

CS 1342 – 001 - PROG FOR SCIENTISTS & ENGINEER Fall 2021 Class Syllabus

Course Description:

An introduction to computer science and problem-solving techniques with applications in engineering and the physical sciences. Topics include an introduction to computer organization, data representation, algorithm development, and computer programming in a high-level language. This course is not intended for Computer Science or Electrical Engineering majors.

Course Goals and Objectives:

- Describe the physical elements of a computer, including the central processing unit (CPU),
- Discuss the numbering system used by computers,
- Explain the similarities and differences between system and application software,
- Discuss database systems and computer networks
- Discuss the various data types, data values, and variables common with computer languages,
- Explain how expressions and arithmetic equations are programmed, and
- Write a functional Python program to compute, iterate, list, search, sort, or perform some other programmable task.

Brief Course Outline:

1. What is a Computer & Building the CPU / Numbering systems / Gates
2. Software (System Software / Application Software) / Algorithms and Analysis
3. Database Systems / Computer Networks
4. Computer Security & Cryptography Artificial Intelligence / Social Issues
5. Introduction to Python ? Software / Development
6. Data Types , Values and Variables
7. Expressions and Arithmetic
8. Conditional Execution
9. Iterations
10. Functions
11. More Functions
12. Exception Handling
13. Sequences: Strings and Files
14. Lists
15. Sorting / Searching Large data
16. Introduction to Object Oriented Programming

Lecture Scheduled Type : Fully online Education Instructional Method .

We will be using a combination of **ZOOM, Canvas** and **my personal web site** for course content delivery, announcements , most assessments, and/or assignment submission .

Successfully completing the requirements of an online course places more responsibility on the shoulders of the student. Staying engaged is vital to the learning process. Practice is especially important when learning to write efficient, readable code that is easily maintainable.

You are required to have a working camera and a working microphone especially on lectures and exam days. You will be required to leave your camera on during Zoom lecture meetings / exams. To receive any credit for proctored exams, you will be required to leave both camera and microphone on for the duration of the exam.

Think ahead. Plan for your online class, especially on exam days.

You should have a quiet place where you can listen to the presentation of new material, participate in class discussions or take an online proctored exam.

You also should a place free of distraction and free of any other people and/or pets whenever possible. Let your parents, roommates or friends know what time you need their cooperation.

Consider moving your pet(s) into another room during meetings.

Consider putting a 'Do Not Disturb' sign on the door and turn off the ringer on your phone.

ZOOM meetings minimum requirements:

- You are expected to behave in a professional manner when participating in ZOOM meetings.
- Verbal exchanges should be respectful and profanity free.
- Backgrounds (visible through your camera) should be appropriate.
- Dress appropriately.
- Your profile picture is required and should be a headshot where you are easily identifiable. (no costumes or masks or images of superheroes and the like)
- Remember that you are **expected** to leave your camera on during the meeting.

Instructor: Husain Gholoom

E-mail: hag10@txstate.edu

Office: CMAL 301 F

CLASS TIME: MW 3:30 p.m. – 4:50 p.m. Fully Online

OFFICE HRS (Via ZOOM):

MW 8:25 am - 8:55 am &
MW 11:00 am - 1:00 pm or by appt.

**Other times by appointment.
(Appointments need not be made during regularly
scheduled office hours. Must have the camera on
when attending office hours)**

Other times by appointment only.

WEB PAGE: <http://husaingholoom.com/classes.html>

Text Book: Fundamentals of Python: First Programs, 1st Edition
Kenneth A. Lambert

ISBN – 13 : 978-1-111-82270-5
ISBN – 10 : 1-111-82270-0

GRADING POLICY:

Attendance : Required (Via Zoom)

Programming Assignment 20 %

**Midterm Exam - 1 25 % (October 6th – 2021
Via Canvas & ZOOM)**

**Midterm Exam - 2 25 % (November 3rd – 2021
Via Canvas & ZOOM)**

**Final Exam : 30% (Comprehensive over
programming concepts Via
Canvas & ZOOM)**

Note: You are *required* to show your Texas State student (photo) ID to your instructor on exam days. A driver's license is not adequate. Exam scores will be recorded as zeros until your Texas State student ID is presented.

