

ICS 603: Applied Computing Fundamentals

Mahdi Belcaid

Instructor



Virtual Room Link

Email

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Office Location

POST 306B

Office Hours

Wednesday 12:00-1PM

Or by appointment

Contact Me About

Specific grade questions

Personal Matters

Akib Sadmanee

Teaching Assistant



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POST 306A

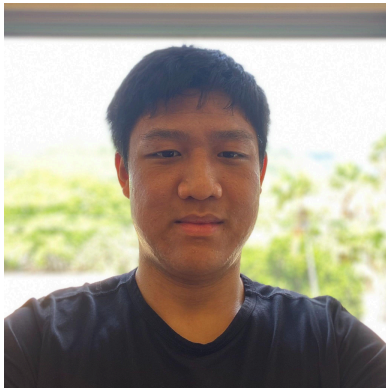
Contact Me About

General course questions

Assignments and due dates

Ethan Chung

Teaching Assistant



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Email

echung32@hawaii.edu

Office Location

POST 303B

Contact Me About

General course questions
Assignments and due dates

Class Meetings

Delivery Method: Hybrid

Location: Keller 102

Meeting Days: Tue, Thr

Duration: Wed Aug 26 to Thr Dec 18

Meeting Time: 10:30-11:45 AM

Course Information

Course Title: Applied Computing Fundamentals

Semester: Fall 2025

Course Number: ICS 603

Prerequisites: Python

Credit Hours: 3

Restrictions:

Course Description:

This course introduces Python programming through the practical application of LLarge Language Models. Aimed at those looking to navigate the rapidly expanding field of generative AI, it covers programming in Python using an LLM-based problem-solving approach. As such, students will

learn to use LLMs as a programming aid, accelerating their learning process, while learning proper techniques for code validation, testing, efficiency and robustness and for using LLMs as part of the software pipeline, including for structuring data or building complex pipelines. The course offers a hybrid format of in-person and synchronous online lectures, with an additional asynchronous online option, designed for comprehensive and flexible learning. Ideal for anyone seeking to harness the power of LLMs in programming.

Required Course Materials

Textbook: Materials for each lecture will be available online.

RSI & Communication Policy

Regular substantive interaction refers to the meaningful communication between the instructor and student. As a fully online course, this includes weekly interaction through feedback, announcements, updates, peer-to-peer activities, and communication through the course discussion. These tools are crucial for building a sense of community in the course, facilitating ongoing support for students, and encouraging communication and engagement.

Course Objectives

Course objectives are clear statements that outline what students are expected to know or be able to do by the end of the course. These objectives serve to provide clarity, helping students focus on essential content. Upon successful completion of this course, students will:

In this course, students will:

- 1. Language Model Fundamentals, with a focus on understanding the key aspects influencing code and text generation.*
- 2. Software engineering strategies for decomposing ideas into actionable, buildable parts.*
- 3. Software development in Python, starting with correct terminology for crafting precise prompts, validating data and code testing,*

*This course is aligned with UH Mānoa's Institutional Learning Objectives of ****Knowing**** (understanding Artificial Intelligence), ****Doing**** (implementing practical problem-solving), and ****Values**** (discussing ethical and inclusive approaches to developing and using AI-based systems).*

Grading Breakdown

Final grades will be calculated from the following criteria:

Assignment type	Percentage or Points
Discussions and Participation	15%
Assignments	55%
Final Project	30%
TOTAL	100%

Assignments

Detailed descriptions and guidelines for all assignments and projects will be provided separately and uploaded to Lamaku.

Grading Policies

Final grades ranging from A to F will be based upon completion of all course requirements that include the following criteria:

Letter Grade	Percentage
A+	100%
A	93 – 99%
A-	90 – 92%
B+	87 – 89%
B	83 – 86%
B-	80 – 82%
C+	77 – 79%
C	73 – 76%
C-	70 – 72%
D+	67 – 69%
D	63 – 66%

D-	60 – 62%
F	< 60%

- Late work is not permitted without prior permission.
- There is no extra credit in this course.
- Students will be notified within a reasonable time of any grading criteria changes that may be necessary.
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Course Policies

Course policies provide clear guidelines to ensure that students stay on track for academic success. Adhering to these policies helps foster a positive and respectful learning environment for all students.

