Introduction to Programming

CSIS - 1340 003

Course Description

This course is designed for the student who has no programming experience and wants to learn the skills required to program a computer. The student develops a simplified programming language and will use this language to create computer algorithms to solve simple problems. The algorithms are then translated into a language such as Java or Python. This course prepares the student for CSIS 1400.

Semester(s) Taught: All

Course Student Learning Outcomes

- From a set of requirements; analyze, design, code, test and document programs to meet requirements.
- Students must translate some math principles and formulas into a computer algorithm and programming language.
- Students will demonstrate critical thinking and creativity by creating multiple solutions for some problems, and analyze the quality of each solution.
- Students will collaborate in a simulated work environment to implement working solutions for some problems.
- Students will identify the key concepts of programming.
- Students will create working solutions based on program requirements.

Additional Materials

The Book for this class is **REQUIRED**. It can only be found at the SLCC Bookstore.

Fundamental Abstractions with Imperative Programming

(Links to an external site.)

$22.00 to $55.00

ISBN: 9780840009050

Author: Koziatek

Publisher: Wire-Wrapped Publications

Formats: PAPERBACK

(Links to an external site.)

The optional JAVA book is not required as most of the information is free on the Internet. However, it is required in the next programming class, CSIS1400.

FLOWCHARTS:

We will use Lucid Charts. This software is provided FREE by SLCC.

When you access Lucid from Canvas as a student for the first time, you need to follow these steps to register for a Lucid account or connect to an existing one.

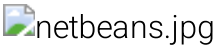
1. From your Canvas course, click Lucid (Whiteboard) from the navigation menu on the left-hand side.
   Select whether you are under 13 years of age.
2. Click Next.
   - If you indicate that you are under 13 years of age, you will be asked to enter your date of birth to verify your age. Students under 13 will be prevented from continuing the setup until their teacher gets approval, as described in the “For teachers” section above.

3. If you do not have a Lucid account, click Register. A Lucid account will be created for you connected to the email address on your Canvas account.
    - If you have an account but are not logged in, enter your credentials to log in.
    - If you are already logged in to a Lucid account, click Connect to Lucid.
4. Click Continue.

Your Lucid account is now connected, allowing you to access and edit Lucid documents from Canvas.

Remember, your page must be 8 1/2 x 11 PDF to turn in via canvas. If you need more room lengthen the page, not the width. Do not let it break to a new page. Not following the rule makes homework hard to read in Canvas and will be sent back to you.

PROGRAMMING JAVA:



After the Mid-Term we will be converting our flowcharts to java programming language. To do this you must install Netbeans IDE on your computer. It is FREE. Instructions are provided later in the course

Brief Description of Assignments/Exams

Flowcharts / Java Programs / Quizzes / Discussions listed below and on Canvas home page.

A Mid-Term and Comprehensive Final are given in Canvas. Open Book: True/False, Multiple Choice and Fill-In-The-Blank

Each Exam is worth 25% of the Final Grade.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
8/31/25	Avatar & Intro Discussion	Discussion	10
8/31/25	Chapter 1 Discussion	Discussion	10
8/31/25	Chapter 1 Quiz	Quiz	8
8/31/25	Chapter 2 - Minimum Coins Algorithm	Assignment	100
8/31/25	Chapter 2 Discussion - Finding Key Concepts	Discussion	10
8/31/25	Chapter 2 Quiz on Key Concepts	Quiz	8
9/7/25	Chapter 3 Discussion - Learning to Speak.	Discussion	10
9/7/25	Chapter 3 Quiz - OOP	Quiz	10
9/7/25	Chapter 4 - First Flowchart with Lucid	Assignment	100
9/7/25	Chapter 4 Discussion - Simple Programming Using Flowcharts	Discussion	10
9/14/25	Chapter 5 - Minimum Coins with Lucid	Assignment	100
9/14/25	Chapter 5 Discussion - Counters & Accumulators	Discussion	10

Due Date	Assignment Name	Assignment Type	Points
9/21/25	Chapter 9 Discussion - Adding Structure	Discussion	10
9/21/25	Chapter 9 - Basic Structures Quiz	Quiz	20
9/21/25	Chapter 9 Structured Minimum Coins with Lucid	Assignment	100
9/28/25	Chapter 6 - GCD Flowchart with Lucid	Assignment	100
9/28/25	Chapter 6 Discussion - Practice Makes Perfect	Discussion	10
10/5/25	Chapter 7 - GCD Function with Lucid	Assignment	100
10/5/25	Chapter 7 Discussion - Form Follow Function	Discussion	10
10/19/25	Chapter 8- DOW Temperatures with Lucid	Assignment	100
10/26/25	DOW using Arrays with Lucid	Assignment	100
11/2/25	HelloWorld using Java	Assignment	100
11/2/25	Mid Term 25% of Final Grade	Quiz	54
11/9/25	Java Minimum Coins Program	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
11/16/25	GCD & Function Java Program	Assignment	100
11/30/25	DOW Reading & Writing to Files	Assignment	100
12/7/25	DOW reading FILE load Arrays	Assignment	100
12/18/25	Final Test 25% of Final Grade	Quiz	50
12/18/25	Minimum Coins GUI Program	Assignment	100

Grading Scale

See Canvas

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.

For more information, navigate to the Institutional Policies tab on the Institutional Syllabus page.

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, visit the Institutional Syllabus page under the Tutoring and Learning Support tab. 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, visit the Institutional Syllabus page under the Advising and Counseling Support Services tab. 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.