Introduction to Programming Syllabus

This **non-credit** course will introduce the beginning programmer to programming structure and design, creating a solid foundation for all types of programming. The emphasis will be on procedural programming and control structures, although exercises will be in Python.

Instructor: Lisa Karstens, PhD   **Office Number:** 503-418-8877 **Email:** karstens@ohsu.edu

Teaching assistant (TA): TBD

Communication:

Any questions about course content should be emailed to the instructor AND the TA, with "Introduction to programming" in the subject line. If you do not receive an email within two days, please resend the email.

Required Textbooks:

*Programming Logic and Design, Comprehensive, **Eighth Edition***. Joyce Farrell. (Course Technology Cengage Learning, ISBN-10: 1-285-77671-2; ISBN-13: 978-1-285-77671-2)

Select readings from additional resources (available on Sakai).

Note: There are older and/or newer editions of these textbooks, be sure to get the right editions.

Grading:

The evaluation consists of:

> 35% - Conceptual Assignments (9 assessments)
>
> 35% - Programming Assignments (9 assignments)
>
> 30% - Final Examination

The final grade is Pass/Fail and a grade of 70% or more is required for a Pass.

Assignments should be turned in by the due date, which is one week after they are released. *Late assignments will receive a **10 point deduction** and will only be accepted up to one week past the due date.* Graded assignments are returned within two weeks of submission.

Programming requires paying attention to detail. As such, points will be deducted from homework for not following instructions. Be sure to follow all instructions in the assignments, including how to name your files and the types of files to turn in.

You will receive a Certificate of Completion upon successful completion of the course. This course will not appear on your transcript as it is non-credit.

Computing requirements:

In order to write and run Python programs, the student will be required to have a computer with permissions to install programs. Instructions will be given on how to install the required software in the first course module.

Goals:

- Learn to represent programming logic in pseudocode and flowcharts.
- Learn to write and test simple Python programs.

- Learn to select test data for programs.
- Understand correct naming and declaration of variables and constants.
- Become proficient in structured programming.
- Understand the advantages of and methods for modularization of programs.
- Learn to use Boolean expressions in if-then structures for making decisions.
- Learn to use looping structures and how to end loops.
- Learn to use arrays including multidimensional arrays and practice using them in sorting
- algorithms.

Modules:

This course consists of 10 modules. Each module contains:

- assigned readings from the textbooks and other resources
- lectures available for viewing along with a handout and audio files
- an interactive notebook to practice programming concepts
- homework: conceptual assessments and programming assignments (modules 1 – 9)

This course releases one module per week. **Each module is posted by 9am PT Monday** morning, and the **assignments are due the following Monday at Midnight PT**.

The final examination will be made available during week 10 and will be due the following week.

DMICE Communication Policy

1. **Please use professional etiquette when communicating with peers and the instructor**. This means avoiding aggressive or offensive language, showing respect for others' opinions and positions, and conducting yourself as if you were face to face with them. Please pay special attention to etiquette in class forums and when using email. If you notice someone violating this policy, please make the instructor and TA aware of the problem.
2. **Students having difficulties with Sakai should contact the Sakai Help Desk** at sakai@ohsu.edu or at (877) 972-5249. Sakai help is available M-F from 8am to 10-pm and weekends from Noon to 5pm. Do not contact the instructor, but cc the instructor on emails to the Sakai help desk.
3. If the syllabus directs the student to contact the TA before contacting the instructor, the student should do so. Otherwise, the student should contact the instructor and allow 2 business days (not including weekends) for a response.
4. If the student does not receive a response from the instructor within 2 business days, s/he should contact the TA (if there is one). When contacting the TA s/he should cc the instructor and Vanessa Reeves at reevesva@ohsu.edu.
5. If a student does not receive a response from the TA within 1 business day (not including weekends), s/he should contact Vanessa Reeves at reevesva@ohsu.edu and cc the instructor and the TA.
6. If Vanessa does not reply within 2 business day (not including weekends), the student should contact Andrea Ilg at ilgan@ohsu.edu.
7. Please use professional etiquette when communicating with peers and the instructor. This means avoiding aggressive or offensive language, showing respect for others' opinions and positions, and conducting yourself as if you were face to face with them. Please pay special attention to etiquette in class forums and when using email. If you notice someone violating this policy, please make the instructor and TA aware of the problem.

Professional Conduct Policy:

While discussion between students and use of external resources are important learning tools, all homework assignments and the exam are expected to be the work of the enrolled student only. Any violation will result in zero points for that homework assignment or exam. Students enrolled the certificate, BMI, or MS program should review the professional conduct policy of the Graduate Studies Program, which can be found on the Graduate Studies website at: https://www.ohsu.edu/school-of-medicine/graduate-studies/forms-and-policies

COMMITMENT TO EQUITY AND INCLUSION

OHSU is committed to creating and fostering a learning and working environment based on open communication and mutual respect. If you encounter sexual harassment, sexual misconduct, sexual assault, or discrimination based on race, color, religion, age, national origin or ancestry, veteran or military status, sex, marital status, pregnancy or parenting status, sexual orientation, gender identity, disability or any other protected status please contact the Affirmative Action and Equal Opportunity Department at 503-494-5148 or aaeo@ohsu.edu. Inquiries about Title IX compliance or sex/gender discrimination and harassment may be directed to the **OHSU Title IX Coordinator** at 503-494-0258 or titleix@ohsu.edu.

Please use professional etiquette when communicating with peers and the instructor. This means avoiding aggressive or offensive language, showing respect for others' opinions and positions, and conducting yourself as if you were face to face with them. Please pay special attention to etiquette in class forums and when using email. If you notice someone violating this policy, please make the instructor and TA aware of the problem.

Student Access

OHSU is committed to providing equal access to qualified students with disabilities. Student Access determines and facilitates reasonable accommodations, including academic adjustments and auxiliary aids, for students with documented disabilities. A qualified student with a disability is a person who meets the academic and technical standards requisite to admission or participation in a particular program of study. As defined by the Americans with Disability Act (ADA), a person with a disability has a physical or mental impairment that substantially limits one or more major life activities of the individual. This may include, but is not limited to, physical conditions, chronic health issues, sensory impairments, mental health conditions, learning disabilities and ADHD. Student Access works with students with disabilities from all of OHSU's educational programs and at each campus.

Each school has an assigned Program Accommodation Liaison (PAL), who acts as an "in-house" resource for students and faculty concerning access issues for students with disabilities. The PAL works in collaboration with Student Access to implement recommended accommodations for students with disabilities.

It is recommended that you contact Student Access to consult about possible accommodations if you a) received disability accommodations in the past, b) begin experiencing academic difficulties, and/or c) are given a new diagnosis from your healthcare provider.

Learn more about Student Access:

Phone: 503 494-0082

Email: studentaccess@ohsu.edu   Website: www.ohsu.edu/student-access

Use Of Sakai

This course will have an online component, which can be accessed through Sakai, OHSU's online course management system. For any technical questions or if you need help logging in, please contact the Sakai Help Desk.

Hours: Sakai Help Desk is available Mon – Fri, 8 am – 9 pm and weekends 12 pm – 5 pm. The Sakai Help Desk is closed on OHSU-observed holidays.

Contact Information:

(Toll-free) 877-972-5249

(Web) http://atech.ohsu.edu/help

(Email) sakai@ohsu.edu

Content subject to (minor) change before class begins.