

Syllabus -- Informatics 304: Programming for Informatics (Fall 2024)

Overview

This class offers an introduction to computer programming for those without any prior knowledge or experience in computer programming. If you already have programming experience, please explore options below for waiving the requirement to take this class.

Requirement to complete I304. This class is required for the [undergraduate B.S. Informatics degree](#) (see [concentrations](#)) and as a prerequisite for various other informatics courses. Alternative ways to meet this requirement include:

- Complete this class (see [Past & Future Offerings of this Course](#))
- Complete a suitable substitute course
 - [BME 303 Introduction to Computing](#)
 - [CS 303E Elements of Computers and Programming](#)
 - [CS 312 Introduction to Programming](#)
 - J 326C Introduction to Coding for Journalists
 - LIN 313 Language and Computers
 - LA 319 Computer Programming: Liberal Arts
 - [MIS/BAX 304: Introduction to Problem Solving and Programming](#)
 - [SDS 322 Introduction to Scientific Programming](#)
- Transfer credit, e.g., from AP Test
 - <https://utdirect.utexas.edu/ctl/cbe/petition/index.WBX>
- Test out of the requirement
 - [Exam in Computer Science 303E](#)
 - [Exam in Computer Science 312](#)

Why take this class? (beyond the requirement above)

- **Acquire valuable skills to apply in a job**, during school or after graduation
 - Whether or not you plan on this today
 - Even non-programming jobs will increasingly incorporate aspects of it
- **To better understand how computers work**, since they are increasingly entwined in our daily lives and crucial to how our modern world functions
- **To create and be creative**: beyond drawing or writing, to translate anything you imagine into an operational system: [Coding is Creative](#)

Course Details

Meeting Days/Times: T/Th 5-6:15pm

Unique ID: [27405](#)

Location/Format: [PAR](#) 301 (in-person)

iSchool [class listing](#)

Instructor: [Matt Lease](#) (contact via [Canvas](#) message)

Office Hours (online Zoom by appointment)

Academic Assistant (AA): [Dhruvi Gopani](#) (contact via [Canvas](#) message)

AA Office Hours (online; see [Zoom](#) tab on Canvas): Mon/Wed 4-5pm

- Note: **office hours tend to be very crowded close to assignment deadlines**, meaning there will be less time for individual feedback the later you ask for help. Starting assignments early is the best way to ensure you have ample time to ask for help and get it ahead of assignments being due.
- *"The duties of the academic assistant may include student conferences, supervision of voluntary*

or informal review or discussion sessions, evaluation of student work, classroom or laboratory assistance under the direct supervision of a faculty member in charge of the class or section..."

Note: Assume that the instructor & AA will respond to messages during business hours, Monday-Friday. Please do not expect responses in the evenings and over the weekends; plan ahead for deadlines!

Laptop requirement. A laptop is required for class participation. Please bring your laptop to each class.

Prerequisites. There are no prerequisites for this class.

Catalog Description: Examine the fundamentals of computer programming and practice developing and documenting code.

Course Objectives: We will introduce four broad areas related to success in computer programming:

- **Programming language:** Python.
- **Software Engineering concepts:** algorithmic thinking, software architecture, flowcharts & pseudocode, documentation, programming, testing, debugging, version control
- **Programming Environments:** Replit • [Google Colab](#)
- **Practical know-how:** (seeking help online, dealing with obscure error codes, falling back to an earlier working version, coding style conventions, etc.)

Textbook: Tony Gaddis, Starting out with Python, 5th edition (2021) -- we will not use [Pearson's MyLab](#)

- [Video notes, Errata, and Source code zip](#)
- UT Austin Restricted Resources (**UTMail login required**)
 - Textbook's official [slides](#)
 - [Instructor notebooks](#)
- **The digital textbook can be accessed via Canvas in [My Textbooks](#)** (navigation link on the left-hand side of the Canvas class page), thanks to the [Longhorn Textbook Access \(LTA\) program](#) created to reduce the cost of digital course materials for students.
- You are automatically opted into the program but can easily opt-out (and back in) via Canvas through **the 12th class day**. If you remain opted-in at the end of the 12th class day you will receive a bill through your "What I Owe" page and have until the end of the 18th class day to pay and retain access. If you do not pay by the 18th class day, you will lose access to the materials after the 20th class day and your charge will be removed.
- **If you have additional problems or questions, please contact LTAhelp@universitycoop.com**

Course Evaluation will consist of homeworks and possible quizzes. **There are no exams.**

Course Grades (there is no rounding)

- 94 or above (A: superior), 90-94 (A-: distinguished)
- 87-90 (B+: good), 84-87 (B: satisfactory), 80-84 (B-: barely satisfactory)
- unsatisfactory: 77-90 (C+), 74-77 (C), 70-74 (C-)
- for a course to count towards degree requirements, the minimum grade is a C-

Grades will be posted on Canvas as work is submitted over the course of the semester. Feedback will be provided directly in Replit. Homework will be evaluated holistically, i.e., on the basis of overall quality.

