

# Habtamu Minassie Aycheh,PhD Department of Electrical and Computer Engineering





### Department of Electrical and Computer Engineering Spring 2022

Course Title: Programming for All 1

Course Number: COMP 1010

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#### Course Objective

- This course is designed for non-CS major students who desire a practical course for gaining basic computer programming skills.
- The course provides a comprehensive study of how to approach programming problems and devise solutions using python programming language.
  - basic concepts, patterns, data structures and implementation of python programming techniques will be presented.



Syllabus

Week	Day	Date	Topic	Week	Day	Date	Topic
1	Tue	22/02/2022	Introduction		Tue	19/04/2022	More on lists
	Thu	24/02/2022	Setup python working environment	9	Thu	21/04/2022	Collection data types: Tuples
	Fri	25/02/2022	Python Variables		Fri	22/04/2022	
2	Tue	01/03/202	Independence Movement Day		Tue	26/04/2022	Collection data types: dictionary
	Thu	03/03/2022	Values and primary data types	10	Thu	28/04/2022	
	Fri	03/04/2022	Statements and Expressions		Fri	29/04/2022	Collection data types: Sets
3	Tue	08/03/2022	Operators and Operands		Tue	03/05/2022	The Python Module
	Thu	10/03/2022	Type conversion - Casting	11	Thu	05/05/2022	Children's Day
	Fri	11/03/2022	5 (1 ) (1 )		Fri	06/05/2022	Reading Day
4	Tue	15/03/2022	Program flow control- Conditions	12	Tue	10/05/2022	Errors and Exceptions Handling
	Thu	17/03/2022	Program flow control- iterations  Algorithms		Thu	12/05/2022	Unit testing
	Fri	18/03/2022			Fri	13/05/2022	Python Turtle
5	Tue	22/03/2022		13	Tue	17/05/2022	
	Thu	24/03/2022			Thu	19/05/2022	Object oriented programming (OOP) - class and object  More on OOP -Inheritance
	Fri	25/03/2022	Functions – Built in libraries/modules				
6	Tue	29/03/2022			Fri	20/05/2022	
	Thu	31/03/2022	Spring Recess		Tue	24/05/2022	
	Fri	01/04/2022		14	Thu	26/05/2022	File I/O operations
7	Tue	05/04/2022	Functions -User defined Functions		Fri	27/05/2022	
	Thu	07/04/2022	Strings and string manipulation	15	Tue	31/05/2022	File I/O operations – CSV files
	Fri	08/04/2022			Thu	02/06/2022	File I/O operations – image files
8	Tue	12/04/2022	Collection data types: Lists		Fri	03/06/2022	
	Thu	14/04/2022	Mid Term Exam	16	Tue	07/06/2022	Final Exam
	Fri	15/04/2022					4

# Class Logistics

- Class Time
  - □ Tuesday & Thursday: 8:00am 8:50am
  - □ Location: U513(Lab)
- Office Hour
  - By appointment
- Course materials
  - Canvas: <a href="https://utah.instructure.com">https://utah.instructure.com</a>
    - Please check canvas
      - for lecture slides before class
      - □ quizzes, assignments, etc...
      - □ GitHub: <a href="https://github.com/habtamuMin/comp1010">https://github.com/habtamuMin/comp1010</a>

#### Evaluation

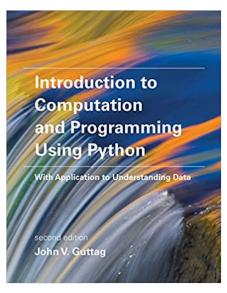
- Class participation: 10%
- Quiz : 10%
- Programming Assignments(PAs): 30%
- Mid test : 25%
- Final test: 25%

# Academic integrity

- You have to be honest in all your academic course work
- Violation will be recorded in your transcript
  - https://regulations.utah.edu/academics/6-400.php
- Submit assignments by the deadline
- Attend classes to successfully complete the course.

#### Books

- Textbook: Foundations of Python Programming
  - Interactive textbook: <a href="https://runestone.academy/ns/books/published/fopp/index.html">https://runestone.academy/ns/books/published/fopp/index.html</a>
     Reference
- 2. Introduction to Computation and Programming Using Python, second edition
  - https://www.amazon.com/Introduction-Computation-Programming-Using-Python/dp/0262529629/ref=sr\_1\_3?keywords=Introduction+to+Computation+and+Programming+Using+Python.&qid=1564178404&s=gateway&sr=8-3



Programming requires "practice" not just reading!

# Good luck and have a great semester!

