ITSE 1302 – Computer Programming

Instructor contact information

Instructor:	Bruce Caraway	**Office Phone:**	281-401-5394
Office:	UP Bldg 13 Rm 863	**Office Hours:** (or hours of availability)	TTh 11-1 | Wed 10-12 or by appointment
E-mail:	bruce.e.caraway@lonestar.edu	**Website:**	carawaysclass.com

Welcome to

Course Title:	Computer Programming	**Term and Year:**	Spring 2016
Course Subject:	ITSE 1302		
Course Section:	**6003**	**Class Days & Times:**	**ONLINE**
Credit Hours:	3		
Lecture Hours:	2	**Class Room Location:**	N/A
Lab Hours:	3		
Total Contact Hours:	80		

Instructor: Bruce Caraway
Email: bruce.caraway@lonestar.edu
Office Phone: 281-401-5394
Office Location: University Park, Bldg 13, Rm 863
Office Hours: Tues & Thu 11a-1p
Wed 10a-12p
or by appointment

ITSE 1302 - Computer Programming: Spring 2016

Syllabus for Online Section 6003

Credit Hours: 3

Course Description

This course is designed to equip you, the student, with the primary critical thinking and fundamental programming skills necessary to solve fairly complex problems using programming logic. You should develop skills that incorporate the fundamental ideas of structured programming in your problem solving approach. This course will serve as the foundation for understanding how to program. This will be the precursor to programming in other specific structured programming languages.
Generally (and per the course catalog), this course:

- provides a disciplined approach to problem solving
- introduces the use of structured techniques in problem solving
- demonstrates the use of pseudocode and graphical tools to represent algorithms
- introduces the methods of testing, evaluating, and documenting code.

Syllabus Fast Facts

- Check the D2L calendar and content module ***each week*** for scheduled assignments and exams.
- Email is the best way to reach your instructor: bruce.e.caraway@lonestar.edu.
- For emails received *between Monday and Friday noon*, I will reply by 5pm, the following day.
- For emails received *between Friday noon and Sunday or on holidays*, I will reply by 5pm, the following Monday.
- Call OTS (832-813-6600) for technical issues with D2L or your student email.
- Work is to be submitted by the Due Date. ***Late work may be declined or subject to penalty***.
- Technical issues with your personal computer or internet access do not exempt you from turning your assignments in on-time.

Student Learning Outcomes

The student will be able to design, write, test, and document computer programs.

Prerequisites

ITSC 1301/1401 or COSC 1301/1401 or departmental approval.

Required Materials

To be successful in this class, the student must have access to the textbook:

> **Programming Logic and Design: Introductory 8th by Joyce Farrell**
> **ISBN: 978-1285845777**

The book may be purchased at the campus bookstore or purchased/rented from Cengage or from amazon.com.

Instructor Guidelines and Policies

Communication

Email is the best way to contact your instructor. Your instructor's email address is listed at the top of the syllabus. You are certainly welcome to contact your instructor via a phone call, but email preferred for those times when I am out of the office. Plus, an email creates an electronic record of communications between faculty and student. This can be very beneficial if something needs to be verified in the future.

How To Email Your Instructor

When you email your instructor, be sure to be brief, and to-the-point. Also include your name, course name, and course number in the email. Here is an example of a good email:

> *Professor Caraway:*
>
> *I am Angela Ford from your ITSE 1302 (Computer Programming) online class, and I have a question about this week's assignment. I thought that we needed to complete both sections, am I correct? Can you please help me?*
>
> *Angela Ford*

Using Your LSCS Email Account To Send The Email

Since emails can contains viruses, your instructor may only open emails that are sent from a valid lonestar.edu email account. Emails sent from your personal account may not be opened.

My goal is to answer all weekday (Mon thru Friday, noon) emails within 24 hours. As a general rule, expect that emails sent after 5pm will likely not be viewed until the following morning. Please do not expect a response from me on Saturday, Sunday or holidays - I will reply by 5pm the following Monday (or next non-holiday)

Office Visits

Please feel free to drop by my office for help during my office hours (listed at the top of this document) but it is best to let me know you are coming as I may have meetings or other appointments already scheduled. I am available by appointment if you cannot visit during office hours. Email me with a requested day and time and I will do what I can to accommodate.

