Master Syllabus

MET 1131 - Personal Computer Applications for Engineering Technology

Division: Science, Mathematics and Engineering

Department: Mechanical Engineering Tech

Credit Hour Total: 1.0   **Lecture Hrs:** 0.5 **Lab Hrs:** 1.5

Prerequisite(s): AND DEV 0022 DEV 0012

Date Revised: February 2014

Course Description:

Applied computer tools to solve engineering technology problems, emphasizing the integration of word processing, spreadsheets, presentation software and engineering research skills using the Internet. Applications of an integrated approach to research papers, engineering technology analysis, technical laboratory reports and technical presentations. One-half classroom, one and one-half lab hours per week.

General Education Outcomes:

- Oral Communication
- Critical Thinking/Problem Solving
- Computer Literacy
- Written Communication
- Information Literacy
- Values/Citizenship/Community

Course Outcomes:

Advanced problems
Utilize integrated software to prepare and communicate solutions to engineering technology problems.

>   **Assessment Method:** Locally developed exams
>   **Performance Criteria:** 70% or higher on all exams

Engineering documents
Create engineering documents using word processing, presentation graphics and spreadsheets.

>   **Assessment Method:** Locally developed exams
>   **Performance Criteria:** 70% or higher on all exams

Internet usage
Access the internet for research and problem solving.

>   **Assessment Method:** Locally developed exams
>   **Performance Criteria:** 70% or higher on all exams

Spreadsheets
Use spreadsheets and solve problems in a variety of engineering technology disciplines.

>   **Assessment Method:** Locally developed exams
>   **Performance Criteria:** 70% or higher on all exams

Presentation
Research, prepare and make a presentaion on a technical topic.

>   **Assessment Method:** Locally developed exams
>   **Performance Criteria:** Receive 80% or more of available points on grading rubric

Outline:

Introduction to Windows operating environment
Word processing
Techniques for solving engineering technology problems using algorithms and spreadsheets
Accessing the Internet for collection of engineering data
Integration of word processing, spreadsheets and graphics
Completion of technical projects using integrated software