equiv place	1
<b>WINTER</b>			<b>12</b>
Ag 201	Integrated Pest Management	None	4
AG 205	Introduction to Geographic Information Systems & Remote Sensing	None	4
	Precision Agriculture Electives	Varied	4
<b>SPRING</b>			<b>10</b>
AG 202	Advanced Farm Management Systems	None	3
AG 207	Precision Agriculture Capstone	AG 105, 106, 201, 205	3
	Precision Agriculture Electives	Varied	4
<b>Credit total</b>			<b>34</b>
<b>ELECTIVES (if applicable)</b>			
Course Number	Course Title	Requisites	Credits
<b>Agricultural Management Electives</b>			
<b>Business / Leadership Track</b>			
FYE 100	College Planning and Survival Skills (F, W, SP, SU)	Placement into WR 115	4
BA 131	Introduction to Business Technology (W)	IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98; keyboarding by touch	4
BA206	Management Fundamentals (SP)	Rec: BA 101Z, WR 121Z, BA 131. Prereq: IRW 115 or WR 115 or equiv place; place into MTH 65 or MTH 98	3
BA 208	Business Ethics (W)	Place into MTH 65 or MTH 98; Pre/co: WR121Z	4

BA 228	QuickBooks (SP)	Rec: BA 104, BA 211Z	3
COMM 215	Small Group Communication: Process & Theory (?)	Place into MTH 65 or MTH 98; Pre/co: WR121Z	4
<b>Mechanics Track</b>			
MFG 195	Welding Technology I (F)	None	3
MEC 120	Hydraulics and Pneumatics (W)	MTH 65 or equiv place	5
MEC 124	Mechatronic Systems in Advanced Manufacturing (SP)	IRW 115 or WR 115, MTH 65 or equiv place	3

#### SECTION #4 RELATED INSTRUCTION

**Certificates 45 credits or more require related instruction. Fill out a Template for Related Instruction located on the Curriculum web page.**

All courses identified as fulfilling the embedded related instruction requirement must have been reviewed and recommended by the Curriculum Committee and the details outlined on the CCOG.

#### SECTION #5 DEPARTMENT REVIEW

*"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 Degree or Certificate Signature Form signed by the department chair and dean/director."*

Submitter	Email	Date
Susan Lewis and Jarett Gilbert	<a href="mailto:slewis@cgcc.edu">slewis@cgcc.edu</a> <a href="mailto:jgilbert@cgcc.edu">jgilbert@cgcc.edu</a>	4.10.25
Department Chair (enter name of department chair): Jim Pytel		
Department Dean (enter name of department dean/director): Jarett Gilbert		

Next steps:

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2. If needed, attach the completed Related Instruction Template to the same e-mail.
3. 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.
4. 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.
5. It is required for a representative to attend the Curriculum Committee meeting in which your submission is scheduled for review. The representative will be asked to describe the proposal and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.