CS 121: Introduction to Programming

COURSE DETAILS

	Crystal Hess - chess@shoreline.edu		
	I prefer messages sent through Canvas.		
Instructor	Messages are checked daily and typical		
	response time is within 24 hours, this		
	excludes weekends and holidays.		
Office	T/TH/F 9-10am, M/W 3-4pm, or by appt.		
Hours	Science Building, Office 2813		
Class	M/T/W/TH 10:30-11:20am		
Hours	Computer Lab 1308		

CS121 - Introduction to Programming (5 credits)

This course provides an introduction to computer programming. Explore foundational programming constructs, such as variables, functions, decisions, loops, and lists. Explore foundational programming concepts, such as problem solving, testing, and debugging. This course is intended for students with little to no prior programming experience.

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COURSE OUTCOMES

At the end of this course, students will be able to:

- 1. Identify and use programming language constructs such as sequence, selection, iteration, and procedures.
- 2. Examine and explain syntax, semantics, and practical effects of programming statements and procedures.
- 3. Develop solutions to small, independent problems given an algorithm.
- 4. Recognize and use test cases to verify that solutions meet specifications.
- 5. Examine and compare reasoning, design, and effectiveness of alternative solutions.

PREREQUISITES

Placement into ENGL& 101, and MATH 099 with grade of 2.0 or better, or instructor permission.

TOPIC COVERAGE

In our class, we will be using the programming language Python. We will code "in the cloud" using <u>repl.it</u> and our course text is also "in the cloud" at <u>How to Think</u> like a Computer Scientist.

Over the course of the quarter, we will cover approximately one topic per week through Week 8.

For the last two weeks of the quarter, we will revisit the topics previously covered by way of Edison Robots which can be programmed using Python.

Week 1	Introduction to Computing				
Week 2	Variables, Expressions, Statements				
Week 3	Functions				
Week 4	Decisions				
Week 5	Midterm and Turtle Graphics				
Week 6	Repetition				
Week 7	String Operations				
Week 8	Lists				
Week 9	Midterm 2 and Edison Robots				
Week 10	Edison Robots				
Week 11	Final Project				

REQUIRED MATERIALS

SOFTWARE

• http://repl.it (Available online for free)

TEXT

• How to Think like a Computer Scientist (Available online for free)

COMPUTER

- It is expected that when students enroll for this course they will be able to use a computer, be able to upload and download files, and successfully navigate browsers and websites.
- Students will receive homework throughout the course that must be completed on a computer with Internet access. The school library computers can be used for these purposes.
- Need help? Canvas questions can be directed to Shoreline e-Learning at elearning@shoreline.edu, (206) 546-6966, visit Building 1200, or 24hour Canvas Support via chat or telephone. Canvas and basic computing support is also available on campus at the Shoreline Business Technology & eLearning Center in Building 1300, Room 1304.
- More <u>information on general technical requirements</u> can be found here.

ACADEMIC INTEGRITY

Academic honesty and integrity is expected. Shoreline Community College has a strict policy on cheating and plagiarism. You are cheating if you copy, steal, borrow, consult, or use any means to obtain answers from classmates or unauthorized sources during a quiz or assignment. You are committing plagiarism if you copy the words of another person without giving them credit by acknowledging the source of the information. Any student found guilty of cheating and/or plagiarism will receive a zero for the exam or assignment. If it happens a second time, you will fail the course. More Information: Shoreline Dishonesty in Academics Policy (#5033)

GRADING AND ASSESSMENT

In this course, you will be assessed through **Learning Practice** (smaller daily assignments), **Individual Homework**, **Quizzes**, two **Midterm Exams** (approximately week 5 and week 9), and a group **Final Project** (presented during Finals time slot).

I strive to grade daily and weekly assignments within 5 days of the due date. The larger assignments take longer to grade and are generally graded within 7-10 days.

Activity	Percentage	
Learning Practice	30	
Individual Homework (~8)	30	
Quizzes (~8)	10	
Midterms (2)	20	
Final Project	10	

Final GPA decimal grading will be used in accordance with the following table.

