COURSE SYLLABUS
ITEN 4303 Selected Topics:
Computer Applications in Industrial Technology
Summer II, 2008

Instructor: Dr. Bruce Marsh
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Meeting Time: MTW 6-9:20 pm
Meeting Place: IT109/Mac Lab
Office Hours: MTW 4-6 pm

Description: ITEN 4303 - Selected Topics: Computer Applications in Industrial Technology, a 3 credit hour course centering on advanced computer concepts and terminologies with a special emphasis on selective software programs, specifically Excel spreadsheet and FileMaker database programs. There are no prerequisites for this course.


Objectives and Learner Outcomes: The purpose of this course is to help you develop fundamental knowledge and insight into the use and application of computers in the field of Industrial Technology. Through this course you will develop an understanding of the dilemmas that have arisen in this field due to society’s acceptance and application of computer technology. Objectives of this course include:

• developing an understanding of the terms and concepts related to computer hardware including memory, storage, and the movement of data.
• developing an understanding of the terms and concepts related to computer software application programs specifically spreadsheets, and database programs.
• developing an understanding of the charting and graphing and data analysis capabilities within MS Excel, Powepoint, and Access programs.
• examining the impact of computer technology and its effects in shaping society and our future.
• identifying the considerations and paradigms needed when selecting, evaluating, and adopting computer technology.

Expected learner outcomes

• demonstrate the ability to use and apply charting and graphing and data analysis tools within the MS Excel spreadsheet program, MS Powerpoint program, and the Access database program.
• demonstrate the use and application of charting and graphing and data analysis tools through successful completion of the final exam.

Activities and Requirements. Various activities will be integrated into this course. Through assigned readings, you will be exposed to a wide range of concepts, problems, and issues associated with computers and computer applications. During in-class discussions and lab work, you will be given an opportunity to learn more about topics from your readings. Through lab assignments/projects, you will the opportunity to apply topics from your readings and/or ones that have been discussed in class. All work submitted, written or lab, will be considered final and evaluated as such unless prior arrangements are made for a draft review. All written work submitted must have a cover page with your Assignment description, course, course #, name, and date. Submitted work should be stapled--no paper clips or loose/unattached papers.
Grading and Evaluation Criteria. Letter grades will be assigned based on the distribution of percentage points earned throughout the semester. The percentage point distribution that will be used is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum Percentage</th>
<th>Maximum Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 - 100%</td>
<td>(360-400 pts)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>80 - 89%</td>
<td>(320-360 pts)</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>70 - 79%</td>
<td>(280-320 pts)</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>60 - 69%</td>
<td>(240-280 pts)</td>
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Keep in mind that everyone starts the semester with an A or 100%. Consequently, it's not what you do that earns you a percent but what you don’t do that decreases your percent.

The final exam will be given during the week scheduled by the university. The chapters and/or information covered in the exam will be determined as the semester progresses. The final exam will be worth 100 points and will be scored on the 10 point scale (90-100 = A, 80-89 = B, etc). The final grade for the course will be based on a weighted average of all assigned activities and exams (see below).

<table>
<thead>
<tr>
<th>Activities</th>
<th>Activity Points</th>
<th>Total Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (16 given, 12 req’d)</td>
<td>5.0</td>
<td>60.0</td>
<td>15%</td>
</tr>
<tr>
<td>Labs (9 given, 8 req’d)</td>
<td>10.0</td>
<td>80.0</td>
<td>20%</td>
</tr>
<tr>
<td>Project #1</td>
<td>40.0</td>
<td>40.0</td>
<td>10%</td>
</tr>
<tr>
<td>Project #2</td>
<td>60.0</td>
<td>60.0</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>120.0</td>
<td>120.0</td>
<td>30%</td>
</tr>
<tr>
<td>Attendance and Participation</td>
<td>40.0</td>
<td>40.0</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>400.0</strong></td>
<td></td>
<td><strong>100%</strong></td>
</tr>
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</table>

Attendance Policy. Your attendance is expected at each scheduled class and/or lab activity. Individuals with three or more consecutive absences during the semester may be dropped from the course.

Assignment/Lab Submittal Policies. To get credit for a lab assignment you must be in attendance on the day/session the lab assignment is given. Labs will not be accepted for credit beyond their scheduled due date. Unless otherwise instructed, any assignment that is due on or before the last day of classes will not be accepted for credit after the last class day. Any assignment for which there is no work submitted will receive a zero. As a final note, since the number of quizzes and assignments given during the semester normally exceeds the number used for final grade calculation, the lowest quiz and/or assignment scores will be dropped. If the number of quizzes and/or assignments taken equals the number required, all scores will be used.

