

DEPARTMENT OF TECHNOLOGY
TEC 161
COMPUTER APPLICATIONS IN INDUSTRY

Instructor:

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Office:

405 Whalin Technology Complex

Office Hours:

Online: Tuesday 5 pm - 8 pm. Other times by appointment.

Class schedule:

1st class meeting on-campus, 14 June, 6 pm – 8 pm, in Room 341, Whalin Complex, Richmond

Final presentation, 5 August, 6 pm – 8 pm, in Room 341, Whalin Complex, Richmond

Online (Optional): Monday, 6 pm - 8 pm. Material for the week will be outlined.

Optional: Thursday, on-campus meetings: 5 pm - 8 pm, in the Whalin Technology Complex, Room 341. Students may come on campus to work on assignments. Additional meetings times will be decided depending on class needs.

Credit hours:

3

- I. **CATALOG DESCRIPTION:** A survey of computer systems and software applications currently being used in manufacturing and construction industries. 2 Lec/2 Lab. This semester Microsoft Word, Excel, Access, and PowerPoint will be the software applications emphasized in the class.
- II. **PREREQUISITE:** None
- III. **CREDIT HOURS:** Three (3) semester hours
- IV. **REQUIRED TEXTBOOK:**
Rutkosky, Nita H. (1999). **Microsoft Office 2000**. St. Paul , MN. Paradigm Publishing Inc.
ISBN: 0-7638-0255-7

V. COMPUTER FACILITIES AND REQUIRED MATERIALS:

Fifteen Pentium multimedia computers are available in 341 Ault Building (Whalin Technology Complex) for the class.

Every student should purchase **four 3.5" high-density disks** to store his/her own working files.

VI. COURSE OBJECTIVES: Students successfully completing this course will have an understanding of:

- A. The functions that are common to computer application programs;
- B. Computer terminology;
- C. How to work in the Windows 98 and 2000 environment; and
- D. Techniques needed to be able to prepare documents that are commonly used in industry using word processing, electronic spreadsheet, database management, and presentation software, web page development, simulation software

VII. COURSE OUTLINE:

- A. Introduction
- B. Computer Terminology
- C. Computer History
- D. Operating Systems
- E. Using Windows 2000
 - 1. The basics
 - a. The mouse and keyboard
 - b. Icons and windows
 - c. My Computer
 - d. The Start button
 - e. Starting and shutting down Windows
 - f. Running and switching among applications
 - 2. The Control Panel
 - 3. Creating **Web** pages
- F. Word Processing using Microsoft **Word** 2000
 - 1. Basics
 - 2. Advanced functions
- G. Computer Communications
 - 1. E-mail
 - 2. Using the Internet
 - a. Browsers
 - b. Search Engines

- H. Spreadsheet creation and use with Microsoft **Excel** 2000
 - 1. Spreadsheet basics
 - 2. Advanced operations
 - 3. Charts and graphs

- I. Presentation graphics using Microsoft **PowerPoint** 2000
 - 1. Creating a presentation
 - 2. PowerPoint views
 - 3. Slide shows
 - 4. Interactive slide shows

- J. Database management using Microsoft **Access** 2000
 - 1. Database basics
 - 2. Creating a table
 - 3. Creating a form
 - 4. Creating a query
 - 5. Creating an update query
 - 6. Creating a report
 - 7. Printing a report
 - 8. Managing relational databases

- K. Simulation software in technology

VIII. COURSE ACTIVITIES:

- A. Each student is expected to complete laboratory assignments designed to familiarize him or her with the use of computer equipment, operating systems, and application software.

- B. Each student will be expected to perform satisfactorily on both written and performance tests.

- C. Each student will be expected to complete written assignments relating to course content.

IX. EVALUATION PROCEDURES: Final evaluation will be based on successful and satisfactory completion of all assignments, satisfactory completion of tests, and class attendance.

- A. Exercises and online participation: 30%
There will also be a requirement that students have a minimum total of 3 online posts/week in the blackboard online discussion board - 1 question and 2 replies to a question or prompt offered by me or any other student in the class. You may participate as many times as you wish – the more the better. Extra credit will be awarded for insightful postings on the discussion board.

- B. Four Unit tests, each consisting of objective questions, and a performance test. The topics for each unit are Word, Excel, Access, PowerPoint and worth: 70%

Grading scale:

GRADE	RANGE	
A	90	100
B	80	89
C	70	79
D	60	69
F	less than 60	

- X. ATTENDANCE POLICY:** Students are expected to attend all class sessions in order to derive full benefits from the course.

There will be having two weekly meetings – Monday 6-8pm online (optional), and in-class (optional) on Thursday 6-8pm on-campus in case some students want to come to ECU Richmond campus and practice. On each Monday, material for the week will be outlined – this in most cases will cover 3-4 chapters of the text. For the Monday online session students should log-on into the Blackboard system Virtual Classroom.

All assignments and unit tests must be turned in on schedule to receive full credit. Delayed submissions will receive reduced credit, unless the delay has been approved in advance. You will benefit most by way of understanding the content of the course by completing all the assignments in a timely manner.

XI. LAB RULES:

Food and drinks are prohibited in the computer laboratory.

Unauthorized duplication (i.e., copying) of copyrighted software is prohibited. Copyrighted software is licensed to the original purchaser only and is not for distribution to other parties for any consideration or for any reason.

Each student is expected to do his or her own work on assignments and tests. Copying a classmate's work or the work of a former student is plagiarism and will warrant a failing grade.

XII. DISABILITY STATEMENT

If you are registered with the Office of Services for Individuals with Disabilities, please make an appointment with the course instructor to discuss academic accommodations you need. If you need academic accommodations and are not registered with the Office of Services for Individuals with Disabilities, please contact the Office directly, either in person on the first floor of the Turley House or by telephone at (859) 622-1500 V/TTY. Upon individual request, this syllabus can be made available in alternative forms

Any suggestions leading to improvements in the content or presentation of the course, especially in the laboratory work, are most welcome.