Attendance for Online Students

We do not formally meet so no attendance is taken. I do reserve the right to assign tasks that may require your participation in online Discussion board or Chat. It is your responsibility to keep up with the material and check the class D2L page regularly for updates, assignment due dates, and potential schedule changes.

Should you anticipate that you will not be able to log on and participate in class for an extended period, please notify me in advance by email: bruce.e.caraway@lonestar.edu. Not logging in to the online class at a regular interval will significantly impact your chance for success.

Class Participation
The college classroom is a place for adult men and women to meet with a common purpose of improving their intellectual and academic skills. This applies to both face-to-face and online classes. When engaging your instructor and fellow students, you will be expected to treat everyone with respect and in a professional manner. The use of profanity, derogatory terms, and threats in any class-related forum will not be tolerated. If a student violates this rule, they will be asked to leave the classroom (in a face-to-face section) or their access to the class will be blocked (in an online section).

The violating student will not be allowed to return to class or regain access until he or she arranges a conference with the instructor. It is the student's responsibility to arrange for this conference.

Civility Statement
Members of the Lone Star College, which includes faculty, staff, and students, are expected to act honestly and responsibly in all aspects of campus life. Lone Star College holds all members accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that recognizes personal respect, and demonstrates concern for personal dignity, rights, and freedom of every member of the College community, including respect for the College property and the physical and intellectual property of others.

Assignments
Assignments are due according to the schedule posted in D2L. Students are responsible for meeting assignment due dates. Students should expect assignments to be submitted according to a weekly schedule that correlates to the schedule outlined in this document.

Make-up Exams
Make up exams must be arranged beforehand. If a student cannot take an exam during scheduled exam periods, the student must make prior arrangements with the instructor. Alternative exams may be arranged at the discretion of the instructor.

Grade Determination

Evaluation will be based on the following grade components:	Points
Lab Assignments	525
Programming Challenges	270
Quizzes	60
Exams & Final Project	475
Total:	**1330**

Letter Grade	Final Average in Percent
A	1197 - 1330
B	1064 - 1196
C	931 - 1063
D	798 - 930
F	< 798

Department/Division Contact

If you have any issues in our classroom, the course content or with me, I would ask that you first address the issue directly with me. If you feel that the issue remains unresolved even after speaking with me, you may contact the following individuals to whom I report.

- Department Chair: Gina Sprowl, 281-290-3755, gina.m.sprowl@lonestar.edu
- Dean: Steven Kahla, 281-655-3788, steven.c.kahla@lonestar.edu

Non Attendance at Start of Semester

If you have not attended class for Face-to-Face sections or if you have not logged into D2L for Online sections by to the Official Day of Record, you will be administratively withdrawn from the class, no exceptions.

Withdrawal Policy

Withdrawal from the course after the Official Day of Record and prior to "W" Day (Monday November 9th, 2015) will result in a final grade of "W" on your transcript. Instructor approval is necessary if you want to withdraw after the Official Day. No credit will be awarded for a course earning a "W." If you stop participating in the online class, you must withdraw at the registration office prior to "W" day.

If you stop attending class and do not officially withdraw, ***you will receive an "F"*** *for the course.*

Incompletes

An 'I' or Incomplete will be considered only in extreme cases of illness or emergency. An Incomplete will only be considered for those students who have completed at least 75% of the course material and have a passing average (70 or better) for those assignments that they have completed. *Granting an Incomplete is fully at the discretion of your instructor.*

A student who receives an "I" does not re-register for the course and must complete the course no later than the set due date not to exceed the end of the following fall or spring semester. The instructor must submit a signed “I” contract to the appropriate division; students will receive a copy of the contract following approval by the Dean or designee.

Early Alert

Early Alert is a student success effort designed to help students reach their full educational potential and successfully complete their classes. By requesting Early Alert for a student, a faculty member sends a message to the advising/counseling team, who will then contact the student and schedule a meeting to discuss support options. Students may be referred to Early Alert for many reasons, including poor academic performance, lack of basic study skills, attendance, persistent tardiness, and personal or financial issues that interfere with class performance.

