CS 105: Intro to Computing

Summer, 2022

Course Information

Instructor Information

Instructor: Erin Keith

Course Description

Introduction to modern problem solving and programming methods. Emphasis is placed on practical development. Introduction to procedural programming and data abstraction.

Course Pre/Co-requisites

None

Required Texts/Course Materials *(textbooks and materials are purchased and provided to students by the THINK program)*

Required Technology – TopHat, WebCampus, Slack, Python 3, Git

Required Textbook – Automate the Boring Stuff with Python

Class Procedures/Structures

Students will be required to access materials and complete activities and assignments online via WebCampus, TopHat, and GitHub Classroom.

Course Arrangement

The course has one component: Lecture and it is mandatory. All assignments, homework, quizzes, and exams are required.

The tentative schedule for each day is as follows:

30 minutes – videos, textbook, and online resources
30 minutes – online activity
30 minutes – problem solving discussion for programming assignment

60 minutes – concept and coding lecture
30 minutes – problem solving discussion for programming assignment

Student Learning Outcomes

- 3, 5 Students will be able to demonstrate that they can analyze simple problem statements to identify relevant information and design small computer programs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability to solve such problems (ABET 3, 5).
- 11. Students will be able to demonstrate that they can use a modern programming language and development environment to design and implement small computer programs (ABET 11)
- 13. Students will be able to demonstrate that they can use relevant design and development principles in the construction of simple computer programs (ABET 13).

Assessment

CSE SLO/CO	Course Specific SLO	Assessment Methods
4	An ability to function effectively on multidisciplinary teams (ABET 4)	Programming projects
5	Students will have an ability to analyze a problem, and identify, formulate and use the appropriate computing and engineering requirements for obtaining its solution.	Programming projects and exams
11	Students will be able to demonstrate that they can use a modern programming language and development environment to design and implement small computer programs (ABET 11)	Programming Projects and exams
13	Students will be able to demonstrate that they can use relevant design and development principles in the construction of simple computer programs (ABET 13).	Programming projects and exams

Course Requirements

Assignments

Programming assignments require designing, implementing, and perhaps demonstrating your solutions to posed problems. We will be using the Python 3 programming language for these assignments.

TopHat
TopHat not only provides access to lecture material, but also allows for class participation through its interactive design. TopHat participation is required, counts toward your Labs and Quizzes grades, and cannot be made up.

Quizzes
There may be announced and unannounced quizzes.

Exams
There will be two exams, a midterm and a final. Dates and times will be posted on WebCampus.

Grading Criteria, Scale, and Standards

We will not use the plus/minus grading system. Your grade will be one of A, B, C, C-, D, or F.

A: 90% - 100%
B: 80% - 89%
C: 70% - 79%
D: 60% - 69%
F: <60%

Your final grade will be based on:

Item	Percentage
Programming assignments	40%
TopHat, Quizzes, In Class Assignments	20%
Midterm exams	20%
Final Exam	20%

Assignments and exams are individual efforts. A severe penalty will be given for collusion or other form of academic dishonesty. The usual penalty for academic dishonesty on assignments or an exam is failure in the course.

Late Work or Make-up Exams Policies

Late programming assignments or exercises will be accepted for 3 days after the assignment is due, with a 10% per day penalty.

Course Calendar or Topics Outline

Required readings, approximate schedule of exams and due dates for graded assignments.

