

Course Assessment- Part B: Your Results & Analysis

COMPLETE

#535

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.

EET 221- Semiconductor Devices and Circuits- Tom Lieurance- Fall 2021

*** Part B: Your Results DIRECTIONS 1. Report the outcome achievement data gathered via the assignments, tests, etc. you identified for each outcome (question 3) of your Part A. (Only include data for students who completed the course. Do not include students who withdrew or earned an incomplete) Data for all 3 outcomes should be reported below.**

Evaluations were based off attendance and assessment of the labs, tests, assignments, and homework. Students that put in an effort did well and one that rarely showed up did not master the outcomes. The class was Zoom recorded.

*** Outcome #1**

Apply concepts of semiconductor devices, diodes and transistors, to design and analyze circuits

*** % of students who successfully achieved the outcome (C or above)**

75

*** Outcome #2**

Apply concepts of semiconductor devices to troubleshoot circuits

*** % of students who successfully achieved the outcome (C or above)**

75

*** Outcome #3**

Apply concepts of semiconductor devices in problem solving.

*** % of students who successfully achieved the outcome (C or above)**

75

*** ANALYSIS 3. What contributed to student success and/or lack of success?**

One student showed up for 50% of the classes and 20% of the labs. The majority of students were a B or better.

*** 4. Helping students to realistically self-assess and reflect on their understanding and progress encourages students to take responsibility for their own learning. Please compare your students' perception of their end-of-term understanding/mastery of the three outcomes (found in student evaluations) to your assessment (above) of student achievement of the three outcomes.**

Apply concepts of semiconductor devices, diodes and transistors, to design and analyze circuits 75% of students mastered or close to mastering the concepts of designing with semiconductors, Apply concepts of semiconductor devices to troubleshoot circuits. Students that completed the exercises (one did not) showed a mastery of applying the theory to creating electronic circuits that accomplished the task required. Apply concepts of semiconductor devices in problem solving. Given a problem to overcome students were able to build and troubleshoot their circuits to accomplish tasks.

*** 5. Did student achievement of outcomes meet your expectations for successfully teaching to each outcome (question 4 from Part A)**

3 yes, 1 no

*** 6. Based on your analysis in the questions above, what course adjustments are warranted (curricular, pedagogical, student instruction, etc.)?**

More testing.

Not sure what to do with a student that just won't show up for class or lab.

7. What resources would be required to implement your recommended course adjustments (materials, training, equipment, etc.)? What Budget implications result?

\$400,000 to replace the flood damaged equipment in the labs.

*** 8. Describe the results of any adjustments you made from the last assessment of this course (if applicable) and their effectiveness in student achievement of outcomes.**

The last assessment of this course was somewhat better because the previous class had more students, and, one student wouldn't make a heavy impact on the results like it did this time.

Some less relevant material was dropped in favor of adding newer, current material.

9. Describe how you explain information about course outcomes and their relevance to your students.

We talked several times during the quarter about the course outcomes and how they are the point of light at the end of the tunnel. A goal we are striving for.

10. Please describe any changes/additions to instruction, curriculum or assessment that you made to support students in better achieving the CGCC Institutional Learning Outcomes: ILO #1: Communication. The areas that faculty are focusing on are: "Content Development" and/or "Control of Syntax and Mechanics" and ILO #2: Critical Thinking/Problem Solving. The areas that faculty are focusing on are: "Student's Position" (Critical Thinking) and "Evaluate Potential Solutions" (Problem Solving). ILO #4: Cultural Awareness. The area that faculty is focusing on is: "Curiosity" - Encouraging our students to "Ask deeper questions about other cultures and seek out answers to these questions" ILO #5: Community and Environmental Responsibility. The area that faculty are focusing on are: "Applying Knowledge to Contemporary Contexts" and "Understanding Global Systems" ILO#3 -Quantitative Literacy - "Application/Analysis" and/or "Assumptions"

ILO#1 Writing and oral reports, Thoroughness in the reports that are written. This is how to evaluate a situation and report on it so everyone understands.

ILO#2 Electronic challenges given, troubleshoot, and evaluated.

ILO3 Why is this out of order? Application and analysis of electronic circuits and applications.

ILO 4 Curiosity..... The sheer volume of new technologies within the electronics field should be a curiosity to students. Read students Read.

ILO5 Eliminating old technology for new. Recycle old technology Understanding global systems like why is there a chip shortage now and what can be done so it doesn't happen again.