Computer Program (ITSE 1302)

CREDIT

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

MODE OF INSTRUCTION

Online



PREREQUISITE/CO-REQUISITE:

There are no Prerequisite/Co-requisites for this course.

COURSE DESCRIPTION

Use programming techniques including control structures, arrays, and subprograms to design and code basic programs using a modern computer language. Other topics include working with data, number systems, and an introduction to object-oriented and event-driven programming.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to

- Understand the concept of a program (a computer following a series of instructions).
- Understand the concept of a variable holding a value, how a variable is declared and how it can change.
- Understand the concept of a loop.
- Be able to work with both character and numerical data.
- Understand the concept of an algorithm (that is, a series of steps that can be carried out in a mechanical way) and a few specific examples of algorithms (for example, finding an average, sorting, searching).
- Understand the parts of a computer system and how they interact.
- Understand the concept of a program in a high-level language being translated by a compiler into machine language program and then executed.

INSTRUCTOR CONTACT INFORMATION

Instructor: Abhinay Kamatham

Email: akmatham@lit.edu

Office Phone: 409-257-0058

Office Location: TC-230

Office Hours: Monday & Wednesday 8:00 a.m. – 9:00 p.m.

Tuesday & Thursday 8:00 a.m. – 11:00 a.m.

Friday 8:00am – 1:00pm

Approved: Initials/date

REQUIRED TEXTBOOK AND MATERIALS

- Fundamentals of Python: First Programs, 15th Edition, Kenneth A. Lambert, ISBN-13: 9780357881125
- Access to the Internet.

ATTENDANCE POLICY

There is not an attendance policy. However, Starfish will contact you if you do not log in once a week.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the <u>Academic Calendar</u>. If you stop completing the assignments and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

DATE	TOPIC	ASSIGNMENTS /Quizzes (Due on this Date)
Week 1	Overview & Syllabus	
Week 2	Chapter 1. Introduction	2/7/2025
Week 3	Chapter 2. Software Development, Data Types, and Expressions	2/7/2025
Week 4	Chapter 3. Loops and Selection Statements	2/21/2025
Week 5	Chapter 4. Strings and Text Files	2/21/2025
Week 6	Chapter 5. Lists and Dictionaries	3/7/2025
Week 7	Chapter 6. Design with Functions	3/7/2025
Week 8	Chapter 7. Design with Recursion	3/6/2025
Week 9	Spring break	
Week 10	Midterm Exam	3/28/2025
Week 11	Chapter 8. Simple Graphics and Image Processing	3/28/2025
Week 12	Chapter 9. Graphical User Interfaces	4/11/2025
Week 13	Chapter 10. Design with Classes	4/11/2025
Week 14	Chapter 11. Data Analysis and Visualization	4/25/2025

Week 15	Chapter 12. Multithreading, Networks, and Client/Server	4/25/2025
	Programming	
Week 16	Final Exam	4/30/2025

Final grades will be calculated according to the following criteria:

Assignments 40%Midterm 25%Finals 35%

GRADE SCALE

• 90-100 A

• 80-89

• 70-79 C

• 60-69 D

• 0-59 F

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Specialpopulations. Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at

<u>www.lit.edu</u>. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

AI STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into the classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

- 1. Students should log onto Blackboard and access this course at least 3 times a week to keep on track with assignments. And do the assignments by each due date so it does not become overwhelming to catch up.
- 2. Cheating of any kind will not be tolerated.
- 3. Internet Usage Students are expected to use proper net etiquette while participating in course emails, assignment submissions, and online discussions.
- 4. Students should turn assignments in by the posted due date and time.
- 5. If you wish to drop a course, the student is responsible for initiating and completing the drop process before the date stated in the LIT Academic Calendar. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
- 6. Grades will be posted under the Grades icon on the class gradebook. All grades are automatically graded and posted. If you see a missing grade, please email me to call it to my attention so I can correct it after the initial 24 hours of completing the assignment.
- 7. If you need to contact the instructor, my LIT e-mail is sbcarson@lit.edu. Your e-mail will be answered within 24 hours Monday Thursday and within 72 hours Friday Sunday. Be sure

- to include specific details and your section number, which chapter, assignment, and question you are working on. It is always extra helpful if you can include screenshots so I can see what you are referring to.
- 8. All assignments will be completed using the link in Blackboard. Assignments CANNOT be submitted via email. All due dates will be posted in Blackboard with each assignment.
- 9. ABSOLUTELY NO ASSIGNMENTS, EXAMS, PROJECTS OR TESTS WILL BE REOPENED. I strongly encourage you to complete all work well in advance of the Due Date, so you don't miss anything. The entire course is available from day 1 for you to work as fast as you can. Once all the work is completed, you are through with the class.
- 10. It is not my practice to give Incompletes, except for extreme circumstances and you have successfully completed at least 90% of the course. Please see the chart below for important drop/withdrawal dates for this semester. This class is a Full-Term class.