This syllabus is subject to change at the discretion of the instructor.

Student Expectations

- Students are expected to log in to the course at the beginning of each session
- Submit work by deadlines
- Communicate with the instructor if any significant delays arise

Etiquette & Professionalism

- Always show respect to peers, instructors and guests
- Avoid distracting behaviors or noise in videoconferences
- Respect the privacy of others
- Complete group work in a timely manner, and communicate clearly
- Prepare yourself for constructive feedback, and listen before responding
- No animated backgrounds or avatars during videoconferences

- Share your video during videoconferences

Participation

The knowledge and skills you will gain in this course highly depend on your participation in class. Students are expected to actively participate in all aspects of the class including: discussions, group work, and individual assignments. This includes asking questions, sharing ideas and contributing to the overall learning experience.

Students who are enrolled in this course, but never attend will be flagged by the course instructor for non-participation before the last day to add/drop (for 100% tuition refund) deadline. Flagged students will be administratively dropped by the Office of the Registrar. Any changes to a student's enrollment status may affect financial aid eligibility and can result in the return of some of all of federal student financial aid.

Academic Integrity

Cheating, plagiarism, or other forms of academic dishonesty are not permitted within this course and are prohibited within the System-wide Student Conduct Code (EP 7.208). Examples include: fabrication, facilitation, cheating, plagiarism, and use of improper materials. Artificial intelligence tools are permitted only when explicitly defined in the instructions. All web-based sources will be cited, and copyright laws will be honored. Any incident of suspected academic dishonesty will be reported to the Office of Student Conduct for review and possible adjudication. Additionally, the instructor may take action in regards to the grade for the deliverable or course as they see fit.

University Policies & Resources

UHM is committed to providing a learning, working and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. If you or someone you know experiences any of these, UHM has staff and resources on campus to support and assist you. Staff also can direct you to resources in the community.

Student Basic Needs

Basic needs include food and housing, childcare, mental health, financial resources and transportation among others. Student Basic Needs security is critical for ensuring strong academic performance, persistence and graduation, and overall student well-being. If you or someone you know are experiencing basic needs insecurity, please view the resources provided.

Statement on Disability: KOKUA Program

If you have a disability and related access needs, please contact the KOKUA Program (Office for Students with Disabilities) at 956-7511, KOKUA@hawaii.edu, or go to Room 013 in the Queen Lili'uokalani Center for Student Services. Please know that I will work with you and KOKUA to meet your access needs based on disability documentation. Kokuia's services are confidential and offered free of charge.

Accommodation Statement

The University of Hawai'i is committed to a barrier-free campus and provides accommodations to ensure students with disabilities equal access to education. We agree to make academic adjustments to ensure non-discrimination of students with disabilities. This commitment is in accordance with applicable state and federal laws, including the Americans with Disabilities Act, and Sections 504 and 508 of the Rehabilitation Act.

Under the Americans with Disabilities Act (Title II) and the Rehabilitation act of 1973-section 504 and 508, individuals with disabilities have protections against discrimination and are assured access to programs, services and activities. For more information see "Americans with Disabilities Act" and "Rehabilitation Act of 1973 – Section 504 or Section 508".

Students must self-identify to the appropriate Disability Services Office and complete the intake process before receiving reasonable accommodations. To ensure the prompt and effective provision of accommodations, students should contact the Disability Services Office as early as possible. Find your disability services office contact for your home campus.

Title IX

The University of Hawai'i is committed to providing a learning, working and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. If you or someone you know experiences any of these, UHM has staff and resources on campus to support and assist you. Staff also can direct you to resources in the community. Here are some of your options:

If you wish to remain ANONYMOUS, speak with someone CONFIDENTIALLY, or would like to receive information and support in a CONFIDENTIAL setting, contact:

The Office of Gender Equity offers direct services to victims and survivors of sexual harassment and sexual assault. Services offered include crisis screening and assessment, case referral, safety planning and risk assessment.

