El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA   **Computer Science**

COURSE RUBRIC AND AREA   **COSC 1301**

COURSE TITLE   **Introduction to Computer and**
                                                    Information Sciences

COURSE CREDIT HOURS   **3**   **3**   :   **1**
                                               Credits   Lec   Lab

I.   Catalog Description

Presents an overview of computer systems hardware, operating systems, the internet and application software including word processing, spreadsheets, presentation graphics and databases. Studies current topics such as the effect of computer on society, and the history and use of computers in business, educational, and other interdisciplinary settings. NOTE: A grade of "C" or better is required in this course to transfer to a university. **(3:1).**

II.   Course Objectives

Upon satisfactory completion of this course the student will be able to:

A.   Digital Technologies and Computing Platforms

   1.   Provide an overview of the operation of a computer system.
   2.   Explain how data is organized, read, stored, processed, and maintained.
   3.   Describe existing digital technologies and computing platforms, including mobile technologies.
   4.   Enhance teamwork skills by working in groups to gain knowledge about how the global business world uses information systems in different cultures and societies.

B.   Hardware and Emerging Technologies

   1.   Describe the hardware components of a system.
   2.   List the various types of auxiliary storage devices and media that are available and discuss the characteristics, advantages, and disadvantages of each.
   3.   Describe the role of emerging technologies in the processing of information.
   4.   Identify practical purchasing solutions for meeting a variety of computing needs.

C.   Operating Systems, Application Software, and File Management

   1.   Describe and examine the functions of an operating system.
   2.   Demonstrate proficiency with file operations and utilities.

        a.   Navigate to drives, folders, and files within the file management utility.
        b.   Create, rename, move, copy, rename, and delete folders within the file management utility.

      c. Identify drive capacities and file size terminology.

3. Identify the software applications suitable for processing and reporting in different environments to accomplish specific tasks.
4. Identify the different types of output to provide the most useful information.
5. Demonstrate proficiency with various application suite programs to include Word Processing, Spreadsheets, Presentation, and Databases.

      a. Create and modify word processing files.
      b. Utilize various word processing features within Microsoft Word to help facilitate better written communication skills.
      c. Create and modify spreadsheet files and utilize problem solving and mathematical skills.
      d. Create various graphs/charts within Excel.
      e. Create and modify presentation files to help facilitate better oral and visual skills.
      f. Create database objects to include tables, forms, reports, queries, etc., to help facilitate solving real-world problems in information business systems**.**

D.   Telecommunications, Networking, and the Internet

1. Run Internet browser applications like Internet Explorer, Chrome, and Firefox.
2. Apply navigation and research skills using the Internet.
3. Identify the capabilities of email and utilize it with an emphasis on personal responsibility and netiquette.
4. Demonstrate a basic level of connectivity utilizing and troubleshooting data communications and networking technologies.
5. Discuss the use of the Web technologies including topics like websites, encryption, and cloud computing.

E.   Ethics, Privacy, and Information Security

1. Identify ethical issues related to digital technology that impact society.
2. Describe the guiding principles of ethical and professional responsibilities and behavior in society and the workplace.
3. Identify potential threats to privacy in personal and professional environments.
4. Examine security issues in information systems and the Internet and identify solutions.

F.   Current Topics

1. Examine how digital technologies influence the way in which people live their lives.
2. Discuss current computing topics such as accessible computing, green technologies, etc.
3. Research digital media formats such as graphics, video, publications, augmented reality, and virtual reality.
4. Analyze the effects of digital media on society with topics such as intellectual property, legal rights, fair use, and plagiarism.
5. Describe communication on the Internet with topics such as freedom of speech, social networks, and censorship.
6. Analyze the impact of big data and describe how information systems aid businesses in a globalized world.

III.   THECB Learning Outcomes (ACGM)

Upon successful completion of this course, students will:

1.   Describe the fundamentals of computing infrastructure components: hardware, application software, operating systems, and data communications systems.

2.   Delineate and discuss societal issues related to computing, including the guiding principles of professional and ethical behavior.
3.   Demonstrate the ability to create and use documents, spreadsheets, presentations and databases in order to communicate and store information as well as to support problem solving.
4.   Describe the need and ways to maintain security in a computing environment.

IV.   Evaluation

A.   Preassessment

None

B.   Postassessment

This course will contain lab assignments and exams. The instructor will determine the mix of lab assignments and exams to arrive at a grade as described in the Instructor's Course Requirements document.

C.   Remediation

The instructor may provide the students with means of improving a grade. The instructor will determine the timing, form, and method of remediation.

D.   Final Grade

The final grade report will be based on the percentage of the total points earned.

90-100	=A
80-89.99	=B
70-79.99	=C
60-69.99	=D
0 -59.99	=F
Incomplete	=I
Withdraw	=W

V.   Disability Statement (Americans with Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI.   6-Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.

VII. **Title IX and Sex Discrimination**

Title 9 (20 U.S.C. 1681 & 34 C.F.R. Part 106) states the following "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Violence Against Women Act (VAWA) prohibits stalking, date violence, sexual violence, and domestic violence for all students, employees and visitors (male and female). If you have any concerns related to discrimination, harassment, or assault (of any type) you can contact the Assistant to the Vice President for Student and Enrollment Services at 915-831-2655. Employees can call the Manager of Employee Relations at 915-831-6458. Reports of sexual assault/violence may also be reported to EPCC Police at 915-831-2200.