Week	Topics, Readings	Assignments Due Dates
1	Intro, Development Environment	Lab 1
2	Python Basics	Lab 2, Programming Assignment 1
3	Flow Control	Lab 3, Programming Assignment 2
4	Functions	Lab 4, Programming Assignment 3
5	Data Structures	Lab 5, Programming Assignment 4

Week	Topics, Readings	Assignments Due Dates
6	Review	Lab 6, Midterm 1
7	Input Validation	Lab 7, Programming Assignment 5
8	Reading and Writing Files	Lab 8, Programming Assignment 6
9	Working with Excel Spreadsheets	Lab 9, Programming Assignment 7
10	Web Scraping	Lab 10, Programming Assignment 8
11	Manipulating Images	Lab 11, Programming Assignment 9
12	Final Project	Lab 11
13	Review	Lab 12, Final Project

Course Policies

Communication Policy

- Quick questions: Slack, 9am – 5pm, response usually within 2-5 hours
- Grading questions: email me, within 24 hours
- Debugging questions: email me, 9am – 5pm, response within 24 hours
- Feedback and grades should be received within 2 weeks.
- For emails, please include **CS 105** in the subject line!

Late policy

Late programming assignments or exercises will be accepted for 3 days after the assignment is due, with a 10% per day penalty.

Plagiarism

Unless otherwise specified, all tasks are individual efforts. A severe penalty will be given for collusion or other form of academic dishonesty. The usual penalty for academic dishonesty on assignments or an exam is failure in the course.

I will be using an automated tool on programming assignments and tests to detect plagiarism.

Netiquette

The following guidelines should be followed each time you interact in the course to ensure your interactions are respectful and professional:

1. In all your interactions, remember that there is a person behind the written post, who has feelings and can be hurt by what and how you interact with him or her.

2. It is easier to say something online when you do not have to look the person in the eye, so never post anything that you would not say to the person face-to-face.

3. Adhere to the same standards of behavior online that you follow in real life, which includes acting ethically and following rules and regulations. If you would not steal in real life, then you should not steal online by taking other people's ideas and using them as your own.

4. Respect other people's time and bandwidth:

a) Take time to understand the requirements of the discussion.

b) Do not waste people's time by asking questions that are not relevant to the discussion or questions whose answers can readily be found in the course with a little effort.

c) Refrain from disagreements that lead to personal attacks.

5. Make yourself look good online:

a) Take time to check your spelling and grammar.

b) Prepare for discussions prior to engaging in them.

c) Refrain from inappropriate language and remarks.

6. Share your knowledge by offering help to learners who have questions.

7. Help keep flame wars under control by not posting flames and not responding to flames – keep discussions professional.

8. Forgive other learners' mistakes and be patient and compassionate of all learners in the course.

University Policies

Statement on Academic Dishonesty

"The University Academic Standards Policy defines academic dishonesty, and mandates specific sanctions for violations. See the University Academic Standards policy: UAM 6,502."

Statement of Disability Services

If you are a student who would normally seek accommodations in a traditional classroom, please contact me as soon as possible. You may also contact the Disability Resource Center for services for online courses by emailing drc@unr.edu or calling 775-784-6000. Academic accommodations for online courses may be different than those for seated classrooms; it is important that you contact us as soon as possible to discuss services. The University of Nevada, Reno supports equal access for students with disabilities. For more information, visit the Disability Resource Center.

This course may leverage 3rd party web/multimedia content, if you experience any issues accessing this content, please notify your instructor.

Statement on Audio and Video Recording

Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

Statement on Maintaining a Safe Learning and Work Environment

The University of Nevada, Reno is committed to providing a safe learning and work environment for all. If you believe you have experienced discrimination, sexual harassment, sexual assault, domestic/dating violence, or stalking, whether on or off campus, or need information related to immigration concerns, please contact the University's Equal Opportunity & Title IX office at 775-784-1547. Resources and interim measures are available to assist you. For more information, please visit the Equal Opportunity and Title IX page**.**

In addition to the required information listed above, it is strongly recommended that the syllabus include:

- Methods for communicating with students outside the classroom regarding matters such as class cancellations, meeting times, or room changes
- More detail about what constitutes academic dishonesty, with a concrete list or examples of "dos and don'ts" in the context of the class
- **Statement for Academic Success Services**: "Your student fees cover usage of the Math Center (775) 784-4433, Tutoring Center (775) 784-6801, and University Writing Center (775) 784-6030. These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student."