

Course Proposal: Modify

CID and Name:

10224219-----Dunn, Deborah

1. Course: **CSC 201 Intro to Computer Programming**

2. Term/Year: **Fall 2014**

3. CIP CODE/10 Digit Program Code: **1102010006**

4. Current Course Title: **Intro to Computer Programming**

Modified Course Title: **Intro to Information Technology**

5. What is the primary reason you are modifying this course:

Course is being updated for the Information Technology program.

6. Enter course description exactly as it will appear in the general/graduation bulletin:

Basic techniques for solving problems by use of a digital computer. Emphasis on application of the computer as a quantitative tool and on the use of the FORTRAN language.

7. Enter modified course description exactly as it will appear in the general/graduation bulletin:

Introduction to the field of Information Technology including the hardware, software, and networking concepts required to understand the modern computing and communications world. Use scripting languages available on current operating systems and in the Internet environment.

8. Current Prerequisites:

two years of high school algebra or equivalent

9. Modified Prerequisites:

CSC 102

10. College: **College of Science/Mathematics**

11. Department Teaching Course: **Computer Science**

12. Instruction Type: **N/A**

13. Modified Credit Hours Maximum: **N/A**

Credit Hours Minimum: **N/A**

Maximum Hours counted toward degree: **N/A**

14. Maximum contact hours each week Fall Semester: **N/A**

15. May this course be taken more than one time each semester? **N/A**

16. Grade Type: **N/A**

17. Describe the place of the modified course within your current curriculum. (Will it be elective or required? Part of a major or a minor?)

The modified course will be a required course for the Information Technology majors and an elective course for the Information Technology minors.

18. How does the modified course differ from similar courses being offered at Stephen F. Austin?

There are no similar courses being offered at Stephen F. Austin.

19. Syllabus: Course Learning Goals

List course objectives; describe what students who complete the course will now or be able to do.

1. To describe how digital systems work. 2. To be able to identify and explain the parts of a computer system. 3. To be able to demonstrate an understanding of how computers store and manipulate information. Identify the storage media appropriate for specific tasks. 4. To be able to explain what the von Neumann architecture is and its significance. 5. To identify the role and functions of an operating system. 6. To be able to use system utility programs to identify running processes and their memory usage and for routine maintenance operations. 7. To be able to use system utility programs to perform file management functions such as creating, copying, deleting, and moving files and folders. Also be able to perform these tasks at the command prompt. 8. To be able to discuss basic networking concepts, identify by use and description network cables and devices, setup a peer to peer network or shared Internet connection, and explain the layers of the OSI model and their functions. 9. To be able to demonstrate the use of a scripting language to manipulate data on a single computer system and over the network. 10. To be able to explain how the client-server model of Internet programming works. 11. Be able to create simple web pages using a text editor, using HTML standards. Also be able to use scripting to create interactive web pages. 12. To be able to explain daily tasks for a variety of Information Technology careers.

20. Syllabus: Course Outline

List the topics that the proposed course will cover and indicate the approximate proposed amount of time to be devoted to each, either by percent of course time or number of weeks. Please indicate which topics will be required in all sections of the course and which may vary.

Week 1 Introduction to Information Technology, Computer Assembly Week 2 Computer Organization Week 3 Binary Numbering System and Data Storage Concepts Week 4 Introduction to Operating Systems Concepts Week 5 Files, Directories and the File System, User management Week 6 Processes and Services Week 7 Introduction to Client-Side Scripting – Bash/Powershell Shell Week 8 Regular expressions and file search tools Week 9 Networking and the Internet (OSI Model) Week 10 Network configuration & network software tools Week 11 Shell scripting (Programming Part 1) Week 12 Shell scripting (Programming Part 2) Week 13 Introduction to Markup Languages (HTML, XML, Unix configuration) Week 14 Introduction to Client-Side Scripting – Javascript Week 15 IT careers, Ethics, Organizational Impact

21. Any Other Information.

The purpose of this course is to familiarize the student with a broad high level understanding of how computer hardware, software, networks, and systems operate. Topics will include discussion of how computers operate; how the Internet and the World Wide Web operate; and how all of these affect security, privacy, property and other issues. It will also touch on fundamental ideas from computer science, and some of the inherent limitations of computers. The Bash shell and the Javascript language will be use to as an introduction to interpreted languages.

