

COSC 1315.060 – Programming Fundamentals

Fall 2025 Course Syllabus

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Office Hours: virtual, by appointment

Preferred Form of Communication: Email. *It is the responsibility of the student to regularly check the announcements and their Patriot e-mail address.*

Catalog Description:

Introduction to the fundamental concepts of procedural programming. Topics covered include data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. This course is for non-CS majors.

Delivery: Online

Required Textbook:

Java Illuminated by Julie Anderson

Edition : 6TH 24

Publisher : JONES+BART

ISBN 13 : 9781284250480

Course Objectives:

1. Analyze and explain the behavior of simple programs involving the fundamental programming constructs.
2. Modify and expand short programs that use standard conditional and iterative control structures and functions.
3. Design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions.
4. Choose appropriate conditional and iteration constructs for a given programming task.
5. Apply the techniques of structured (functional) decomposition to break a program into smaller pieces.
6. Describe the mechanics of parameter passing.

7. Discuss the importance of algorithms in the problem-solving process.
8. Identify the necessary properties of good algorithms.
9. Create algorithms for solving simple problems.
10. Use pseudocode or a programming language to implement, test, and debug algorithms for solving simple problems.
11. Discuss the representation and use of primitive data types and built-in data structures.
12. Explain the reasons for using different formats to represent numerical data.
13. Explain the objectives and functions of modern operating systems.
14. Describe the phases of program translation from source code to executable code and the files produced by these phases.
15. Identify and describe the properties of a variable such as its associated address, value, scope, persistence, and size.
16. Discuss the properties of good software design.
17. Explain the software life cycle and its phases including the deliverables that are produced.
18. Discuss debugging code to find logic errors

Topics:

- Introduction to Java Programming Language and Programming Environment
- Structured program development in Java
- Data Types and Instance Variables
- Software development methodology
- Decision structures
- Arrays and Strings
- Functions
- Debugging
- Characters and Strings
- Formatted Input/output
- Binary and logic

Grading Policy:

Type	Points
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Test 1	8%
Test 2	8%
Final Exam	8%
Programming Assignments	25%
Lab Assignments	25%
Quizzes	26%
Total	100%

Grading Rubric:

% of Total Points	Letter Grade
>= 90%	A
>= 80 and < 90%	B
>= 70 and < 80%	C
>= 60 and < 70%	D
< 60%	F

Missed Labs, Quizzes, Programming Assignments, and Tests:

Programming assignments will be accepted late if they are submitted within one week of the due date (the last programming assignment may be an exception). Late assignments will have a 20% point deduction. Labs will be due one week after they are assigned. Quizzes will be due one week after they are assigned.

Programming Software, Tutorials, and Help:

In class we will be using the [OnlineGDB Java Compiler](#), but you are free to use any Java environment you prefer. Graduate assistants are available for help with learning the course material and their hours will be posted. The instructor is available for assistance with any type of issues, including programming related ones, and, if needed, online meetings can be arranged at a time mutually convenient for the student and the instructor.

Tutoring Sessions Schedule:

The schedule will be posted after the teaching assistant has been hired for the semester.

Class Schedule:

Week	Date	Topics	Assignments		
			Quiz	Lab	Program
1	25-Aug	Intro, PC Anatomy, Hello World	Quiz 01		
2	1-Sep	Chapter 1 Binary and Logic	Quiz 02	Lab 01	
3	8-Sep	Chapter 2 Data Types and Variables	Quiz 03	Lab 02	Program 01
4	15-Sep	Chapter 2 Data Types, Variables, and Math	Quiz 04	Lab 03	
5	22-Sep	Test 1, Chapter 3 Classes	Quiz 05	Lab 04	
6	29-Sep	Chapter 3 Strings	Quiz 06	Lab 05	Program 02
7	6-Oct	Chapter 3 Methods	Quiz 07	Lab 06	
8	13-Oct	Chapter 4 Flow of Control	Quiz 08	Lab 07	
9	20-Oct	Chapter 5 Switch	Quiz 09	Lab 08	Program 03
10	27-Oct	Chapter 6 Loops	Quiz 10	Lab 09	
11	3-Nov	Test 2, Chapter 6 Loops	Quiz 11		
12	10-Nov	Chapter 7 Debugging	Quiz 12	Lab 10	
13	17-Nov	Chapter 8 Arrays	Quiz 13	Lab 11	Program 04
	24-Nov				
14	1-Dec	Chapter 9 Multidimensional Arrays	Quiz 14	Lab 12	
15	8-Dec	Final Exam			

Artificial Intelligence Policy

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course, to best support your learning, **you must complete all graded assignments by yourself to assist in your learning.** This exclusion of other resources to help complete assignments includes artificial intelligence (AI). Refrain from using AI tools to generate any course content (e.g., code) for assignments.

