Course Outcomes Guide (COG)

Course Title: EGT 136 Mechanics

Date: May 24 2019

Course Team: Dr. Olu Bamiduro

Expected Learning Outcomes

1. Students will know *HOW* to apply the concepts of structure analysis to design mechanical components.
2. Students will *UTILIZE* techniques, skills and modern engineering tools, such as MTS testing machine, necessary for modern engineering practice.
3. Students will *DEMONSTRATE* the application of mechanical engineering design theory to identify and quantify machine elements in the design of commonly used mechanical systems.
4. Students will *LEARN* to effectively communicate (in written and oral form) proper engineering practices as it relates to structural analysis.

Assessment
The assessment of the course will be administered to all sections of EGT 136 by the below methods:
1. Examinations, Homework Assignments and class exercises.
2. Communication: Oral and written.

Validation
The following criteria will be used to validate EGT 136:

1. The ability to apply knowledge of mathematics, science, and engineering.
2. The ability to design and conduct experiments, as well as to analyze and interpret data.
3. The ability to identify, formulate, and solve engineering problems.
4. The ability to communicate effectively.
5. The ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Results
Data may be seen in table below:

	SPRING 2018	FALL 2018	SPRING 2019
# of Active Students	11	N/A	5
# unofficially walked away from class	N/A		N/A
% of success	83.3%		80
Final Exam Score (Average)	87.1%		82
Mean Course Grade	2.33		2.30

Areas of difficulty in course content	Using geometry and trigonometry to resolve Moment of a Force		Support Reactions

Follow-up

Students have difficulty utilizing geometric and trigonometric applications to resolve support reactions in engineering structures. This concept is crucial for engineering design in subsequent classes such EGT 231 and EGT 234 respectively.

Budget Justification

None at the moment.