Foundations of Computing

CSIS1030

Course Description

The course includes introductory topics such as: the history of computers, web development, programming, databases, GIS, networking, and security. Through a series of engaging activities and assessments, students will learn first-hand about the field of computer science. Upon completion, students will have an understanding of the career path that aligns with their interests and professional goals.

Semester(s) Taught: All

This course provides students with a broad overview of topics they might encounter within the Computer Science curriculum. It is designed to provide a foundational exploration of Computer Science, essential in undergraduate programs to ensure that all students are on the same footing for subsequent courses.

The course is taught at an introductory level and includes topics such as: the history of computers, process analysis, web development, programming, database, networking, and security. Through a series of engaging activities and a variety of assessments, students will learn first-hand about the field of computer science as both a degree and a career. Upon completion, students will have a strong understanding of the career path that most aligns with their interests and professional goals.

Course Student Learning Outcomes

- Describe the different fields of study in Computer Science and Information Systems.
- Demonstrate critical thinking by creating algorithms, logical thinking, and problem-solving.
- Determine the ethical implications of privacy concepts regarding corporate and personal data.
- Distinguish between good design and bad design.

Text

No required text. All reference material comes from Open Educational Resources (OER) available on the web.

Course Prerequisites

This course doesn't have prerequisites.

Communication Plan

- I will respond to emails within [4 hours] and offer feedback on major assignments within [24 hours]. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- In this course, I will post interactive announcements every other week, which will offer specific opportunities for class questions and extra credit.

Keys for Success (how to succeed in the course)

Students must complete all assignments in this course.

how to succeed in the course;

- Discipline Yourself.
- Manage Your Time.
- Stay Ahead.
- Help Yourself Then Ask for Help
- Be Present and Prompt.
- Don't Quit.
- Communicate with Instructor

Brief Description of Assignments/Exams

Weekly Assignments (50%): The specific assignment, due date, and turn-in procedures are all managed through Canvas. Late work will be accepted after the due date, but a 10%penalty will be charged.

Quizzes (15%): One or more quizzes may be given to cover the material in each module.Quizzes must be taken on or before the due date, are "open book", not timed, and you may take a quiz only once.

Discussions (10%): Participate in weekly discussions.

Module Reflections (10%): Each module will have a reflection paper for the student to reflect on what was learned in the module, this is in place of exams.

Final Reflection (15%): The final is a reflection on the whole course with a bit of research into what Computer Science path the student may want to take.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	11/21 Extra Credit	Assignment	0
	12/7 Extra Credit	Assignment	0
	Practice Submitting Assignments	Assignment	0
	Roll Call Attendance	Assignment	100
	SQL Quiz	Quiz	6
8/25	Introduce Yourself	Discussion	10
8/25	Orientation Quiz	Quiz	5
9/1	Binary & Data Representation	Quiz	9
9/1	Introduce Yourself - Part II	Discussion	10
9/1	Module 1 Reflection	Assignment	15
9/8	Good vs Bad Design	Discussion	10
9/8	Wolf, Sheep, and Cabbage Logic game	Assignment	10
9/15	Logical Reasoning	Quiz	5

9/15	Why study "Logic"?	Discussion	10
9/15	Logic Problem Assignment - Group	Assignment	50
9/15	Module 2 Reflection	Assignment	15

Due Date	Assignment Name	Assignment Type	Points
9/22	Algorithms & Flowcharts	Discussion	10
9/29	Algorithms are EVERYWHERE!	Discussion	10
9/29	Algorithm & Flowchart Assignment - Group	Assignment	75
9/29	Group Peer Evaluation	Assignment	20
9/29	Module 3 Reflection	Assignment	15
10/6	The Future of the Web	Discussion	10
10/6	Website Design I	Assignment	50
10/13	Extra Credit Discussion	Discussion	0
10/13	HTML & CSS	Quiz	5
10/13	Website Security	Discussion	10
10/13	Module 4 Reflection	Assignment	15
10/13	Website Design II	Assignment	50
10/20	Database Design	Discussion	10
10/27	Module 5 Reflection	Assignment	15
10/27	SQL Assignment 1	Assignment	25
10/27	SQL Assignment 2	Assignment	50
11/3	Project 1 Lab	Assignment	10
11/10	Project 2 Lab	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
11/17	Module 6 Reflection	Assignment	15
11/17	Program I	Assignment	100
11/17	Program II	Assignment	100

Grading Scale

Grading Scale	A 94% - 100%	A- 90% - 93%
B+ 87% - 89%	B 84% - 86%	B- 80% - 83%
C+ 77% - 79%	C 74% - 76%	C- 70% - 73%
D+ 67% - 69%	D 64% - 66%	D- 60% - 63%
E 59% and below		

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link:
https://slcc.instructure.com/courses/530981/pages/institutional-syllabus

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar