# COSC 1436.02E – Intro to Computer Science & Programming
COURSE SYLLABUS: Spring 2024

## INSTRUCTOR INFORMATION

Instructor:               Kaoning Hu
Office Location:          JOUR 220
Office Hours:             MON 10:00 – 12:00, 15:30 – 16:30; WED 10:00 – 12:00
Office Phone:             903-886-5409
Office Fax:               903-886-5404
University Email Address:               Kaoning.Hu@tamuc.edu
Preferred Form of Communication:        Email
Communication Response Time:            1~2 business days

## COURSE INFORMATION

### Materials – Textbooks, Readings, Supplementary Readings
No textbook is required.
Software Required:   Windows OS, Mac OS, or Linux (not Chrome OS).
                     Python IDE with PyGame Zero library (Mu preferred), Java IDE.
Optional Texts and/or Materials:
                     Official Python online documentation
                     Official PyGame Zero online documentation
                     Official Java online documentation

### Course Description
This is a lecture and laboratory course to introduce computer science and programming. Topics include programming languages and algorithm design. Three programming languages: **Python, Java, and assembly language**, will be taught in the course. **Examples and assignments on video game development will be used in the labs**.

## Student Learning Outcomes
1. Learn basics of low-level machine instructions and understand the low-level fetch-decode-execute cycle
2. Differentiate between high-level and low-level programming

*The syllabus/schedule are subject to change.*

3. Understand the basic syntax of Python.
4. Understand the basic syntax of Java.
5. Comprehend various data types and how to use them
6. Comprehend standard input and standard output
7. Comprehend how primary storage and secondary storage work
8. Comprehend arithmetic operations and operator precedence
9. Comprehend control structures: selection and repetition, and how they translate to low-level representation
10. Comprehend basic data structures: arrays and lists
11. Learn how to divide a program into many modules and comprehend how to use functions or subroutines
12. Develop, run, and test basic programs including game-driven examples
13. Apply general problem-solving strategies to the development of computer algorithms.

# COURSE REQUIREMENTS

## Minimal Technical Skills Needed

Students enrolling in this course should have mastered computer essentials including how to interact with a graphical user interface, text editor, and web browser. If the use of a personal computer is preferred over university laboratory computers, it is expected that the student can download, install and configure software.

## Instructional Methods

We will have weekly lectures. Slides, supplementary materials, and assignments will be released online via D2L. *Please upload your assignments to the appropriate folders on myLeo(D2L).*

## Student Responsibilities or Tips for Success in the Course

1. Attend every lecture as long as you are able to.
2. Check myLeo at least twice a week.
3. Read the text materials before and after every lecture, and use the slides as your guideline.
4. Start your homework assignments early.
5. Do your own work. If you have difficulties in an assignment, ask the instructor. Do not copy other people's work.
6. Contact the instructor when you are confused.
7. Seek help from lab tutors in Jour 101 or 200 when you need.

## GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

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The weight total grade is computed as
- Exams: 50%
- Average of quizzes: 15%
- Average of assignments: 20%
- Lab participation: 10%
- Attendance: 5%

## Assessments

There will be
- 5~6 homework assignments
- 7~9 lab exercises
- 3~4 quizzes and
- 2 exams.

Assignments will be graded on the following:
- meet specification of assignment
- have good organization and logic
- demonstrate good form, including remarks and indentation
- on-time (Late submission subject to the penalty.)

Quizzes and exams are graded based on the correctness of the answers.

Lab exercises are graded based on whether the student have participated in the exercise. (i.e., You receive the credit as long as you work on the exercise question, even if your answer is incorrect.)

Exams are comprehensive. The time and location of each exam will be announced one week before the exam.

Quizzes are not comprehensive unless otherwise specified. The time of each quiz will be announced before the quiz.

Make-up quizzes/exams are given only if there is an emergency. If you take a make-up quiz/exam, you may receive a different set of questions with approximately the same difficulty level as the regular quiz/exam. Alternatively, you may also choose to receive a grade based on your in-class ranking in the next quiz/exam.

All assignments must be completed on time. Late submission is subject to penalty: up to 10% if late but no later than 24 hours; up to 20% if later than 24 hours but no later than 7 calendar days; up to 100% if later than 7 calendar days. However, the students and the instructor can negotiate on the due time and late penalty of the assignments.

*Bonus credit* – in some situations, the students may be awarded bonus credits. Bonus credits will not be counted towards the weight total grade. However, bonus credits will be considered when the student's weight total grade is very close to the borderline between two letter grades.

# TECHNOLOGY REQUIREMENTS

## LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS).  Below are technical requirements

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LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Video Conferencing Tool
https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

# ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu**.**

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

# COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your instructor.

## Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

## Interaction with Instructor Statement

To communicate with me about this course you are to use the email address on this syllabus. Please include the course number in the beginning of the subject field for every email message. During the week, you can generally expect a response to your emails within 1 business day. *If you do not receive my response in 2 business days, please send a second email to me*.
You can also call me at my office or stop by my office during office hours. You can also schedule an appointment by email.
My office location, phone number, and office hours are subject to change and amendment.

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# COURSE AND UNIVERSITY PROCEDURES/POLICIES

## Course Specific Procedures/Policies

Late submission of assignment subject to the penalty. However, you may negotiate the due date with the instructor before the assignment is overdue.

Make-up quizzes/exams are given only if there is an emergency. If you take a make-up quiz/exam, you may receive a different set of questions with approximately the same difficulty level as the regular quiz/exam.

When a make-up quiz/exam is impossible, you will receive a grade based on your in-class ranking in the next quiz/exam. E.g., if you miss Quiz 1 because of an emergency, and your rank in Quiz 2 is $10^{th}$ in the class, then we will copy the $10^{th}$ grade in Quiz 1 to your grade.

Extra credit may be possible.

## Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

# University Specific Procedures

## Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

## TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedures 13.99.99.R0.01
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

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## Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03
Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf


## Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

**Office of Student Disability Resources and Services**
Texas A&M University-Commerce
Velma K. Waters Library Rm 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services
http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/


## Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.


## Campus Concealed Carry Statement


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Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34Safet yOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

## A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit **www.tamuc.edu/counsel**

## AI use policy [Draft 2, May 25, 2023]

Important: *In this course, the use of AI is disallowed.*

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

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- 13.99.99.R0.03 Undergraduate Academic Dishonesty
- 13.99.99.R0.10 Graduate Student Academic Dishonesty

## COURSE OUTLINE / CALENDAR

| Week 1 | Introduction to computer systems and programming concepts |
|--------|-----------------------------------------------------------|
| Week 2 | Variable declaration |
| Week 3 | Variable declaration (continued) |
| Week 4 | Binary number system and data representation |
| Week 5 | Operators and expressions |
| Week 6 | If statement |
| Week 7 | If statement (continued) |
| Week 8 | Midterm exam<br>Input/output |
| Week 9 | Functions |
| Week 10 | Functions (continued) |
| Week 11 | Functions (continued) |
| Week 12 | Repetitions |
| Week 13 | Repetitions (continued) |
| Week 14 | Arrays/Lists |
| Week 15 | Arrays/Lists (continued) |
| Week 16 | Final Exam |

Course calendar is **tentative** and will adapt to the actual progress of the classes and may not be accurately the same as the table above.

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