



**I. COURSE DESCRIPTION:**

This introductory course is a study of the terminology and operation of a personal computer, computer operating systems and applications. The student will learn the relationships of the hardware and software of a personal computer, as well as typical applications used in the Electrical / Electronics industry. The information presented will serve as a foundation for future courses that study, in detail, specific application software, programming and hardware interfacing of PC's and Microprocessors.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon successful completion of this course, the student will demonstrate the ability to:

1. Understand the function of the major components of a PC.

Potential Elements of the Performance:

- Recall the functional Block Diagram of a typical PC
- Identify major components and their function
- Recall correct terminology associated with PC hardware
- Specify hardware requirements for a PC
- Obtain PC characteristics by accessing the BIOS and POST

2. Understand the function of Operating Systems.

Potential Elements of the Performance:

- Recall the function of an Operating System
- Recall the typical "Boot" process of a PC
- Identify and distinguish characteristics of various operating systems.
- Recognize essential system files and their function

3. Correctly navigate a PC for effective file management.

Potential Elements of the Performance:

- Understand file structure and organization
- Efficiently perform file management using both "Command Line" and "GUI" processes

- Recall various file types and their associations
4. Efficiently utilize an Engineering Software Package to analyze simple electric circuits.

Potential Elements of the Performance:

- Accurately fabricate a simple electric circuit using specified software package
- Correctly obtain data from the simulation software

### III. TOPICS:

1. PC Hardware Terminology
2. Operating Systems
3. File Structure and File Management
4. Application Software

### IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- 5 - 3.5" Floppy Disks ( New )
- TEXTBOOK – Windows 2000 MS-Dos Command Line by Phillips and Skagerberg
- Instructors Course Notes
- Access to the Internet

### V. EVALUATION PROCESS/GRADING SYSTEM:

**The final grade will be a combination of theory and practical tests.**

60% = Theory ( Consisting of 2 to 3 tests and several quizzes)

40% = Lab Activities ( Lab Reports and Practical Tests )

- **See Special Notes Section VI, for further details affecting final grade.**

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	

B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

## VI. SPECIAL NOTES:

### Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493 so that support services can be arranged for you.

### Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

### Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

- Attendance to lab activities is compulsory, unless discussed with the instructor in advance of the absence and the absence is for a medical or family emergency. A **deduction of 2% per Lab missed**, will be imposed on the final lab mark.
- Your attendance to all classes, and your final grade are directly related. A **deduction of 1% per theory hour missed**, will be imposed.
- Any student that is absent for a test, will be required to provide a doctors' note immediately upon returning. Failing to do so will result in a grade of 0% being assigned to the missed test.
- Tests, quizzes and other activities, will not be scheduled on an individual basis, unless it is for a medical or family emergency.
- Disruptions to theory classes, such as lateness, are not acceptable and will be dealt with on an individual basis.

**Laboratory Reports**

All Lab Reports are due at the start of the following weeks Lab Class unless otherwise stipulated by the instructor. A **penalty of 10% per day** will be assessed for late submissions ( Weekends included).

**All Lab Reports must be submitted in a Duo-Tang cover.**

All other required submissions will be assessed a late penalty of **5% per day** ( Weekends included).

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

**VIII. DIRECT CREDIT TRANSFERS:**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.