Telephone: (808) 956-2299 | Email: t9uhm@hawaii.edu | <https://manoa.hawaii.edu/titleix/>
13 Queen Lili'uokalani Center for Student Services 210
2600 Campus Road, Honolulu, HI 96822

Student Conduct Code and Academic Dishonesty

The university expects students to maintain standards of personal integrity that are in harmony with the educational goals of the institution; to respect the rights, privileges, and property of others; and to observe national, state, and local laws and University regulations. Academic dishonesty such as plagiarism, cheating, and other forms of dishonesty may result in a failing ("F") grade for the assignment. More than one incident of academic dishonesty may result in a failing ("F") grade for the course. Equally, more than one incident may also result in reporting the academic dishonesty to the UH Office of Judicial Affairs. Students should familiarize themselves with the University of Hawaii Student Conduct Code.

Financial Aid Statement

If students do not begin attendance in a course or stop participating in a course, Title IV funds must be returned according to Federal Return of Title IV funds regulations (34 CFR 668.21(a)). This means you may be required to return some (or all) of the financial aid you have received. It is very important to remember that colleges are required to take steps necessary to ensure that students are academically engaged in order to justify the disbursement of Federal Title IV 15 student aid funds. If at any time your plans change and you no longer plan to participate in the courses in which you enrolled, you must contact the financial aid office to minimize any possible negative financial impact.

For more information on financial assistance for your education, please contact your home campus financial aid office. Financial assistance may include grants, scholarships, and other resources to help you pay for the cost of college. A financial aid adviser will be able to help you navigate this process to determine your eligibility for these funds.

University Resources

[Student Resources](http://studentresources.manoa.hawaii.edu/students) provides a list of campus resources for undergraduate students.
manoa.hawaii.edu/students

[Division of Student Success](http://divisionofstudentsuccess.manoa.hawaii.edu) provides support services – co-curricular activities, housing, counseling and career guidance, employment, and health, which serve all students.
studentaffairs.manoa.hawaii.edu

[Learning Assistance Center](http://learningassistancecenter.manoa.hawaii.edu) provides tutoring, supplemental instruction and academic coaching.

(808) 956-6114 | *manoa.hawaii.edu/undergrad/Learning* | learning@hawaii.edu

[The Writing Center at Mānoa](http://writingcenter.manoa.hawaii.edu) is a pedagogical space that supports writing and research at UHM. It provides one-to-one writing consultations free of charge to all students, faculty, and staff affiliated with the University of Hawai'i at Mānoa.

sites.google.com/a/hawaii.edu/writingcenter/welcome | tutors@hawaii.edu

[Manoa Career Center](#) partners with both on-campus and off-campus employers to empower UH Mānoa students to engage in career life planning through awareness, exploration, experience, and reflection.

manoa.hawaii.edu/careercenter | careers@hawaii.edu | (808) 956-7007

[Counseling and Student Development Center](#) provides a variety of services to students, including short-term personal counseling, couples and career counseling, workshops, support groups, and peer fellow services.

(808) 956-7927 | manoa.hawaii.edu/counseling/

[UH Information Technology Services – Computer Help Desk](#) provides a wide array of services to support the teaching, learning, public services, administration and research endeavors of the students, faculty and staff of the UH community.

(808) 956-8883 | www.hawaii.edu/its/help-desk/ | help@hawaii.edu

[UH Confidential Advocacy](#) provides confidential advocacy services and case management for victims of discrimination, violence, harassment, or exploitation who are involved in the University.

(808) 956-9499 | manoaadv@hawaii.edu

[Department of Public Safety](#) is dedicated to providing and promoting a safe and secure campus. Contact them for any safety concerns.

Emergency: (808) 956-6911

Non-emergency: (808) 956-8211

Safety Escort: (808) 956-SAFE