Late homework is not accepted except in case of university-excused absences (e.g., religious holy days, jury duty, military service, officially documented illness or family loss, etc.). See information below on contacting [Student Outreach and Support \(SOS\)](#) to obtain documentation in support of requests for extensions on academic deadlines. SOS will verify details and provide documentation without revealing protected details. The [Student Absence Notification Request Form](#) is intended for critical situations and/or medical or family emergencies. In general, starting homework early reduces the chance that you will need

an extension if someone unexpected should happen close to a deadline for submitting work.

Attendance Policy

- No attendance will be taken the first week of class (since new people often enroll late)
- **Goal:** Attendance is graded lightly to encourage you to attend class, yet remain flexible enough to encourage you to stay home when you are sick, and to allow you some other flexible absences.
- **You may miss up to 4 classes with no grade penalty. No explanations are needed.**
- **Additional absences will be penalized at 0.5% off your final grade.** For example, if you missed 10 classes during the semester and achieved 100% on all assigned work, you would still receive a final grade of 97% (A) in the class.
- Additional classes may be missed without grade penalty only for **university-excused absences** (e.g., religious holy days, jury duty, military service, officially documented illness or family loss, etc.) with formal documentation provided by [Student Outreach and Support \(SOS\)](#).
 - Given the small penalty for such absences, it may not be worth the bother to obtain the formal documentation to get them excused.
- **TARDIES**
 - If you are 5-20 minutes late to class, or leave class 5-20 minutes early, you are *tardy*.
 - Three tardies are equivalent to 1 absence.
- **ABSENCES:** If you are 20 or more minutes late to class, or leave class 20 or more minutes early, this counts as being absent from class for the day.
- Canvas shows a "[Attendance \(Roll Call\)](#)" assignment (*see below*) but will NOT automatically factor attendance into your final grade shown. This will be done manually at the end of the semester.

Roll Call Attendance

Due No Due Date Points 100 Submitting an external tool

Roll Call Attendance

0 Days Total

- 0 Late Days
- 0 Absent Days
- 0 Present Days

Date	Day	Status	% Points
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[Lectures Online](#) provides remote access to recordings of SLIDES AND AUDIO (NO VIDEO). After each class meeting, the day's recording is automatically made available online. Recordings are normally available within a few hours after class ends.

- This is great for seeing what you missed if you were absent, as well as for reviewing what was covered in class anytime later on: that evening, the next day, or later in the semester.
- **Video Recording Policy:** Class recordings are reserved only for the use of members of this class (students, TAs, and the instructor) and only for educational purposes. Recordings should not be shared outside the class in any form. Violation of this restriction could lead to Student Misconduct proceedings. Students cannot refuse to be recorded during a recorded class, nor do students have a right to be anonymous in class.

Academic Integrity

All students at UT Austin must abide by the [Student Honor Code](#). This includes that: “I pledge to be honest about what I create and to acknowledge what I use that belongs to others.” Honor code violations harm yourself as well as other students, and this is strictly enforced. As noted below, **students that violate University rules on academic dishonesty risk severe penalties, such as automatically failing the course and being dismissed from UT. Please do NOT take the risk.**

Educate Yourself About Plagiarism. If in doubt, ask the instructor. Plagiarism and similar conduct constitute a serious violation of UT's Honor Code and standards of conduct

Students who violate University rules on academic misconduct are subject to the student conduct process. A student found responsible for academic misconduct may be assigned both a status sanction and a grade impact for the course. **The grade impact could range from a zero on the assignment in question up to a failing grade in the course. A status sanction can range from a written warning, probation, deferred suspension and/or dismissal from the University.** To learn more about academic integrity standards, tips for avoiding a potential academic misconduct violation, and the overall conduct process, please visit the [Student Conduct and Academic Integrity website](#).

Assignments will be automatically checked for plagiarism. We report suspected cases to the central administration for investigation and disciplinary hearings.