Six Drop Rule

Students who enrolled in Texas public institutions of higher education as first-time college students during the Fall 2007 term or later are subject to section 51.907 of the Texas Education Code, which states that an institution of higher education may not permit a student to drop (withdraw with a grade of “W”) from more than six courses, including courses that a transfer student has previously dropped at other Texas public institutions of higher education that have already been counted against their six drop limit. Each student should fully understand this drop limit before you drop any course. Please see a Counselor or Advisor in our Student Services area for additional information and assistance. **This policy does not affect developmental or ESOL students.**

Tentative Course Outline

Week	Activities and Assignment	Objectives
1	**Getting Started**	
	Assignments: • Syllabus • Visual Logic User Guide	At the end of this module, you will be able to: • create flowcharts using Visual Logic software.
2	**Chapter 1**	**An Overview of Computers and Programming**
	Activities: • Chapter Reading • End-of-Chapter Questions Assignments: • Quiz • Lab Assignment • Programming Challenge	At the end of this module, you will be able to: • Describe computer systems. • Develop and illustrate simple computer logic. • List and explain the seven steps of the program development cycle. • Write pseudocode statements and create flowcharts. • Use a sentinel value to end a program. • Define programming and describe user environments. • Explain the evolution of programming models.
3	**Chapter 2**	**Elements of High-Quality Programs**
	Activities: • Chapter Reading • End-of-Chapter Questions	At the end of this module, you will be able to: • Explain, create, and use variables and constants. • Perform arithmetic operations.
4	**Chapter 3**	**Understanding Structure**

Week	Activities and Assignment	Objectives
	Activities: • Chapter Reading • End-of-Chapter Questions Assignments: • Quiz • Lab Assignment • Programming Challenge	At the end of this module, you will be able to: • List the disadvantages of unstructured spaghetti code. • Describe the three basic programming structures - sequence, selection, and loop. • Use a priming input to structure a program. • Recognize and apply structure to unstructured logic. • Perform the steps to manipulate strings. • Explain and illustrate branching. • Use the Python syntax to create a program that generates a different outcome based on user input.
5	**Exam 1 Week**	**Exam will cover Chapters 1, 2, and 3**
	Exam 1 Week	Recall information about computers, programming, elements of high-quality programs, and program structure.
6	**Chapter 4**	**Making Decisions**
	Activities: • Chapter Reading • End-of-Chapter Questions Assignments: • Quiz • Lab Assignment • Programming Challenge	At the end of this module, you will be able to: • Explain Boolean expressions and the selection structure. • Identify the relational comparison operators. • Explain the concepts of ‘AND’ and ‘OR’ logic. • Determine precedence when combining ‘AND’ and ‘OR’ operators.
7	**Chapter 5**	**Looping**
	Activities: • Chapter Reading • End-of-Chapter Questions Assignments: • Quiz • Lab Assignment • Programming Challenge	At the end of this module, you will be able to: • List the advantages of looping. • Use a loop control variable. • Describe and illustrate nested loops.
8	**Chapter 6**	**Arrays**
	Activities: • Chapter Reading • End-of-Chapter Questions Assignments: • Quiz • Lab Assignment • Programming Challenge	At the end of this module, you will be able to: • Perform the steps to store data in arrays. • Explain how an array can replace nested decisions. • Use constants with arrays. • Perform the steps to search an array for an exact match.
9	**Chapter 6**	**Arrays (continued)**

