

## College Now Syllabus Disclosure:

The following syllabus outlines the policies and requirements necessary to receive college credit for a CGCC course. While fulfilling the requirements for high school credit, students may still fail to meet the criteria for college credit. Please note that the requirements and expectations for the college course may differ from those outlined in the high school syllabus.

Participation in the College Now program results in two separate transcripts and two separate grades to be awarded at the end of the term (one from the participating high school and one from the participating post secondary institution, CGCC). End of term grades on each transcript may differ due to differing grading policies between syllabi.

Students are responsible for understanding and adhering to the specific requirements detailed in the College Now syllabus to ensure eligibility for college credit.

[25-26 College Now Student Handbook](#)

Hello!

My name is Lynn Helyer. I will be your student's TDHS Fabrication 2a/2b & CGCC's MFG 155 Instructor. I am excited to get to know your student and you over the course of this trimester. I am very excited to have the opportunity to teach this class as a cooperative between CGCC and TDHS. Students in this class, for a small fee will be able to receive college credit in addition to the credit they will receive towards their diploma at TDHS. This course is the second course in the Less Than One Year (LTOY) CGCC Local Industry Welding Certificate. Utilize the first 2 links below for CGCC's directions for applying for College Now credits. The 3rd link is for The Dalles High Schools class articulation with Columbia Gorge Colleges Advanced Manufacturing Program.

Please direct students to apply to CGCC as soon as possible, using the directions found on <https://www.cgcc.edu/cn>.

You can find guides, important dates, approved courses, an FAQ, and other information at <https://www.cgcc.edu/cnfaculty>.

**Students**

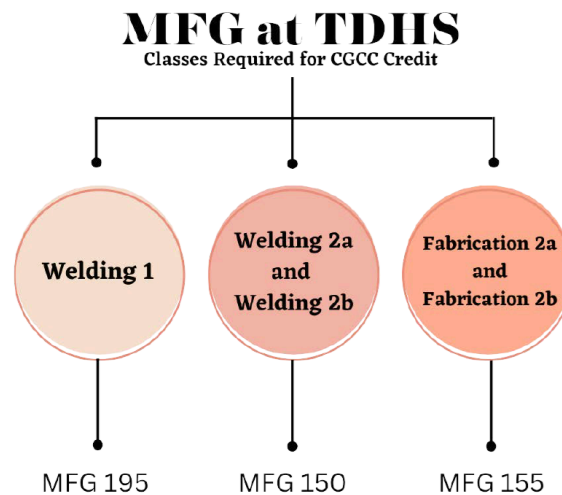
- Review the [CGCC Dual Credit Programs Overview](#)
- Review the [College Now Student Guide](#)

If students have not completed College Now courses before:

- [Apply to CGCC](#)
- Complete the [College Now Permission Form](#)
- If under 16, complete the [Exception Form](#)
- Once student has received login credentials, login to [MyCGCC](#)
- Register for spring term courses starting April 1

TDHS Welding & Fabrication Overview Video:

<https://youtu.be/twmNnGrSRw0?si=KansDXAM4TskOAnI>



### Course Description

Introduces students to reading and creating basic technical drawings. Third course in the LOTY Welding certificate. Fabricate from drawings to industry specification and tolerances. Create and raw parts in computer software, and explore integration with CNC part generation and computer aided blueprint design. MFG 195, MFG150 Prerequisites.

This course focuses on use of blueprints and welding symbols in ANSI style blueprints welders will encounter in local industry. Testing will involve students creating and welding a product from blueprints. Students will design parts in fusion 360 and then use the Plasma Cam CNC to cut them. After having cut parts students will produce a work sample of the designed part according to the blueprint.

Since this class is held at CGCC's welding lab, a bus is provided to take students from campus to CGCC. In case of inclement weather delays to school start times or early releases, classes will not meet at CGCC. Instead we will meet at TDHS in room 407.

### **Course Content Standards**

The course will be graded with an 80% weight on learning targets/assessments and a 20% weight on Job and Career ready skills. These skills are crucial in obtaining and maintaining employment in today's workplace. Students will log these skills weekly in their portfolio of learning targets. Specific skills that will be graded weekly: **professionalism, paper work accuracy, attendance, punctuality and time management**. Students will receive 25 points per week in this category, weighted at 20% of their total grade.

