COMPUTER OPERATING SYSTEM	GE 113
Course Title	Dept & Course No.

I. COURSE DESCRIPTION

This course is designed to provide the students with the knowledge and skills required in the manipulation of the computer system. It covers basic hardware set up, maintenance, and installations of different types of operating system software and application software in the general electronics technology courses.

II. SEMESTER CREDIT: 3

III. CONTACT HOURS PER WEEK:

2	3	5
Lecture	Lab	Total

IV. PREREQUISITE: NONE

V. STUDENT LEARNING OUTCOMES:

Upon completion of the course, the students will be able to, with 65% accuracy to;

1. Connect the different cable port of computer.

2. Discuss the association of the computer system

3. Explain the boot-up process

4. Run DOS commands

5. Install different operating system and device driver to the computer

VI. COURSE CONTENT

A. Connecting computer peripherals
   1) Different computer port
   2) Internal buss
   3) Computer peripherals
B. Introduction to the computer system
   1) Precautions in the Use of Computers and the Computer Laboratory
   2) The Hardware System
   3) The Firmware System
   4) The Soft ware System
C. Disk operating system
   1) Magnetic Storage Disk
   2) Boot-up Record and FAT
   3) System Boot-up File
   4) Boot-up Sequence
   5) DOS Prompt
D. DOS command
   1) Internal DOS Commands
   2) External DOS Commands
E. Introduction to computer system
   1) Precautions in the Use of Computers and the Computer Laboratory
   2) The Hardware System
   3) The Firmware System
   4) The Software System
F. Disk Operating System
   1) Magnetic storage disk
   2) Boot-up record and FAT
   3) System boot-up file
   4) Boot-up sequence
   5) DOS prompt
G. Operating System

1) Memory requirements
2) Steps and procedures
3) Fix and partition the HDD
H. Types computer files
1) Parts of a computer file
2) Command files
3) Executable files
4) Batch files
5) Text files
6) Other computer files

6. Perform user and software configuration

I. Windows control panel
1) Add Hardware
2) Add and remove software
3) Display
4) Folder options
5) Internet options
6) Keyboard and mouse
7) Network connections
8) Printer
9) System

7. Install different application software to the computer

J. Types of application software
1) MS office
2) Electronics CAD
3) Games

8. Disinfect the computer from viruses.

K. Antivirus Software
1) AVG
2) Kasperskey
3) MaAfee

VII. MATERIALS AND EQUIPMENT

1. 16 Set of updated model of Desktop Computers
2. Blank CD and DVD Disk
3. Hard disk drive (HDD)

4. Windows Operating Software
5. AVG Antivirus Software Computer Cleaning materials

VIII.   TEXT AND REFERENCES
A. Required Text
   NONE. Instructor's made handouts

IX. METHOD OF INSTRUCTION
A. Lecture for the presentation of theory.
B. Demonstration for the presentation of skills.
C. Computer Aided Learning
D. Research/calculations
E. Practical experiments for emphasis of known principles.

X. METHOD OF EVALUATION
A. Knowledge will be evaluated using the following methods:
   1. Written test
   2. Graded recitation/Oral presentation
   3. Instructor's Interview

B. Skills will be evaluated using the following criteria:
1. Accuracy
2. Quality of work
3. Safety
4. Timeliness/Completion

C. Midterm and final grade are computed and weighted using the following criteria:

Participation 10%
Portfolio... 10%
Quizzes/Homework 10%
Midterm/Final Examination 20%
Laboratory Performance/Project............................ 50%

TOTAL = 100%

D. Transmutation of total percent to letter grade:

90-100%.. A
80-89%... B
70-79%... C
65-69%... D
00-64%... F

GE 113 COMPUTER OPERATING SYSTEM	Credit:	2	3	48
Course No. & Title		Lec	Lab	Total Lab Hrs

COURSE LEARNING OUTCOMES	Allotted Hours
1. Connect the different cable port of computer	2
1.1 Connect and label the different ports of computer	
2. Install different operating system and device driver to the computer	22
2.1 Construct a simple computer program in accessing different computer files	
2.2 Boot-up a computer and identify the sequence of the booth up process. Install computer operating system	
2.3 Explore the internal and external commands prompt	
2.4 Printer	
2.5 Scanner	
2.6 Audio and video device	
2.7 CD/DVD ROM	
3. Perform user and software configuration	10
3.1 Customize and configure the computer operating system according to client's requirements	
4. Install different application software to the computer	8
4.1 Install operating system on the computer	
4.2 Install office applications.	
4.3 Install other applications required by the client.	
5. Disinfect the computer from viruses	6
5.1 Perform software and hardware maintenance	
5.2 Disinfect computer from viruses, malicious software and other electronic infections.	
	48

During the course experience, the *course learning outcomes* (CLO) will be assessed through the use of signature assignments. A rating scale will be used to determine the students' proficiency level of each CLO using specifically aligned assignments. The numerical rating of 4,3,2 and 1 are not intended to represent the traditional school grading system of A, B, C, D and F. The descriptions associated with each of the numbers focus on the level of student performance for each of the course learning outcome listed below.

Rating Scale:
- 5. Excellent
- 4. Above average
- 3. Average
- 2. Below Average
- 1. Unacceptable

1. Connect the different cable port of computer

5	The student is able to connect the different cable port of computer without any supervision and instruction
4	The student is able to connect the different cable port of computer with limited supervision but no instruction
3	The student is able to connect the different cable port of computer with limited supervision and limited instruction
2	The student has difficulty to connect the different cable port of computer and requires considerable supervision and instruction
1	The student is unable to connect the different cable port of computer

2. Install different operating system and device driver to the computer

5	The student is able to install different operating system and device driver to the computer without any supervision and instruction
4	The student is able to install different operating system to the computer with limited supervision but no instruction
3	The student is able to install different operating system and device driver to the computer with limited supervision and limited instruction
2	The student has difficulty to install different operating system and device driver to the computer and requires considerable supervision and instruction
1	The student is unable install different operating system and device driver to the computer

3. Perform user and software configuration

5	The student is able to perform user and software configuration without any supervision and instruction
4	The student is able perform user and software configuration with limited supervision but no instruction
3	The student is able to perform user and software configuration with limited supervision and limited instruction
2	The student has difficulty to perform user and software configuration and requires considerable supervision and instruction
1	The student is unable to perform user and software configuration

4. **Install different application software to the computer**

5	The student is able to install different application software to the computer without any supervision and instruction
4	The student is able to install different application software to the computer with limited supervision but no instruction
3	The student is able to install different application software to the computer with limited supervision and limited instruction
2	The student has difficulty to install different application software to the computer and requires considerable supervision and instruction
1	The student is unable to install different application software to the computer

5. **Disinfect the computer from viruses**

5	The student is able to disinfect the computer from viruses without any supervision and instruction
4	The student is able to disinfect the computer from viruses with limited supervision but no instruction
3	The student is able to disinfect the computer from viruses with limited supervision and limited instruction
2	The student has difficulty to disinfect the computer from viruses and requires considerable supervision and instruction
1	The student is unable to disinfect the computer from viruses