Computer Program (ITSE 1302)

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

MODE OF INSTRUCTION
Web

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: Dr. Jie Liang

Email: jliang@lit.edu

Office Phone: 409-241-4748

Office Location: TC-230

Office Hours:

Monday to Friday 7:30 a.m. – 9:00 p.m.
Monday & Wednesday 2:00 p.m. – 3:30 p.m.
Tuesday & Thursday 12:00 p.m. – 4:00 p.m.

Approved: Initials/date

REQUIRED TEXTBOOK AND MATERIALS

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

ATTENDANCE POLICY

Attendance is recorded in Starfish for each class meeting.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

COURSE CALENDAR

DATE	TOPIC	ASSIGNMENTS /Quizzes (Due on this Date)
Week 1	**Overview & Syllabus**	
Week 2	Chapter 1. Introduction	1/26/2024
Week 3	Chapter 2. Software Development, Data Types, and Expressions	2/2/2024
Week 4	Chapter 3. Loops and Selection Statements	2/9/2024
Week 5	Chapter 4. Strings and Text Files	2/16/2024
Week 6	Chapter 5. Lists and Dictionaries	2/23/2024
Week 7	Chapter 6. Design with Functions	3/1/2024
Week 8	Chapter 7. Design with Recursion	3/8/2024
Week 9	Spring break	
Week 10	**Midterm Exam**	**3/18/2024**
Week 11	Chapter 8. Simple Graphics and Image Processing	3/29/2024
Week 12	Chapter 9. Graphical User Interfaces	4/5/2024
Week 13	Chapter 10. Design with Classes	4/12/2024
Week 14	Chapter 11. Data Analysis and Visualization	4/19/2024
Week 15	Chapter 12. Multithreading, Networks, and Client/Server Programming	4/26/2024
Week 16	**Final Exam**	**4/29/2024**

Final grades will be calculated according to the following criteria:

- Attendance 10%
- Assignments 30%
- Midterm 25%
- Finals 35%

GRADE SCALE

- 90-100 A
- 80-89 B
- 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 located 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 Special Populations - 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 www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

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. There are 11 Units. For each unit, there will be a unit quiz in class, students should take it in person.
2. Students should come to class to take Midterm and Final exams in person.
3. Cheating of any kind will **not** be tolerated.
4. Internet Usage – Students are expected to use proper net etiquette while participating in course emails, assignment submissions, and online discussions.
5. Students should turn assignments in by the posted due date and time. **Late work** is not accepted. All assignments and quizzes stay open the entire term.
6. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
7. If you need to contact the instructor, you can send an e-mail to jliang@lit.edu. Your e-mail will be answered within 48 hours Monday – Thursday and within 72 hours Friday - Sunday.
8. Assignment may NOT be submitted via email.