CSC 100: Introduction to Problem Solving

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An important note about my contact information. My name is very often spelled incorrectly. When trying to contact me via email this can mean the difference between me getting the message and your message floating endlessly in hyper space. Please be sure you double check the spelling when sending me messages. My last name, Hutchison, only has one letter n and it is at the end of my name.

Office Hours:

Monday: 2:30 to 4 pm
Tuesday: 9:30 am to 10:45 and 2 to 3:30 pm
Wednesday: 9:15 to 10:45 am and 2:30 to 3:30 pm
Thursday: 9:30 to 10:45 am
Friday: By appointment

The office hours above are just a starting point. I am often online and I am frequently available outside these hours, including evenings. You may email me at any time. I will gladly make appointments for other times (either online or in person).

Any changes to office hours will be posted on BRIGHTSPACE BY D2L in the Course News Announcements.

CSC AARC:

The CSC AARC (Academic Assistance Resource Center) will offer evening sessions during the week. You may use this time to get help from the tutors, or simply to make use of the lab computers. For Fall 2018 the tentative hours for the CSC AARC are Monday through Thursday from 5 – 8 in STEM 206. Check BRIGHTSPACE BY D2L or posted hours outside STEM 206 for any changes to these hours.

Class meeting time and place:

CSC 100.001
1:00 - 2:15 am on Monday and Wednesday in the Cole STEM Building Room 314

Course Description

Introduction to operating systems and file management. Use of spreadsheets and programming languages for solving problems.

PURPOSE OF COURSE

To provide experience using a computer as a problem solving and productivity tool. To provide practice using an operating system and managing files in a networked environment. To develop competencies in utilizing
software to organize, analyze and store data. To provide experience using digital resources to locate information. To explore problem solving through programming.

Prerequisite:

Eligibility for enrollment in college algebra.

Required Materials:

There is no required book for this course, all material will be presented in class or provided on BRIGHTSPACE BY D2L. If you would like recommendations on reference books, just let me know.

Course Requirements:

While this is NOT an online class, we will be using Internet resources and making use of the SFA BRIGHTSPACE BY D2L Learning Management System for homework and quiz submissions. Students are encouraged to complete the BRIGHTSPACE BY D2L Student Tutorials prior to the first day of class. This is a face-to-face class and student success is dependent upon being present at every class meeting.

Examinations:

Examinations are worth 800 of the 1,000 total course points. There will be fours exams, each is worth 200 points. See class calendar in D2L for the dates.

All class examinations are considered to be a major part of the course work upon which a large part of the course grade depends. Class examinations will be announced at the start of the semester. If you have a conflict with another university event, you must contact me well in advance of the examination. In case of an extreme emergency, contact me before the scheduled examination. Failure to do so will result in an examination grade of zero. There are no exemptions for the final examination and no changes in taking the final examination. All students must take the final exam. A zero on the final exam will result in an F in the course. Check the final examination time. If the final examination time is a problem, you need to drop this course. Once a student leaves the room on the day of an examination, they will not be permitted to return. Once the first person has left the room on the day of an examination, no one else will be permitted to begin the exam. Possession of a cell phone or other electronic communication device during an exam will result in an examination grade of zero.

Note: There are no exemptions for the final examination and no changes in taking the final examination. All students must take the final exam. A zero on the final exam will result in an F in the course. Check the final examination time. If the final examination time is a problem, you need to switch to another section of this course.

Assignments:

Per SFA policy 5.4, this course requires an amount of student work per credit hour that reasonably approximates at least two hours of out-of-class student work per week for fifteen weeks over a long semester. So for this 3 credit hour course, class work approximates 150 minutes of instruction and at least 6 hours of out-of-class work per week for fifteen weeks.
Assignments which programs, quizzes, posts, and participation are worth a total of 200 points of the 1,000 total course points (20% of the course grade) will be given. Periodic in class assignments will be given. Assignments may be of unequal weight. Not all assignments will be graded. Missed work may not be made up. All assignments are due at the announced time on the specified due date. If you have a conflict, please contact me in advance. Please Note: You will be given assignments during the last five class days of the semester.

Course Calendar/Approximate Timeline:

<table>
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<tr>
<th>Week</th>
<th>Topics</th>
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| 1    | Course introduction  
       | Computer history highlights  
       | System components |
| 2    | Storage and data representation  
       | Computers in society (privacy, security, ethics, professions)  
       | Data communication principles and equipment  
       | Using local and wide area networks |
| 3    | Accessing digital resources  
       | Downloading and using information from the Internet  
       | Boot process  
       | Launching application software  
       | Utility programs |
| 4    | File types, names, directories, and path information  
       | File compression/extraction  
       | Searching for file  
       | Exam 1 |
| 5    | Designing and organizing a spreadsheet  
       | Formatting  
       | Generalizing solutions using formulas and functions |
| 6    | Generalizing solutions using formulas and functions  
       | Cell addressing (relative, absolute, mixed)  
       | Problem Solving |
| 7    | Problem Solving  
       | Data Analysis |
| 8    | Data Analysis  
       | Communicating with visualization |
| 9    | Communicating with visualization  
       | Exam 2 |
| 10   | The need for programming languages  
       | The need for and creativity in algorithms |
| 11   | Using simple commands |
| 12   | Creating functions  
       | Top down design |
| 13   | APIs  
       | Selection |
| 14   | Iteration  
       | Exam 3 |
| 15   | Problem Solving  
       | Data Analysis |
|      | Final Exam |
Specific exam dates and assignment due dates will be available on the Calendar tool in the BRIGHTSPACE BY D2L learning management system. Once registered and the semester has started, students can access BRIGHTSPACE BY D2L via d2l.sfasu.edu using their mySFA username and password.