Students must produce a product to specification. The final product will be graded on accuracy, correct welds as designated by the blueprint and overall quality. Students will also create parts based on customer requests including mounting holes and correct hole sizing for fasteners as appropriate. Fit and finish of the final product will be a part of the assessment grade for these production tasks, as well as timeliness of completion of work. Students will quality check each other's work.

### **Unit 1: Safety / Shop Responsibilities**

LT1: Safety Test #1 – Miller Openbook Curriculum

LT2: Safety Test #2 – Click Safety - OSHA 10 safety training.

LT3: Shop Awareness

LT4: Cleanup duties

LT5: Job Readiness

### **Unit 2: Fusion 360**

LT6: Creating Basic Shapes in fusion 360

LT7: Using Measurement Tools in fusion 360

LT8: Drawing Pack #1

### **Unit 3: Inkscape and/or Adobe**

LT9: When to use Inkscape/Adobe

LT10: Basic Inkscape Functions and Drawing Creation

LT11: Inkscape “artistic metal” Project

LT12: Inkscape multiple level project – adding depth

### **Unit 4: Operating the CNC**

LT13: CNC Operations and Functions / G Code / .tap files

LT14: Nesting in CNC

LT15: Creating Parts Arrays that Work

LT16: Generating Multiple Layer Drawings

LT17: CNC Scaling and Conversion

LT18: Produce and Weld Product from Drawing Test #4

### **Unit 5: Creating Products**

LT19: Basic CNC Plasmacam Using Fusion, Sheetcam, Mach 3, Inkscape and Adobe

LT20: Creating Parts from Blueprint

LT21: Creating Blueprint from Part

LT22: Drawing to Specification

LT23: Decimal Conversion Math and Metric to Inch Conversion Math

LT24: Fabricating Part to Fit Spec

LT25: Battery Tie Down and Box Fabrication

LT26: Oil Catch Can Tank Fabrication

LT27: Coolant Reservoir Tank Fabrication

### **Required Textbooks or Readings**

Students are expected to provide a binder / portfolio to put pre and post project forms in.

### **Technology Requirements**

Students will have access to a School supplied Chromebooks and CGCC class computer terminals to research welding tips and tricks before working on weld samples in addition to direct teacher instruction.

### **Grading**

Each service will appear in the grade book as a Learning Target (LT) as expressed above. Students will receive credit for the trimester based upon their completion of welding samples as well as completing lessons from the above mentioned curriculums. Each sample is worth 10 to 50 points plus a final worth 100 points, making up 80% of the grade. The remaining 20% of the grade is based on the CTE- Career Readiness & Employability Skills. Any project receiving a "0" at Trimesters end will remain a "0." No late make-up work is accepted after that point and there will be no shop access. Final course grade will be based on cumulative points earned using the traditional grading system of 90% and above = A, 80% to 89.99% = B, 70% to 79.99% C, 60% to 69.99% D, 59.99% and under F.

Each learning target is graded on a 0-10 scale, as per the rubric below.

- 0- Sample/Learning Target not attempted
- 2-4 -Attempted, but of poor quality; or attempt not documented in welding journal
- 5-6 -Attempted, but weld has many quality problems-(e.g.: porosity, incorrect amperage )
- 7-8 -Acceptable weld; not to industry standard but marked improvement over initial attempts.
- 9-10 -Proficient / Mastery; weld is up to industry standard. Student should consider taking certification testing.

### **Classroom Expectations**

Basic guidelines for the academic aspects of the course:

1. Students will give their best effort every day in class.
2. Absolutely no plagiarism will be acceptable. Frequent checks on all work will be performed. Plagiarized material will be reported to the administration. Plagiarized material is defined as anything copied and pasted, not cited or quoted, and any work presented as the students when it has come from another source without citation. For a welding class, submitting work completed by another student is considered plagiarism.
3. Students will be respectful of the work environment in the classroom and their peers need for that environment.