Attendance and Participation Points. The points allotted for Attendance and Participation (A/P) will be calculated based on the total number of quizzes, and labs completed during the semester. For example, 36 points is allotted for A/P for the course and 16 quizzes and 8 labs will be given during the semester (a total of 24 activities), if only 16 are completed, the net effect on the A/P points earned would be as follows: (36/24)*16 = 24 points. Consequently, it is to your benefit to complete more than the minimum number of activities required for final grade calculations.

Supplemental References.

**ITEM 4303: Selected Topics**  
Computer Applications in Industrial Technology  
Tentative Schedule - Summer II, 2008

<table>
<thead>
<tr>
<th>Week</th>
<th>Session</th>
<th>Topics/Activities</th>
<th>Assignments</th>
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</table>
| Week 1| July 7  | Course Syllabus, Introduction  
Computer Lab Operation  
Projects Identification  
Excel Fundamentals  
Text, formulas, charting & graphing  
Excel Assessment | **Read:** INT 1: Intro |
|       | July 8  | INT Unit: Introduction  
QUIZ 1 (INT 1)  
LAB 1: Excel  
Simple Regression | **Read:** HW 2  
**Start:** Lab 1  
**Start:** Project 1 |
|       | July 9  | Open lab  
Projects and Labs | |
| Week 2| July 14 | HW Unit: Hardware  
QUIZ 2 (HW 2)  
LAB 2: Excel  
Simple/Multiple Regression | **Read:** HW 3 & 4  
**DUE:** Project 1-selected indiv  
**DUE:** Lab 1 |
|       | July 15 | HW Unit: Hardware  
QUIZ 3 & 4 (HW 3 & 4)  
LAB 3: Excel  
Multiple/Categorical Regression | **Read:** SW 5 & 6  
**DUE:** Project 1-selected indiv  
**DUE:** Lab 2 |
|       | July 16 | SW Unit: Software  
QUIZ 5 & 6 (SW 5 & 6)  
LAB 4: Excel  
Regression Review | **Read:** NET 7 & 8  
**DUE:** Project 1-selected indiv  
**DUE:** Lab 3 |
|       | July 17 | Open Lab  
Projects and Labs | **OPT:** Lab 4 (EC early submit) |
Week 3  July 21  NET Unit: Network  
Project #2 Overview  
QUIZ 7 & 8  (NET 7 & 8)  
LAB 5: Excel  
Sorting/Time Calculations  

Read: NET 9 & WA 10  
START: Excel Project #2  
DUE: Project 1-selected indiv  
DUE: Lab 4  

July 22  NET Unit & WA Unit:  
QUIZ 9 & 10  (NET 9 & WA 10)  
LAB 6: Excel  
QC Analysis  

Read: WA 11 & SYS 12  
DUE: Project 1-selected indiv  
DUE: Lab 5  

July 23  WA Unit & SYS Unit:  
QUIZ 11 & 12  (WA 11 & SYS 12)  
LAB 7: Excel  
Find & Replace  

Read: SYS 13 & 14  
DUE: Project 1-selected indiv  
DUE: Lab 6  

July 24  Open Lab  
Projects and Labs  

OPT: Lab 7 (EC early submit)  

Week 4  July 28  SYS Unit: Systems  
QUIZ 13 & 14  (SYS 13 & 14)  
LAB 8: Powerpoint  
Charting, Graphing, and Slideshow  

Read: CS 15  
DUE: Project 1-selected indiv  
DUE: Lab 7  
DUE: Project 2  

July 29  CS Unit: Computers and Society  
QUIZ 15  (CS 15)  
Intro to Databases  
LAB 9A: Database Creation  

Read: CS 16  
DUE: Project 1-selected indiv  
DUE: Lab 8  

July 30  CS Unit: Computers and Society  
QUIZ #16  (CS 16)  
Intro to Databases  
LAB 9B: Database Modification  

DUE: Project 1-selected indiv  
DUE: Lab 9A and 9B  

Week 5  Aug 4  Open Lab  
Review for Final  

Aug 5  Final Exam  
Graduates  

Aug 6  Final Exam  
Non-Graduates  

Aug 5  Final Exam  
Graduates  

Aug 6  Final Exam  
Non-Graduates