Class Collaboration Policy. Unless otherwise specified, it is the expectation of the University that you complete all work independently. For this class, if you discuss assignments with classmates, **YOU MAY NOT** take any written notes away from such discussions, unless explicitly directed otherwise. Any written notes from such discussions violate this collaboration policy, and could also lead to either accidental or intentional collusion in submitted work, in further violation of this collaboration policy.

USE OF AUTOMATIC CODE GENERATION TOOLS IS PROHIBITED. This introductory course teaches introductory programming so that you can learn the fundamentals of computer programming and how to program. **All submitted work in this course must be entirely your own** (without help from another person, copying solutions found online, or using artificial intelligence (AI) tools to generate solutions.

SHARING OF COURSE MATERIALS IS PROHIBITED. No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class without explicit, my written permission. Unauthorized sharing of materials may facilitate cheating. The University is aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to [Student Conduct and Academic Integrity](#), as with other honor code violations above.

Safety and Wellness

[Office of Emergency Management](#)

- Sign up for [Campus Emergency Text Alerts](#)
- [Emergency Preparedness Pocket Guide](#)
- [Emergency Terms \(PDF\)](#)
- [Remember 5 - Survival Guide \(PDF\)](#)
- [Active Shooter Response Guide](#)

Coping with stress and personal hardship. Life brings unexpected surprises to all of us. If you are facing any personal difficulties in coping with life challenges, please take advantage of the various services offered if they might help. They exist to be used. I invite students who are struggling for any reason and who believe that it might impact their performance in the course to reach out to me if they feel comfortable. This will allow me to provide any resources or accommodations that I can. If immediate mental health assistance is needed, call the [Counseling and Mental Health Center](#) (CMHC) at 512-471-3515 or contact Bryce Moffett, LCSW (iSchool CARE counselor) at 512-232-2983. Outside CMHC business hours (8a.m.-5p.m., Monday-Friday), contact the CMHC 24/7 Crisis Line: 512-471-2255.

BCAL. If you have concerns about the safety or behavior of fellow students, TAs, or Professors, call the Behavior Concerns Advice Line (BCAL): **512-232-5050**. Your call can be anonymous. If something doesn't feel right—it probably isn't. Trust your instincts and share your concerns.

Student Outreach and Support (SOS). SOS provides assistance, intervention, and referrals to support students navigating challenging or unexpected issues that impact their well-being and academic success. If you need to miss class due to a family emergency, medical or mental health concern, or academic difficulty due to crisis or an emergency situation, SOS will verify your situation and notify your professors. You can best access services available through SOS by completing an online form or emailing them.

Basic Needs Security. Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. UT maintains the UT Outpost (<https://deanofstudents.utexas.edu/emergency/utoutpost.php>) which is a free on-campus food pantry and career closet. Furthermore, please notify the professor if you are comfortable in doing so. This will enable him to provide any resources that he may possess.

Further Information

University Resources. For a general list of university resources that may be helpful, see the [University Resources Students Canvas page](#).

The Sanger Learning Center. Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center's classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas.

Disability and Access (D&A). The university is committed to creating an accessible and inclusive learning environment consistent with university policy and federal and state law. Please let me know if you experience any barriers to learning so I can work with you to ensure you have equal opportunity to participate fully in this course. If you are a student with a disability, or think you may have a disability, and need accommodations please request them. If you are already registered with D&A, please deliver your *Accommodation Letter* to me as early as possible in the semester so we can discuss your approved accommodations and needs in this course.

Personal Pronouns. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender identity & expression, and nationalities. Class rosters are provided to the instructor with the student's legal name, unless they have added a "chosen name" with the registrar's office, which you can do so here: https://utdirect.utexas.edu/apps/ais/chosen_name/. I will gladly honor your request to address you by a

name that is different from what appears on the official roster, and by the pronouns you use (she/he/they/ze, etc). Please advise me of any changes early in the semester so that I may make appropriate updates to my records. For instructions on how to add your pronouns to Canvas, visit <https://utexas.instructure.com/courses/633028/pages/profile-pronouns>. More resources available on the Gender and Sexuality Center's website, www.utgsc.org.

UT Austin - Land Acknowledgment. (I) We would like to acknowledge that we are meeting on the Indigenous lands of Turtle Island, the ancestral name for what now is called North America. Moreover, (I) We would like to acknowledge the Alabama-Coushatta, Caddo, Carrizo/Comecrudo, Coahuiltecan, Comanche, Kickapoo, Lipan Apache, Ysleta Del Sur Pueblo and Tonkawa, and all the American Indian and Indigenous Peoples and communities who have been or have become a part of these lands and territories in Texas.