Course Outcomes Guide (COG)

Course Title: EGT 101 Foundation of Engineering Technology **Date:** December 20, 2018

Course Team: Dr. Olu Bamiduro

Expected Learning Outcomes

EGT-101 is a foundational course that sets the pathway for subsequent courses in the Mechanical Engineering Technology Program. It is expected that 80% of the students enrolled in this course will begin to use software programs analytically as well as methodically to solve technical problems.

Today's engineering technologist will required to use software (as an added tool) in solving modern engineering problems. Consequently, it is anticipated that successful students will complete the MET program and be employed in a related field or continue their education.

The learning outcomes are as follows:

1. Students will ***KNOW*** how to effective work on a team.
2. Students will ***EFFECTIVELY*** utilize software programming skills and modern engineering software, such as Microsoft Excel, and MATLAB in modern engineering practice.
3. Students will understand ***HOW*** to apply mathematical models to identify and quantify experimental data used in mechanical systems.
4. Students will be ***ABLE*** to develop effective communication (in written and oral form) skills utilized in engineering practices.

Assessment

The assessment of the course will be administered to all sections of EGT 101 by the below methods:

1. Examinations
2. Homework Assignments
3. Student assigned Chapter-Section Presentations

Validation

The following criteria will be used to validate EGT 101:

1. The ability to apply knowledge of mathematics and engineering.
2. The ability to program, 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:

	FALL 2017	**SPRING 2018**	**FALL 2018**
# of Active Students	N/A	5	***Awaiting results***
# unofficially walked away from class		0	
% of success		80.1%	
Final Exam Score (Average)		85%	
Mean Course Grade		2.05%	
Areas of difficulty in course content		Getting students to works as a team.	

Follow-up (How have you used or how will you use the data to improve student learning?)

Students had a difficult time in staying organized as a team. This ultimately effects project timing and communication when it comes to presentations. As a remedy, an aggressive approach in HIGHLIGHTING the effectiveness of team work. Also, being able to go on an industry tour will help solidify the concept of camaraderie.

Budget Justification (What resources are necessary to improve student learning?)
None at the moment