Syllabus for CET 1100 - Introduction to Computers and Technical Drawing

Course Title - Introduction to Computers and Technical Drawing
Course Number - CET1100

Credits - 3 credits
Class Hours - 30 hours (2 hours per week)
Laboratory Hours - 30 hours (2 hours per week)
Prerequisite Courses - None

Professor - Larry Sutter
Room 311 EERC Building
487-2268
llsutter@mtu.edu
Office Hours: Posted on Office Door

Course Goals - Introduce students to PC and Mac based computer networks and develop their skills using word processing, spreadsheets, and graphing programs. Also introduce the students to technical writing styles and formats, basic drafting skills, and basic use of AutoCAD.

Course Description - Introduction to computer disk operating systems and Microsoft Office. Emphasis is on solutions to problems common to various engineering technology disciplines. Technical writing styles are introduced and discussed. Also, technical drawing and graphical representation is introduced along with the fundamentals of AutoCAD.

Textbooks - None

Computer Usage - Extensive

Calculus Usage - None

Library usage - Minimal - As needed by the student

Attendance/Participation - Recommended 20 Points Overall

Communication Skills Required - Students will be asked to write lab reports and write paragraphs as part of the quizzes and examinations. 10 Points Overall
Quizzes and Homework - 2-3 Twenty (20) minute quizzes given in class. 8-15 homework assignments will be collected for grading. Each quiz and homework assignment will be assigned a weighted value of points, depending upon difficulty or importance. 65 Points Overall

Hour Examinations - 2-3 - One (1) hour examinations given in the evening based upon student availability. Students with conflicts will be allowed alternate testing times if possible. 65 Points Overall

Final Examination - Comprehensive Practical Exam 20 Points Overall

Overall Grading 180 point system / Converted to Percent Overall via a straight curve Note: Straight curve means 100%-95%=A, 94%-90%=B+, 89%-85%=B, 84%-80%=C+, 79%-75%=C, 74%-70%=D+, 69%-65%=D, below 65%=F

Late Assignments All late assignments will have 10% deducted for each day late. No assignments accepted after 7 calendar days.

Example Calculation

Quizzes and Homework
Homework 1 - 10/10
Homework 2 - 6/10
Homework 3 - 9/10
Homework 4 - 8/10
Homework 5 - 9/10
Homework 6 - 8/10
Homework 7 - 7/10
Homework 8 - 9/10
Quiz 1 - 8/10
Quiz 2 - 0/10
Quiz 3 - 8/10
Quiz & Homework average = 7.45/10 = 74.5% = 48.45 points

Examinations
Exam 1 - 83%
Exam 2 - 88%
Exam 3 - 86%
Examination Average = 84.0% = 55.7

Final Examination Final - 79% = 15.8 points
Class Participation * 100% = 20.0 points

Communication * 90% = 9.0 points

* Based upon instructor review, and peer review in the case of group projects.

Overall Grade 148.9 of 180 possible points = 148.9/180 = 82.7% = BC

Cheating and Plagiarism

Anyone engaging in activities deemed to constitute cheating or plagiarism will be given an F in the course and turned over to the Dean of Students for disciplinary action consistent with the Code of Student Conduct and University Policies.

Unless otherwise instructed in writing by the Professor, all students are expected to do their own assignments and examinations.

MTU complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disabilities Act of 1990 (ADA).

If you have a disability and need reasonable accommodation for equal access to education or services, please contact the Dean of Students Office for assistance. For other concerns about discrimination, you may contact your advisor, department head, or the Affirmative Action Office.
<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Introduction, Operating Systems, Windows, and the Internet</td>
<td>Log In/Windows/E-mail/WWW Browsers</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Windows Overview/File Management</td>
</tr>
<tr>
<td>3</td>
<td>Word Processing Software</td>
<td>Microsoft Word Basics</td>
</tr>
<tr>
<td>4</td>
<td>Technical Writing Style/Intro to Spreadsheets</td>
<td>Microsoft Word Additional Commands</td>
</tr>
<tr>
<td>5</td>
<td>Spreadsheet Functions</td>
<td>Microsoft Excel</td>
</tr>
<tr>
<td>6</td>
<td>Graphing with Spreadsheets</td>
<td>Microsoft Excel</td>
</tr>
<tr>
<td>7</td>
<td>Manual Drawing Methods/Sectional Views/Isometric Views</td>
<td>Reading Drawings, Manual Drawing, Assign Drawing Project</td>
</tr>
<tr>
<td>8</td>
<td>Manual Drawing Methods, Engineering Problem Solving, Units, Significant Figures</td>
<td>Manual Drawing</td>
</tr>
<tr>
<td>9</td>
<td>Introduction to AutoCAD</td>
<td>Drawing Shapes given size, location. Saving and plotting.</td>
</tr>
<tr>
<td>10</td>
<td>AutoCAD Basics</td>
<td>Creating Title Blocks, complex shapes, editing.</td>
</tr>
<tr>
<td>11</td>
<td>Creating Construction Drawings with AutoCAD</td>
<td>Floor plans, section views, units, dimensions, hatching.</td>
</tr>
<tr>
<td>12</td>
<td>Creating Construction Maps with AutoCAD with AutoCAD</td>
<td>Topo Maps, Site Maps, Traverses, line types, layers, determining areas.</td>
</tr>
<tr>
<td>13</td>
<td>Creating Schematic Drawings with AutoCAD</td>
<td>Block Diagrams, Attributes, other</td>
</tr>
<tr>
<td>14</td>
<td>Special Topics</td>
<td>Assign Special Topics Project</td>
</tr>
<tr>
<td>15</td>
<td>Special Topics</td>
<td>Special Topics Project</td>
</tr>
</tbody>
</table>