----Course Syllabus----

Must accurately reflect the course syllabus. (N/A is not acceptable response)

22. Program Learning Outcomes

List the program learning outcomes addressed in this course as identified in the course matrix for your degree program. If your department requires a listing of all Program Learning Outcomes (PLOs) on the syllabus, please identify those that are directly taught in this course. If this is a general education core curriculum course and no PLOs are taught in this course then insert the following statement under this heading:

This is a general education core curriculum course and no specific program learning outcomes for this major are addressed in this course.

Students will possess effective oral and written communication skills. Students will be aware of current ethical issues in the computing industry and will have an appreciation for their responsibilities as computer professionals. Students will be familiar with a variety of programming languages, operating systems, and platforms. Students can use practical knowledge and problem-solving skills to develop solutions to a variety of technology problems.

23. General Education Core Curriculum Objectives/Outcomes

List the Exemplary Educational Objectives (EEOs) for this course if the course is included in the general education core curriculum. If you have reworded the EEOs as outcomes for your course, please be sure that the original intent of the EEO is retained.

NA

24. Student Learning Outcomes

List all student learning outcomes (SLOs) for this course including the course specific student learning outcomes that support the PLOs above. In general, SLOs in a course that support the PLOs are specific and include the exact knowledge, skill or behavior taught in the course that supports the more global PLOs. For additional information on meaningful and measurable learning outcomes see the assessment resource page <http://www.sfasu.edu/assessment/index>

By the end of this course:

- Students will understand the components of a contemporary computer and know how to assemble them from components.
- Students will be able to execute basic commands to manage computers running Microsoft Windows and Unix/Linux/OS X.
- Students will be able to convert between binary, decimal and hexadecimal representations, and understand where these representations are necessary in dealing with data and commands.
- Students will be able to explain basic concepts of networking, and give examples of the functions at each layer in the OSI model.
- Students will understand the concept of information and how information is stored, utilized and secured within the context of information technology.
- Students will be able to read and discuss current articles in the professional IT press dealing with trends in IT infrastructure and its context.
- Students will be able to understand and differentiate between the available career paths in Information Technology.

25. Syllabus: Modified Textbook/Assigned Reading Materials for course:

Fox, Richard., Information Technology: An Introduction for Today's Digital World., 1st Ed., Chapman and Hall/CRC., ISBN: 1-466-56828-3., 2013.

26. Course Requirements

Describe the major course requirements, assignments, examinations, projects.

Examinations: (70% of the course grade) Two or three regular examinations plus a comprehensive final. The final exam counts double. NOTE: There are NO exemptions from the final examination. Assignments: (10% of the course grade) Assignments, unannounced quizzes, and attendance. Labs: (20% of the course grade)

27. Course Calendar

Create a tentative timeline for the course. At a minimum, list the topics that the course will cover and indicate the approximate amount of time to be devoted to each, either by percent of course time or number of weeks. The calendar should provide information for the maximum number of weeks scheduled for the course.

Week 1 Introduction to Information Technology, Computer Assembly Week 2 Computer Organization Week 3 Binary Numbering System and Data Storage Concepts Week 4 Introduction to Operating Systems Concepts Week 5 Files, Directories and the File System, User management Week 6 Processes and Services Week 7 Introduction to Client-Side Scripting – Bash/Powershell Shell Week 8 Regular expressions and file search tools Week 9 Networking and the Internet (OSI Model) Week 10 Network configuration & network software tools Week 11 Shell scripting (Programming Part 1) Week 12 Shell scripting (Programming Part 2) Week 13 Introduction to Markup Languages (HTML, XML, Unix configuration) Week 14 Introduction to Client-Side Scripting – Javascript Week 15 IT careers, Ethics, Organizational Impact

28. Grading Policy

Describe how the grade for the course is determined.

Examinations: (70% of the course grade) Assignments: (10% of the course grade) Labs: (20% of the course grade)

29. Attendance Policy

State your attendance policy.

Attendance will not be used in calculating your final grade. If you come to class, you are expected to be present the entire class period unless you have been given permission to leave early. If you are absent from class please do not come by my office and ask me to repeat the class lecture.

30. Academic Integrity (A-9.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

31. Withheld Grades Semester Grades Policy (A-54)

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

32. Students with Disabilities

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to <http://www.sfasu.edu/disabilityservices>.

Dept. Chair Michael M. Pichard Date: 10/30/2013

College Curriculum Chair _____ Date: _____

Dept. Dean _____ Date: _____

College Curriculum Dean _____ Date: _____

RELEASE: 8.3

© 2013 Ellucian Company L.P. and its affiliates.