# **Course Alignment for MET 1311**

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| **CO 1** | **Internet usage** - Access the internet for research and problem solving. |
| **CO 2** | **Advanced problems** - Utilize integrated software to prepare and communicate solutions to engineering technology problems |
| **CO 3** | **Presentation** - Research, prepare and make a presentation on a technical topic. |
| **CO 4** | **Engineering documents** - Create engineering documents using word processing, presentation graphics and spreadsheets. |
| **CO 5** | **Spreadsheets** - Use spreadsheets and solve problems in a variety of engineering technology disciplines |

**Note:** Course Objectives are institutionally mandated and taken from the Master Syllabus.

# **Course Structure and Alignment**

**Note:** Topic Objectives are developed by the course coordinator to align with the Course Objectives.

| **Topic** | **Objectives** | **CO #** | **Materials**(e.g., textbook; videos; links; articles; recorded lectures or demos; other resources) | **Activities**(e.g., watch videos; participate in discussions; draft or outline; complete simulations, labs, or practice activities) | **Assessments** |
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| **Unit 1 Communication** | * Describe the parts of eLearn and the use of the various tabs.
* Recognize the communication process.
* Describe the importance of writing in technical professions.
* Identify ways to become an effective writer.
* Describe the types of communications in which engineers and technicians must be proficient.
* Identify presentation, document, and spreadsheet applications.
* Communicate using eLearn email.
* Identify ethical computer use.
 | 1 | Video'sPowerpointArticles | Video'sPowerpointArticles | Quiz, Sending an email assignmentInformed consent |
| **Unit 2 PowerPoint** | * Use text functions on the home tab.
* Select a presentation theme.
* Insert clip art and photos.
* Perform page set-up.
* Select and modify theme backgrounds.
* Insert smart art, graphics, text boxes and hyperlinks.
* Insert tables, charts, graphs and object files.
* Add headers and footers and notes.
* Create a PowerPoint presentation.
 | 2,3, | Video'sPowerpointArticles | Video'sPowerpointArticles | PreassessmentPost assessmentMy Hobby Assignment |
| **Unit 3 Word** | * View a document and navigate through it.
* Check spelling and grammar.
* Type unusual symbols.
* Format text (font, font size, text style, color).
* Justify text.
* Create lists.
* Clear formatting.
* Insert pages.
* Organize text in tables.
* Display text as Word Art.
* Create text boxes.
* Divide text into columns.
* Add pictures.
 | 4,2,3 | Video'sPowerpointArticles | Video'sPowerpointArticles | Pre assessment Post AssessmentMemo Editing AssignmentDegree Program Newsletter |
| **Unit 4 Excel** | * Type and format data.
* Move around a spreadsheet.
* Search a spreadsheet.
* Edit a spreadsheet.
* Create formulas.
* Use functions.
* Edit formulas.
* Apply conditional formatting.
* Understand the parts of a chart.
* Create a chart.
* Edit a chart.
* Modify the parts of a chart.
* Create tables and charts using formulas.
* Manipulate data with goal seeking.
* Create multiple scenarios.
 | 1,2,3,4,5 | Video'sPowerpointArticles | Video'sPowerpointArticles | PreassessmentPost AssessmentOccupational Outlook HandbookPareto AnalysisControl Chart Assignments  |
| **Unit 5 Integrated Final Project** | * Integrate Word, PowerPoint and Excel into a project book.
* Complete end-of-course survey.
 | 1-5 | Video'sPowerpointArticles |  | Integrated project  |