Course Assessment - Part A: Your Plan

COMPLETE #724

Please select your course and name from the drop-down menu. If your course or name are incorrect or missing, contact the Curriculum and Assessment Administrative Assistant, 541-506-6037 or swade@cgcc.edu.

MFG 211- CAD Design for CNC Manufacturing 1- Chris Dodson- Part A- Winter 2025

*** Part A: Your Plan DIRECTIONS 1. Choose three of your course outcomes to assess and report on this term (these will also be used in your Student Course Evaluation survey): Outcome #1**

Utilize extrusion, fillets and chamfers to generate drawings.

*** Outcome #2**

Understand machining tolerances as they apply to 3d models for manufacturing using machining equipment.

*** Outcome #3**

Create a product from a solid 3d model.

Have you completed an assessment for this course prior to this term?

No

If yes, are you assessing different outcomes?

No

Comments:

(No response)

2. To which degree(s) or certificate(s) does your course map? Degree, Certificate, & Program Outcomes

Advanced Manufacturing Technology

*** Method of Assessment 3. What methods will be used to assess individual student understanding of each of these outcomes? (Please be specific.) Outcome #1: Method to assess student understanding**

This outcome will be assessed using both hands on and written application. During the assessment students will identify ASME standard symbolism for Geometric Dimensioning And Tolerancing, and verbal, written and physical object dimensional specification and apply thim to digital models to create ASME acceptable drawings, expanding into creation of a product through CNC Manufacturing.

* Outcome #2: Method to assess student understanding

This outcome will be assessed through comparison of computer modeled dimensions shown in blueprints, and actual physical dimensions of components made using CNC equipment of each product created.

* Outcome #3: Method to assess student understanding

This outcome will be assessed through submissions of digital model, blueprints, component physical sample of a product created on CNC equipment with adherence to ASME standards.

* 4. How will you know if you were successful in your efforts to teach this outcome? Outcome #1:

Students will provide independent digital work samples from various digital examples, blueprints with increasing difficulty with tolerances beginning at .030” and ending with tolerances of .005”

* Outcome #2: How will you know if you were successful in your efforts to teach this outcome?

Students will provide multi-part assemblies with increasingly tighter tolerances along with inspection reports and a corrective action plan to focus on material usage efficiency.

* Outcome #3: How will you know if you were successful in your efforts to teach this outcome?

Student work will produce digital models and blueprints according to ASME standards with increasing difficulty. Students will be required to represent datums and features using ASME standard symbols as well as provide detailed overview of fabricated parts and assembly procedures.

5. Instructor Questions: Create two course specific questions to be included on the Student Course Evaluation. Question #1

Did this course offer enough real project based learning experience for you to feel comfortable entering the workforce in this field?

Question #2

Do you feel that there was any content that was not sufficiently covered?

Do you require the names of students who complete the course evaluation survey? (Please note: names will be sent to instructors the Thursday before term ends)

NO

Reminder, when completing Part B, instructors will be asked the following questions: Describe anything you did to assist the institutional effort to support students in improving achievement of the specified criteria for the following Institutional Learning Outcomes (ILO): 1. ILO#1 - Communication - "Content Development" and/or "Control of Syntax and Mechanics" 2. ILO#2 - Critical Thinking/Problem Solving - "Evidence" and/or "identify strategies" 3. ILO#4 - Cultural Awareness - "Openness" (Encouraging our students to "Initiate and develop interactions with culturally different others") 4. ILO#5 - Community and Environmental Responsibility 5. ILO#3 - Quantitative Literacy - "Application/Analysis" and/or "Assumptions"

(No response)