Major exams will **be** announced at least one week in advance. They are typically scheduled in the sixth and eleventh weeks of the semester; however, the actual dates may be adjusted to benefit the students.

Major exams / quizzes administered on Canvas will be *proctored* in the ZOOM meeting scheduled on exam day. Therefore, to receive any credit, you are *required* to join the ZOOM meeting with the camera and the microphone on while completing such assessments.

FINAL EXAM SCHEDULE:

**C.S. 1342.001 Will be on: Wednesday December 8th / 2021
Exam Time: 5:00 p.m. - 7:30 p.m.**

Final exams will be administered *only* on the day and at the time indicated in the university exam schedule.

Final Exam also is administered on Canvas and will be **proctored in the ZOOM meeting scheduled on exam day and time indicated in the university exam schedule .**

Therefore, to receive any credit, you are **required to join the ZOOM meeting while completing the final exam**

Exams will **be** announced at least one week in advance. They are typically scheduled in the sixth and eleventh weeks of the semester; however, the actual dates may be adjusted to benefit the students. Look at the website for the exact dates.

If you are absent at the time of *a test*, a grade of **zero** will be recorded. If you are absent at the time of *final exam*, a final letter grade of **F or U** will be recorded.

Makeup Exams policy : There will be NO Makeup Exams.

GRADING SCALE:

Determination of letter grade in the course :

semester average ≥ 89.5 A

$79.5 \leq$ semester average < 89.5 B

$69.5 \leq$ semester average < 79.5 C

$59.5 \leq$ semester average < 69.5 D

semester average < 59.5 F or U

Programs are very important to this course. Therefore, **ALL** programs **MUST** be turned in. A '*good faith*' effort must be demonstrated for each program that turned in. ***Programs that contain compilation errors will automatically receive a 100% penalty.*** To receive **any** credit for a programming assignment, the source code (along with appropriate support files) must be submitted ***electronically on or before the due date.*** If the electronic copy is not available to the grader on the date and the time the programming assignment is due, a grade of **zero** will be assigned.

You are required to install **Python IDE** on your personal device, the IDE used in the course for lecture assignments. Make sure to install the same version as the one installed in our labs.

All programs are going to be tested using : Python IDE 3.9.6

You can use any IDE that is installed on your personal computer, **however**, you are responsible for making any adjustments to accommodate differences between IDE requirements before submitting your projects since **programming assignments will be graded using Python IDE 3.9.6**

No late assignment will be accepted.

Alert: Time permitting programs will be run through an Internet service designed for detecting plagiarism in software code.

LATE POLICY: Assignments should be uploaded *via canvas* on the specified date and time. No late assignments will be accepted ***unless official*** (an ***original, not a copy***) documentation can be provided that ***may*** warrant an extension.

If you take paperwork meant for your lecture instructor to the Computer Science Department office (Comal #211), you should send an e-mail to your instructor indicating that you have done so.

ALLOW FOR NATURAL DISASTERS! The computer system used may ‘go down’, lost internet service ...etc. These types of events do ***NOT*** excuse late work.

Regardless of the deadline set, there will always be people who want it extended. **No time extension will be given and no late assignments will be accepted.**

Now that the deadline *for full credit* has been established, ***please respect this deadline, and plan accordingly.***

GRADE DISPUTES : For complete discussion and possible resolution, grade disputes must be handled in a ZOOM meeting during regularly scheduled office hours or by appointment when all records are readily available to your instructor. Disputes over grades ***must*** be discussed within ***five days*** from when grades are posted. For example, you must discuss programming assignment grades within five days of when feedback is posted. This means within ***five days*** from the date the assignment feedback is ***posted.*** It ***DOES NOT*** mean five days from the date you decide to review the feedback.

