

Syllabus for HIMT345

Programming and Software Development

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

Fundamental concepts of programming using a contemporary data analysis language. Topics include variables, conditional execution, functions and methods, iteration, strings, files, and data structures. Applications will be taken from the Healthcare Information Systems.

Prerequisite(s)

None.

Course Outcomes

Upon completing this course, you will be able to do the following:

- Learn the structures utilized in programming languages for decision-making and repeated operations.
- Understand the need for differing types of data and the ramifications emerging from that need.
- Realize and experience the value of the re-use of code, from both efficiency of operation and of maintenance points of view.
- Make use of programming strategies to answer data inquiries posed by healthcare professionals.

Course Requirements/Components

Activities include textbook readings and video presentations. To assess your understanding of the materials, the following types of assessments will be used:

- Quizzes (in Canvas; immediate scoring)
- Self-review exercises (not submitted for evaluation)

- Lab assignments (programming in Python)
- Final Exam

Examinations

There will be a comprehensive final examination.

An early or makeup final exam will not be given unless there are extraordinary circumstances, as determined by the instructor. You **must** contact the instructor **before** the examination in order to be considered. Failing to do so will result in receiving a zero for that grade component.

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade:

Grade	Percentage Range
A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0 - 59%

Assignment	% of Course Grade
Quizzes	30
Homework Assignments	50
Final Exam (comprehensive)	20
Total	100%