Student Resources

Resources to assist you in the course

- [UT Tyler Student Accessibility and Resource \(SAR\) Office](#) (provides needed accommodations to students with document needs related to access and learning)
- [UT Tyler Writing Center](#)
- [The Mathematics Learning Center](#)
- [UT Tyler PASS Tutoring Center](#)
- [UT Tyler Supplemental Instruction](#)
- [Upswing \(24/7 online tutoring\)](#) - covers nearly all undergraduate course areas
- [Robert Muntz Library](#) and [Library Liaison](#)

- [Canvas 101](#) (learn to use Canvas, proctoring, Unicheck, and other software)
- Digital Support Toolkit (for supported courses only. Students are automatically enrolled in the toolkit for supported courses)
- LIB 422 -- Computer Lab where students can take a proctored exam
- [The Career Success Center](#)
- [UT Tyler Testing Center](#)
- [Office of Research & Scholarship Design and Data Analysis Lab](#)

Resources available to UT Tyler Students

- [UT Tyler Counseling Center](#) (available to all students)
- [MySSP App](#) (24/7 access to Student Support Program counseling through phone or chat and online wellness resources available in a variety of languages)
- [Student Assistance and Advocacy Center](#)
- [Military and Veterans Success Center](#) (supports for our military-affiliated students)
- [UT Tyler Patriot Food Pantry](#)
- [UT Tyler Financial Aid and Scholarships](#)
- [UT Tyler Student Business Services](#) (pay or set up payment plans, etc.)
- [UT Tyler Registrar's Office](#)
- [Office of International Programs](#)
- [Title IX Reporting](#)
- [Patriots Engage](#) (available to all students. Get engaged at UT Tyler.)

University Policies and Information

Withdrawing from Class

Students may [withdraw](#) (drop) from this course using the [Withdrawal Portal](#). Withdrawing (dropping) this course can impact your Financial Aid, Scholarships, Veteran Benefits, Exemptions, Waivers, International Student Status, housing, and degree progress. Please speak with your instructors, consider your options, speak with your advisor, and visit the One-Stop Service Center (STE 230) or email

enroll@uttyler.edu to get a complete review of your student account and the possible impacts to withdrawing. We want you to make an informed decision. UT Tyler faculty and staff are here for you and often can provide additional support options or assistance. Make sure to carefully [read the implications for withdrawing from a course and the instructions](#) on using the [Withdrawal portal](#).

Texas law prohibits students from dropping more than six courses during their entire undergraduate career*. The six courses dropped includes those from other 2-year or 4-year Texas public colleges and universities. Consider the impact withdrawing from this class has on your academic progress and other areas, such as financial implications. We encourage you to consult your advisor(s) and Enrollment Services for additional guidance. **CAUTION #1:** Withdrawing before census day does not mean you get a full refund. Please see the [Tuition and Fee Refund Schedule](#). **CAUTION #2:** All international students must check with the [Office of International Programs](#) before withdrawing. All international students are required to enroll full-time for fall and spring terms. **CAUTION #3:** All UT Tyler Athletes must check with the Athletic Academic Coordinator before withdrawing from a course. **CAUTION #4:** All veterans or military-affiliated students should consult with the [Military and Veterans Success Center](#).

** Students who began college for the first time before 2007 are exempt from this law.*

Final Exam Policy

Final examinations are administered as scheduled. If unusual circumstances require that special arrangements be made for an individual student or class, the Dean of the appropriate college, after consultation with the faculty member involved, may authorize an exception to the schedule. Faculty members must maintain student final examination papers for a minimum of three months following the examination date.

Incomplete Grade Policy

If a student, because of extenuating circumstances, is unable to complete all of the requirements for a course by the end of the semester, then the instructor may recommend an Incomplete (I) for the course. The "I" may be assigned in place of a grade *only when **all** of the following conditions are met:* (a) the student

has been making satisfactory progress in the course; (b) the student is unable to complete all coursework or final exam due to unusual circumstances that are beyond personal control and are acceptable to the instructor, and (c) the student presents these reasons before the time that the final grade roster is due. The semester credit hours for an Incomplete will not be used to calculate the grade point average.

The student and the instructor must submit an Incomplete Form detailing the work required and the time by which the work must be completed to their respective department chair or college dean for approval. The time limit established must not exceed one year. Should the student fail to meet all of the work for the course within the time limit, then the instructor may assign zeros to the unfinished work, compute the course average for the student, and assign the appropriate grade. If a grade has yet to be assigned within one year, then the Incomplete will be changed to an F, or NC. If the course was initially taken under the CR/NC grading basis, this may adversely affect the student's academic standing.

Grade Appeal Policy

Disputes regarding grades must be initiated within sixty (60) days from the date of receiving the final course grade by filing a Grade Appeal Form with the instructor who assigned the grade. A grade appeal should be used when the student thinks the final course grade awarded does not reflect the grades earned on assessments or follow the grading scale as documented in the syllabus. The student should provide the rationale for the grade appeal and attach supporting document about the grades earned. The form should be sent via email to the faculty member who assigned the grade. The faculty member reviews the rationale and supporting documentation and completes the instruction section of the form. The instructor should return the form to the student, even if a grade change is made at this level. If the student is not satisfied with the decision, the student may appeal in writing to the Chairperson of the department from which the grade was issued. In situations where there is an allegation of capricious grading, discrimination, or unlawful actions, appeals may go beyond the Chairperson to the Dean or the Dean's designee of the college from which the

grade was issued, with that decision being final. The Grade Appeal form is found in the [Registrar's Form Library](#).

NOTE: The Grade Appeal Form is different from the Application for Appeal form submitted to the Student Appeals Committee, which does not rule on grade disputes as described in this policy.

Disability/Accessibility Services

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA), the University of Texas at Tyler offers accommodations to students with learning, physical, and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or a history of modifications or accommodations in a previous educational environment, you are encouraged to visit <https://hood.accessiblelearning.com/UTTyler/> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with the Assistant Director Student Accessibility and Resources/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <https://www.uttyler.edu/disability-services>, the SAR office located in the Robert Muntz Library, LIB 460, email saroffice@uttyler.edu, or call 903.566.7079."

Military Affiliated Students

UT Tyler honors the service and sacrifices of our military-affiliated students. If you are a student who is a veteran, on active duty, in the reserves or National Guard, or a military spouse or dependent, please stay in contact with your faculty member if any aspect of your present or prior service or family situation makes it difficult for you to fulfill the requirements of a course or creates disruption in your academic progress. It is important to make your faculty member aware of any complications as far in advance as possible. Your faculty member is willing to work with you and, if needed, put you in contact with university staff who are trained to assist you. The [Military and Veterans Success](#)

[Center \(MVSC\)](#) has campus resources for military-affiliated students. The MVSC can be reached at MVSC@uttyler.edu or via phone at 903.565.5972.

Students on an F-1 Visa

To remain in compliance with Federal Regulations requirements you must do the following:

- Traditional face-to-face classes: Attend classes on the regular meeting days/times.
- Hybrid Classes: Attend all face-to-face classes convened by the instructor according to the schedule set for your specific course.
- Online course: Only one online course can count toward your full-time enrollment. Students are expected to be fully engaged and meet all requirements for the online course.

Academic Honesty and Academic Misconduct

The UT Tyler community comes together to pledge that "Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do." Therefore, we enforce the [Student Conduct and Discipline policy](#) in the Student Manual Of Operating Procedures (Section 8).

FERPA

UT Tyler follows the Family Educational Rights and Privacy Act (FERPA) as noted in [University Policy 5.2.3](#). The course instructor will follow all requirements to protect your confidential information.

Absence for Official University Events or Activities

This course follows the practices related to [Excused Absences for University Events or Activities](#) as noted in the Catalog.

Absence for Religious Holidays

This course follows the practices related to [Excused Absences for Religious Holy Days as noted in the Catalog](#).

Absence for Pregnant Students

This course follows the requirements of Texas Laws SB 412, SB 459, SB 597/HB 1361 to meet the needs of pregnant and parenting students. Part of the supports

afforded pregnant students includes excused absences. Faculty who are informed by a student of needing this support should make a referral to the Parenting Student Liaison. NOTE: Students must work with the Parenting Student Liaison in order to receive these supports. Students should reach out to the Parenting Student Liaison at parents@uttyler.edu and also complete the [Pregnant and Parenting Self-Reporting Form](#).

Campus Carry

We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>.