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Reviewer: **Dr. Cree Stout**

2007-2008 IE OUTLINE

MECHANICAL ENGINEERING TECHNOLOGY

AND

ENGINEERING GRAPHICS TECHNOLOGY

MISSION/PURPOSE

> In compliance with the York Technical College mission of offering state of the art high quality technological education, Mechanical Engineering and Engineering Graphics Technology programs provide opportunities of training in the areas of computer aided design (CAD) and computer aided manufacturing (CAM) of mechanical products and structures, manufacturing operations and principles and coordination between CAD and CAM as well as applications engineering, technical sales and customer service.

DEPARTMENTAL GOALS:

In light of the divisional goals for the current academic year, the following are the departmental goals:

1. Improve critical thinking ability for MET and EGT students. Engage freshman and senior students in critical thinking activities both in lecture and laboratory classes. This emphasizes of student achievement through hands-on classroom activities, *Institutional Goal I*. (A multi-year goal).
2. Add two new high schools to the EXCELS program (York and Lancaster) *Institutional Goal I*, of fostering external relationship.
3. Turn EGT 105 from hybrid to “on-line” by summer 2008, this relates to *Institutional Goal II*, of offering courses in flexible and varies formats.

EXPECTED RESULTS/OUTCOMES

>With systematic exercise of critical thinking activities in the lecture classes and labs students in EGT and MET programs will have a better understanding of the theories covered and an appreciation for the methods used in the lab, and a deeper appreciation of the field of engineering technology.

>Including additional schools in the EXCELS program will help us meet the enrollment goals for both programs

>Placing EGT 105 online by summer 2008 will enhance our ability with flexible scheduling since this would be the first EGT CAD course

MEANS OF ASSESSMENT

1. TER test grades, project reports, lab reports
2. Surveys: online, paper and pencil
3. A fully functional online course which meets the demands of an alternative format of instructional delivery allowing for diverse pedagogy.

STATEMENT OF IMPACT

(This section to be completed in July 2008)

=>Critical thinking is regularly exercised in all laboratory courses in engineering graphics and mechanical engineering technology programs. Test grades demonstrate that the students have a better understanding of the theories covered and they appreciate the materials better since they know what the implications are, and how to solve problems. Project work and written reports demonstrate that students are confident in their ability to practically apply what they have learned both hands-on and theoretical. Due to practicing critical thinking exercises, students demonstrated higher level satisfaction in a paper and pencil survey.

=>EXCELS has been a great recruitment tool for both EGT and MET programs. Progressively more freshman enrollment in each program has shown that more students are attending the program who have EXCELS credits transferred from high schools. This is a multi-year project and we will continue to report progress in the future.

=>As projected EGT 105 is a hybrid course starting this summer (2008). Enrollment has been steady for EGT when compared fall-to-fall. This is a work-in-progress and we will continue to report its progress.