Week	Activities and Assignment	Objectives
	Activities: • Chapter Reading • End-of-Chapter Questions Assignments: • Quiz • Lab Assignment • Programming Challenge	At the end of this module, you will be able to: • Use parallel arrays. • Perform the steps to search an array for a range match. • Explain array bounds. • Use a for loop to process arrays.
10	**Exam 2 Week**	**Exam will cover Chapters 4, 5, and 6**
	Activities: • Hands-on exercises	Recall Boolean expressions, selection structure, loops, and arrays.
11	**Python**	
	Activities: • Hands-on exercises	At the end of this module, you will be able to: • Use the Python syntax to create a simple calculator program. • Create strings and string literals. • Perform the steps to call string methods. • Create console output. • Use the ‘print’ keyword.
12	**Python**	
	Activities: • Hands-on exercises	At the end of this module, you will be able to: • Perform the steps to manipulate strings. • Explain and illustrate branching. • Use the Python syntax to create a program that generates a different outcome based on user input.
13	**Python**	
	Activities: • Hands-on exercises	At the end of this module, you will be able to: • Describe functions. • Create a function using the Python syntax.
14	**Semester Project**	
	Activities: • Work on Semester Project	Begin working on your Semester Project.
15	**Semester Project**	
	Activities: • Work Semester Project Assignments: • Semester Project	Complete your Semester Project.
16	**Final Exam Week**	**Exam will cover Chapters 1, 2, 3, 4, 5, and 6 and Python.**
	Final Exam	Comprehensive

Lone Star College-University Park Learning Center is committed to your success

Your success is our primary concern!
If you are experiencing challenges achieving your academic goals, please contact your instructor or an advisor. We can provide assistance with academic needs, ADA accommodations, classroom difficulties, financial concerns, and other issues.

***Tutoring*: For all disciplines, please visit http://www.lonestar.edu/up-tutoring.htm for information on hours and location.** The tutoring lab, reading/writing lab, and math lab can be found within the learning center in building 12 on the 8th floor.

Counseling Services
Counseling services are available to students who are experiencing difficulty with academic issues, selection of college major, career planning, disability accommodations, or personal issues. Students may contact Counseling, Career, and Disability Services at (281) 401-5370, or in Building 13, Suite 200.

The Assistive Technology Lab
The Assistive Technology Lab is available for students who benefit from its various technologies to convert text to speech, magnify items, convert text to Braille, etc. For further information, please contact Stephanie Harbeson at 281-290-2672 or Stephanie.M.Harbeson@lonestar.edu.

Library
The Lone Star College-University Park Library is located in building 12, 8th floor and contains information resources for both college students and community members. Librarians are available to assist with research. To contact a reference librarian, uplibrary-ref@lonestar.edu. For Library hours and contact information, please visit http://www.lonestar.edu/library .

Assessment Center
The Lone Star College-University Park Assessment Center is located in Building 13, room 240. See link for all testing center hours: http://www.lonestar.edu/testing-centers.htm

Lone Star College-University Park Campus and System Policies

Academic Integrity
The Lone Star College System upholds the core values of learning: honesty, respect, fairness, and accountability. The system promotes the importance of personal and academic honesty. The system embraces the belief that all learners – students, faculty, staff and administrators – will act with integrity and honesty and must produce their own work and give appropriate credit to the work of others. Fabrication of sources, cheating, or unauthorized collaboration is not permitted on any work submitted within the system.

The consequences for academic dishonesty are determined by the professor, or the professor and academic dean, or the professor and chief student services officer and can include but are not limited to:

1. Having additional class requirements imposed,
2. Receiving a grade of zero or "F" for an exam or assignment,
3. Receiving a grade of "F" for the course,
4. Being withdrawn from the course or program,
5. Being expelled from the college system.

Student Behavior Expectations
Students are expected to conduct themselves appropriately while on College property or in an online environment. Students may receive disciplinary action up to and including suspension, if they violate System or College rules, disrupt classes, or interfere with the opportunity of others to obtain an education. Students who pose a threat to the safety of others will be subject to immediate withdrawal from the classroom, campus environment, and/or online environment, as well as face subsequent criminal charges, as appropriate. Please refer to the Student Code of Conduct located online at http://www.lonestar.edu/student-responsibilities.htm for additional information.

Sleeping (or laying your head on your desk) is not allowed in the classroom. On the first occurrence, you will be asked to refrain from sleeping. On a second occurrence, you will be asked to leave the room.