4. One student with a pass at a time, for a maximum of 5 minutes. Longer periods of time will mean a loss of pass privilege. **5 Passes per Semester!**
5. Students will respect each other, and the community of learners they are a part of. Students at CGCC classes who drive themselves are expected to arrive before students taking the bus. Any student arriving after students who have taken the bus are in class are considered tardy and will be marked as such in the attendance roster.
6. Students are not to ride the elevator in Building 10 from the parking lot unless for necessary accommodation, at the request of the National Guard and CGCC. If students choose to utilize Elevators and they've been deemed to be horseplaying in elevators causing elevator stoppage, Emergency Services and/or Elevators Services Company will be called in at expense of the parents of individuals involved. In the event of an Elevator malfunction occupants could spend multiple hours in the elevator depending on the availability of Emergency Services and/or Elevator Services Company from Central Oregon to arrive on scene.

Students should expect to work with peers in positive and productive ways, should problems in groups arise they should be worked out with the instructor and others. Students must be present in order to be successful in this class. I cannot send home an engine for students to practice on. Any missed days will need to be made up for in class, through TAT or before or after school hours. Excessive absences will result in failure due to missing too many necessary skills.

Students will work in groups. They must be prepared to engage in group dynamics and work through issues they will encounter.

Students are expected to be honest and ethical in their academic work. Academic dishonesty includes cheating and plagiarism. All work submitted in this course is to be your own new, original work written in response to the assignments. Consciously or unknowingly presenting the ideas or writings of others will result in academic sanctions that may include a grade of "F" grade for the assignment or for the class and possible institutional sanctions including suspension or expulsion. See the Code of Student Conduct and the Students Rights and Responsibilities policy for further information.

### **Safety**

Appropriate shop clothing; long pants, no open toed shoes, no synthetic materials. Safety glasses are required in the shop. Proper dress will be required at all times; if these rules are not followed, students will not work in the welding lab.

Students are required to clean the shop at the end of every period. Failure to do so will result in lost instructional time and potential issues completing necessary skills/services to receive credit in this course.

### **Submitting Classwork and Assessments**

Weld plates must be clearly marked and labelled. Additionally, each weld sample turned in must be logged and explained in class journal.

### **Late Classwork and Assessments**

Late work will be accepted until the grading period closes. Late classwork will receive no feedback, and will be the last priority to be graded; regardless of sports eligibility requirements or other obligations.

### **Extra Support**

I will be available daily for TAT and will come early or stay late at student request. Any additional necessary support can be provided.

### **Communicating with Parents**

Communication with parents will take place via email or telephone. Similarly, I have an open door policy. Please feel free at any point to observe my class or contact me. My phone here at TDW is 541-506-3400. Leave a message at office or email me at [helyerl@nwasco.k12.or.us](mailto:helyerl@nwasco.k12.or.us)

I welcome comments, questions and concerns about my class and its students!

### **CGCC Policy Statements:**

**ADA Statement:** Individuals needing accommodation under ADA should contact Advisor, Disability Resources at 541-506-6046, or the Event Coordinator, in a timely manner. 711 Relay.

**Discrimination Statement:** It is the policy of Columbia Gorge Community College and its Board of Education that there will be no discrimination or harassment on the grounds of race, color, sex, marital status, national origin, religion, age, disability, veteran status, sexual orientation, and any other status protected by applicable local, state, or federal law in any educational programs, activities, or employment.

**Flexibility Statement:** The course content and requirements may be adjusted in response to institutional, weather, or class situations as needed, with adequate notice to students.

**Alternative Assignment Statement:** Requests for accommodations must be made during the first week of the course by submitting in writing the dates of observances. (Use form 'CGCC Request for Accommodation for Religious Observance'). **Safety Statement:** (As applicable) Instructors of classes in which safety training is necessary, such as science labs, art classes, health occupations classes, and construction classes, should include safety- training statements within their syllabi.

**Diversity, Equity and Inclusivity Statement:** Columbia Gorge Community College is dedicated to building and fostering a global, positive learning environment where individual differences are welcomed,

appreciated, and respected. CGCC respects the expression of diverse perspectives, abilities, interests and backgrounds, understanding that these will strengthen our ability to collaborate effectively and to solve complex challenges. The college provides equal access to and opportunity in our academic programs and facilities.

*The Dalles High School is an equal opportunity educator and employer.*