

Oklahoma State University Institute of Technology
Online Common Syllabus
Spring 2018

ITD2313 – Script Programming

Students learn to develop and execute scripts. Topics include parsing command line arguments, regular expressions, programming logic, functions, error handling, file processing and other scripting technologies.

Course Purpose:

This purpose of this course is to teach the student how to program in an interpreted computer language (python)

Type of Course: Theory/Lab

Credit Hours: 3; Total hours of theory per semester: 30;

Total hours of lab for the semester: 45; Total hours of clinical per semester: 0.

Class Length: Full Semester

Class Format: Online

Class Days and Times: N/A

Prerequisites: ITD1033 – Intro to Computer Logic

Instructor Name: Michael Schnell

Instructor Phone: (405) 382-9641

Office:

Instructor Email: *michael.schnell@okstate.edu*

Contact: My preferred method of contact is email. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours: (all hours are in central time zone)

By appointment online

School Name: Information Technologies

School Main Phone: 918-293-5440

REQUIRED TEXT, REFERENCES, AND MATERIALS

Texts: Fundamentals of Python, First Programs. Kenneth A. Lambert.
ISBN 978-1-111-82270-5.

References: Assorted Subject Videos

Materials: Access to a computer with broadband Internet Access (2Mbps upload preferred)

Uniform/Tools: None

Estimated Cost for Materials: \$139

Estimated Cost for Uniform/Tools: None

Upon completion of the course, students should:

Course Objectives	Assessment of Objectives	
Demonstrate proficiency in the use of a programming language to solve complex problems in a secure and robust manner	*Weekly Assignments	A.2
Apply mathematical concepts to meet Information Technology requirements	*Weekly Assignments	A.4
Demonstrate knowledge of industry standard software development best practices	*Weekly Assignments	M.4

Aspects of the course objective assessments may be used in the university's assessment of student learning. If applicable, an asterisk (*) above indicates this assignment is used in the university assessment program.

(Please asterisk the assignment above if utilized for the assessment assignment.)

COURSE ACTIVITIES

In this course students will:

- Participate in online discussions and activities
- Use Python 3 software to complete labs
- Develop scripts that work as games
- Research and write about script use in industry
- Understand the use of programming logic to automate with script
- Complete a Mid-term and Final Exam
- Compile a portfolio of work produced

EVALUATION - GRADES WILL BE BASED ON THE QUALITY AND COMPLETION OF THESE TASKS: *(NOTE- Please indicate the course-specific evaluations)*

Discussion Board Posts	10%
*Weekly Assignments	35%
Quizzes	15%
Mid-Term Exam.....	15%
Final Exam.....	15%
Portfolio	5%
Professional Development.....	5%
Total	100%

OSUIT Grading Scale
A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% & below

*The student’s grade for this assignment will be used in the university’s assessment of student learning. A 70% competency or higher receives a Pass rating. This Pass/Fail rating is independent of the student’s course grade.

Daily and/or weekly quizzes, small weekly assignments and similar type projects: Normal return time to student by next class meeting or no later than one (1) week.

Extensive assignments, large lab projects, extensive quizzes, exams and similar type projects: Normal return time to students in one (1) to two (2) weeks.

RECOMMENDED STUDENT COMPETENCIES/SKILLS

Students need to have completed all of the skills covered in ITD1033 – Intro to Computer Logic

AUTHORIZED TOOLS

Students may use any/all course materials, including books and notes, while participating in online classroom activities. All quizzes, labs, and written assignments are to be completed independently and any instance of collaboration will be considered academic dishonesty. Collaboration with classmates while studying concepts and network configurations is permitted and encouraged.

LATE WORK

Turning in your properly-executed work early is always acceptable. All exams, assignments, papers and projects must be completed and submitted by the specified due date; late work will not be accepted after the due date unless prior authorization is given.

TESTING

Quizzes may be timed or proctored during this course.

OTHER LAB AND CLASSROOM POLICIES

Students are encouraged to work with and help each other. However, all work turned in must be original for each student.

ONLINE COURSE INTERACTION

OSUIT requires all online courses to include interaction between students, peers and instructors. Our online courses use a variety of tools to build a community of learners and strengthen engagement between students and their peers, as well as between students and the instructor. Communication tools used in courses may include Discussion, News, and Email. Read the syllabus completely to determine which of these methods you, your classmates and your instructor will use for interaction.

General guidelines for student conduct while interacting within an online course include: (1) Use proper language in all communications; (2) Harassment of any type will not be tolerated; (3) No jokes, insults or threats of an offensive nature.

For more information, go to: <http://osuit.edu/center/netiquette>

SYLLABUS ATTACHMENT

View the Syllabus Attachment, which contains other important information, by visiting http://osuit.edu/center/student_syllabus_information

Course Schedule (subject to change at instructor discretion)			
Schedule	Topic	Assignment	Due Date
Module 1	Chapter 1 – Introduction and installing Python	Chapter 1 Assignments Discussion Board Posts Quiz 1	01/10
Module 2	Chapter 2 – Software Development, Data Types, and Expressions	Chapter 2 Assignments Discussion Board Posts Quiz 2	01/17
Module 3	Chapter 2 - Software Development, Data Types, and Expressions, cont.	Chapter 2 Assignments Discussion Board Posts	01/24
Module 4	Chapter 3 – Control Statements	Chapter 3 Quiz 3 Assignments Discussion Board Posts	1/31
Module 5	Chapter 3 - Control Statements continued	Chapter 3 Assignments Discussion Board Posts	02/07
Module 6	Chapter 4 - Strings and Text Files	Chapter 4 Assignments Discussion Board Posts Quiz 4	02/14

Module 7	Chapter 5 - Lists and Dictionaries	Chapter 5 Assignments Discussion Board Posts Quiz 5	02/21
Module 8	Chapter 6 - Design with Functions	Chapter 6 Assignments Discussion Board Posts Mid-Term Chapters 1-5	02/28
Module 9	Chapter 6 - Design with Functions continued	Chapter 6 Assignments Discussion Board Posts Quiz 6	03/07
Module 10	Chapter 7 - Simple Graphics and Image Processing	Chapter 7 Assignments Discussion Board Posts Quiz 7	03/14
Module 11	Chapter 8 - Design with Classes	Chapter 8 Assignments Discussion Board Posts Quiz 8	03/21
Module 12	Chapter 9 - Graphical User Interfaces	Chapter 9 Assignments Discussion Board Posts Quiz 9	03/28
Module 13	Chapter 10 - Multithreading, Networks, and Client/Server Programming	Chapter 10 Assignments Discussion Board Posts Quiz 10	04/04
Module 14	Chapter 11 - Searching, Sorting, and Complexity Analysis	Chapter 11 Assignments Discussion Board Posts Quiz 11	04/11
Module 15	Final Exam & Portfolio	Final Exam Chapters 6 - 11 (available through Wed) Portfolio	04/18