**Grading Policy:**

**End of Course Grade:** There are a total of 1,000 possible points in the course. End of course letter grades will be based on the number of points earned.

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>900 - 1,000</td>
<td>A</td>
</tr>
<tr>
<td>800 - 899</td>
<td>B</td>
</tr>
<tr>
<td>700 - 799</td>
<td>C</td>
</tr>
<tr>
<td>600 - 699</td>
<td>D</td>
</tr>
<tr>
<td>Below 600</td>
<td>F</td>
</tr>
<tr>
<td>Missing the final Exam</td>
<td>F</td>
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*Note: A grade of QF will be assigned to students that are failing due to non-participation in the course.*

**Final Exam:** There are no exemptions from the final examination and no changes in taking the final examination. **All students must take the final exam. A zero on the final exam will result in an F in the course.** If the final examination time is a problem, you need to drop this course. Final Exam times for all classes are available on the university web site (sfasu.edu) and for this course on the BRIGHTSPACE BY D2L course calendar.

**Attendance:** Student success is dependent upon being present at every class meeting. If you are absent from class please make sure to get notes from a classmate. Please remember there is no eating or drinking allowed in our classrooms/labs. Only students officially registered for the course and approved assistants may attend class.

**Participation:** Participation in the course is essential and may be taken into consideration for your final grade.

**BRIGHTSPACE BY D2L (Desire2Learn):** This course will use the BRIGHTSPACE BY D2L Learning Management System. The course login page may be accessed via your mySFA account or by linking directly to d2l.sfasu.edu. BRIGHTSPACE BY D2L student support can be found at SFAOnline Tech Support.

**Acceptable Student Behavior:** Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D 34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

**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

If in my judgment an instance of academic dishonesty on an exam has occurred, a grade of zero will be assigned and a minimum of one (1) letter grade will be lost in the course grade. Using work from a previous semester is considered a violation of this policy even if the work is your own. If you are repeating the course, repeat the work. Please note that being in possession of a cell phone or other electronic device during an exam will result in an examination grade of zero. A student found cheating on an examination may not drop the course. If in my judgment a student is found cheating on any part of an assignment, the student will receive negative points equal to the value of the entire assignment. A negative grade will not be replaced by any possible bonus assignment. I consider the person who did the work and the person copying the work as both cheating. Do your own work. Do not share your work with others. A course grade of F may be assigned depending on the situation.

University Drop Policy: The official university add/drop policy is located at: http://www.sfasu.edu/policies/course-add-drop_6.10.pdf. If you have questions concerning registration, add/drop or the withdraw process, contact the Registrar at (936) 468-2501 or E-mail: REGISTRAR@SFASU.EDU. The Registrar is located on the 2nd floor of the Rusk building.

Withheld Grades, Semester Grades Policy (A-S4): 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.

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 info, go to http://www.sfasu.edu/disabilityservices/.
Acceptable Student Behavior: Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/ inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Computer Account Policy: All assignments that require the use of the University Computer must be done under the computer account that is assigned to you in this class. You should NOT do other class assignments in this account, and you should NOT do assignments from this class in other accounts. Failure to abide by the above statements will mean that you will receive a grade of F in this course.

Software Policy: Disciplinary action will be taken against individuals who perform unauthorized duplication of computer software or who are involved in the unauthorized use of duplicated software. This action may make it impossible for you to complete this course.

Computing Laboratory Usage: Students who utilize equipment in university computing laboratories are expected to read and abide by all posted policies for the laboratories. Please note that no children are permitted in university computing laboratories.

Computer Science Program Accreditations

The Bachelor of Science degree with a major in Computer Science is accredited by the Computing Accreditation Commission (CAC) of ABET, Inc., http://www.abet.org., the recognized accreditor of college and university programs in applied science, computing, engineering and technology. ABET accreditation demonstrates a program's commitment to providing its students with a quality education.

Computer Science Program Learning Outcomes & Objectives

The computer science curriculum is designed to allow the future computer specialist to obtain a broad education coupled with detailed knowledge in computer science sufficient to lay a foundation for professional competence in the computing field. Non-specialists may also take computer science courses that will acquaint them with computing capabilities applicable to their main field of endeavor. Students majoring in the Department of Computer Science may access program educational objectives and outcomes at http://cosm.sfasu.edu/cs/computer-science-outcomes-objectives-graduation-data

Student Learning Outcomes:

Upon successful completion of the CSC 100 course, students should be able to:

1. Demonstrate a knowledge of fundamental computing terminology.
2. Demonstrate basic file management and operating systems skills.
4. Solve problems using a programming language