Lone Star College - University Park is a smoking-free campus. *The use of e-cigarettes, electronic cigarettes, vapor cigarettes, pipes, vapes, etc. is strictly prohibited throughout campus.*

Lone Star College Assistive Facilities
Lone Star College is very committed to equal access in educational opportunities and provides assistance through disability services. Each main campus has an assistive technology lab to assist students with disabilities. These centers offer a wide range of educational technology tools, such as screen readers, for example, to assist students with their educational needs. Information specific to your campus' Assistive Services is located online at http://www.lonestar.edu/19287.htm.

Americans with Disabilities Act Statement
Lone Star College-University Park is dedicated to providing the least restrictive environment for all students. We promote equity in academic access through the implementation of reasonable accommodations as required by the Vocational Rehabilitation Act of 1973, Title V, Section 504 and the Americans with Disabilities Act of 1990 (ADA) which will enable students with disabilities to participate in and benefit from all post-secondary educational activities.

Disability Services is located on the LSC University Park campus in Building 13, Suite 200. You may contact Disability Services at the following number: (281) 401-5370. Additional information may be accessed online at the following URL: http://www.lonestar.edu/disability-services.htm

Campus Safety and Security
Lone Star College System is committed to maintaining the safety of the students, faculty, staff, and guests while visiting one of our campuses. See http://www.lonestar.edu/safety.htm for details. Register at http://www.lonestar.edu/12803.htm to receive emergency notifications. In the event of an emergency, contact the police at 5911.

Computer Virus Protection
Computer viruses are, unfortunately, a fact of life. Using flash drives on more than one computer creates the possibility of infecting additional computers and flash drives with computer viruses. This

exposes college computers, personal computers, and any other computers to potentially damaging viruses. The college has aggressive anti-virus procedures in place to protect its computers, but cannot guarantee that a virus might not temporarily infect one of its machines. It is your responsibility to protect all computers under your control and use and ensure that each flash drive you use, wherever you use it, has been scanned with anti-virus software.

Equal Opportunity Statement
It is the policy of the Lone Star College System to provide equal employment, admission and educational opportunities without regard to race, color, creed, national origin, gender, age, veteran's status, sexual orientation, or disability. Lone Star Colleges strive to provide an excellent learning environment free from harassment or intimidation directed at any person's race, color, creed, national origin, gender, age, veteran's status, sexual orientation, or disability. Any form of harassment will not be tolerated.

FERPA
The academic, financial, and non-directory information on your student account is confidential and protected by the Family Educational Rights & Privacy Act (FERPA). LSCS cannot release certain information to another person without your written authorization. The Authorization to Release Student Educational Records can be found at http://www.lonestar.edu/departments/generalcounsel/OGC-S-2009-03_-_Authorization_To_Release_Educational_Records.pdf.

Internet and E-mail
LSCS provides computing and network resources. You are encouraged to use the computers, software packages, and electronic mail (e-mail) for educational or System-related activities and to facilitate the efficient exchange of useful information. The equipment, software, and network capacities provided through the district computer services are the property of the System. Use of the equipment and networks is to comport with the policies and procedures of the System and access may be denied to any student who fails to comply with the System's policies and procedures regarding its use.

Access to the System's e-mail and similar electronic communications systems are a privilege and certain responsibilities accompany that privilege. All users are expected to demonstrate the same level of ethical and professional manner, as is required in face-to-face or written communications. Threatening, anonymous, or forged messages will be treated as a violation of this policy.

Software Piracy
Law strictly prohibits unauthorized copying of software purchased by Lone Star College-University Park for use in laboratories. Lone Star College-University Park administration will take appropriate disciplinary action against anyone violating copyright laws.

Evaluation of Instruction
Lone Star College-University Park is committed to student success. As part of its institutional effectiveness efforts, our instructors are assessed in several ways. For the continuous improvement of our instruction, all students are required to provide input for each course they take each semester using the Course Evaluations Questionnaire, which can be accessed online for each course. This occurs approximately half way through your course and your instructor will provide you more information on this process. Once you evaluate your course, print and turn in the receipt of completion to your instructor. The college deans review these evaluations each semester. The deans and/or department

chairs may visit each instructor's class at some time during the semester to observe the instructional environment being provided and complete an assessment of the instructor.