ACADEMIC OFFENSES: All assignments submitted for a grade should reflect the work of the *individual* student unless otherwise established in writing by your instructor. Violations will be dealt with according to Academic Procedures and Policies as outlined in the **Texas State Student Handbook**.

Go to **<http://www.dos.txstate.edu/handbook.html>**, and click on **Academic Honor Code** to review **Academic Offenses** and the **Penalties for Academic Dishonesty**.

ATTENDANCE POLICY: Class attendance via **Zoom** is *required*. You will be held responsible for material covered in the lectures. Some of the material covered in lectures may not be readily available elsewhere. I recommend that you obtain contact information of several classmates in the event that you are forced to miss a day of class.

E-MAIL: Notifications , inquires , questions ... etc that are related to this class will be send and received **only** via **Texas State e-mail account**.

ABSENCE POLICY: If you are absent at the time of the *midterm exam*, a grade of zero will be recorded. If you are absent at the time of the *final exam*, a *final letter grade of U will be assigned*

.

DROP POLICY: (Refer to the Academic Calendar).

- Official 12th Class Day / Last Day to Drop with **100% Refund - Wednesday , September 8th , 2021.**
- Automatic “W” deadline and last day to drop a class is on **Monday , October 25th , 2021**
- Last opportunity to *withdraw* from the University on **Thursday , November 18th , 2021 .**
- Students who withdraw from the University after the automatic "W" date will be assigned a "W" or an "F" or an "U" based on class performance up to that point in the semester. A "W" will be assigned **only** if the class average is *passing* on the day the withdrawal procedure is **officially completed.**

Note: Contact the Registrar’s Office as to the proper procedure to follow in order to successfully complete the drop/withdrawal process. If you decide to withdraw from the University *after* the automatic “W” date previously mentioned, be sure to check with your instructor *prior* to completing the withdrawal procedure in order to verify whether you will be receiving a “W” or an “F”. Contact the Registrar if you have any further questions.

It is *your* responsibility to make sure the drop/withdrawal process is complete. Do *not* come to me later and say that you "thought" you had dropped but the process did not "go through" expecting me to change a grade of ‘F’ to a ‘W’. Be sure to check your revised schedule to make sure the course dropped is no longer listed.

ADA Compliance: Students with special needs as documented by the Office of Disability Services who require accommodations should identify themselves to the instructor as soon as possible but no later than the **12th class** meeting in a long session and no later than the 4th class meeting during a regular summer session. Students with special needs who have not already done so will be required to contact the Office of Disability Services to establish accommodations. Every effort will be made to secure the necessary accommodations to facilitate students with special needs/disabilities to enhance their performance in the classroom.

University Policy Statement to share with student:

“Per the university’s direction, all COVID-19-related academic (e.g., online or remote access to lectures, quizzes, and exams) and housing modifications expired at the end of Summer Session II. COVID-19-related academic modifications will not be provided during fall 2021.”

ADA accommodations will be provided by ODS in the fall for students who meet the required criteria:

If a student is approved for an academic accommodation, ODS will provide the student with an academic accommodation letter, which states they are registered with the office and describes the academic accommodations they are eligible to use.

If a student is granted an ADA accommodation, students may discuss alternatives with their instructors if they are unable to attend face-to-face classes. **However, a faculty member is not required to accommodate a request that represents a fundamental alteration to a course or program methods of delivery.**

Links to share :

Office of Disability Services (ODS): <https://www.ods.txstate.edu/>
(includes step-by-step instructions on how a student registers with ODS for ‘academic accommodations’ not modifications (which expired at the end of SS 2, 2021).

Office of Disability-- COVID-19 Information:
<https://www.ods.txstate.edu/current-student-resources/COVID-19-Information.html>

Office of Disability –Covid-19 FAQs:
<https://www.ods.txstate.edu/current-student-resources/COVID-19-Information.html>

Latest COVID-19 Updates and Statements :
<https://www.txstate.edu/coronavirus> (it includes access to President Trauth’s recent message sent out on 8/10/2021)