>= 95%	4.0	79-78%	2.9	65%	1.8
94%	3.9	77-76%	2.8	64%	1.7
93%	3.8	75-74%	2.7	63-62%	1.6
92%	3.7	73%	2.6	61-60%	1.5
91%	3.6	72%	2.5	59-58%	1.4
90%	3.5	71%	2.4	57-56%	1.3
89-88%	3.4	70%	2.3	55-54%	1.2
87-86%	3.3	69%	2.2	53-52%	1.1
85-84%	3.2	68%	2.1	51-50%	1.0
83-82%	3.1	67%	2.0	49-48%	0.9
81-80%	3.0	66%	1.9	<48%	0.0

LATE POLICY

- Students are expected to turn in all assignments by the due date and time.
 Assignments not submitted on-time may receive zero points.
- Special arrangements may be approved for flexible due dates in special circumstances when the instructor is contacted **prior** to the due date.

More information available here: Shoreline's full Grades Policy (#6260)

CLASSROOM CONTRACT

You are expected to uphold the classroom contract as follows:

- Be Prepared: You are expected to complete all pre-work and homework before class starts so that you are ready to be engaged in conversations and activities.
- **Be Present**: You are expected to be in class, on time, and actively present in the learning process.
- **Participate**: You are expected to be an active contributor in class. This means both asking questions and helping others.
- Create space for learning: You are expected to create and cultivate a space where learning is conducive for all learners. This means that you participate in the class without dominating the learning space.

GETTING UNSTUCK

Getting stuck is part of the programming process. However, one of the most useful skills you may learn from this course is "how to get unstuck."

Here are some suggestions:

- Make systematic changes. Look carefully at the work you have just done. Try changing one thing and see what effect it has.
- Talk to a rubber duck. No really, this is actually a thing. Sometimes if you take a moment to tell someone (even someone non-techie) what you're trying to do, you'll end up having an Ah-Ha moment of clarity!
- **Ask a classmate.** Try to share ideas about how to figure out the problem rather than telling your classmate the answer. You'll learn as much by helping others find their mistakes as you will by finding your own.
- **Take a break.** Sometimes you just need to take a break! Looking at code with a fresh set of eyes solves problems quicker than beating your head against the computer:)
- **Ask the Instructor.** I'm here to help you. It's literally my job.

LETTER OF RECOMMENDATION REQUESTS

Letters of recommendation are often needed for applications to transfer universities, jobs, and internships. Instructors take pride in the letters that they write for students and can only craft strong letters for students whom they know well. Part of your job as a college student is to become the kind of student that a professor can speak highly of in a letter of recommendation — hardworking, capable, and intellectually inquisitive.

Before requesting a letter of recommendation, ask yourself:

- Have I discussed my academic or career goals with this instructor?
- Have I demonstrated an excellent work ethic or produced quality work in this course?
- Have I demonstrated responsibility for my learning and active participation in class (good attendance, thoughtful communication with the instructor and my peers)?
- Have I shown or communicated a passion for the subject or concepts that were taught?
- Will this instructor be able to incorporate personal and specific details about my academic growth or trajectory?

It is not necessary that the person writing your recommendation be able to speak to every bullet point above, but they should be able to speak to at least one of them.

Students are required to sign a consent form allowing an instructor to disclose their academic performance according to the Family Educational Rights and Privacy Act (FERPA). Sometimes you are asked if you would like to waive your rights to read the letter written for you. One advantage to waiving your rights is that the people reading the letter will know that it was written candidly, which could make the letter more influential. The disadvantage, of course, is that you won't get to see what your recommender wrote. Thus, it is important to ask your potential recommender if they can provide a *positive* candid letter. If your potential recommender can't say "yes" or suggests you ask another person to write the letter, then ask someone else.

Remember that **requests may be declined for a variety of reasons**, including, but not limited to: insufficient time to write the letter, not knowing the student well enough to provide specific character observations, or too much time has elapsed since working with the student.

Requests for recommendations should come well in advance of the deadline for submission (i.e., at least 14 days in advance of the deadline, but the more notice the better).

STUDENT SERVICES

CAMPUS CLOSURES / CANCELLED CLASS

There are two types of suspended operations possible: campus is closed or classes are cancelled. In the event of campus closure or cancelled class, students will be notified via Canvas of their expectations in relation to school work.

You can read Shoreline's <u>Suspended Operations Procedures</u>.

STUDENTS WITH DISABILITIES

Shoreline Community College is committed to providing educational programs without regard to disabling conditions as defined by Section 504 of the Rehabilitation Act of 1973. Reasonable accommodations will be made and no otherwise qualified individual with disabling conditions shall, on the basis of disability, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program, activity or service administered by the college.

For more information: http://www.shoreline.edu/oss/students-with-disabilities/

TUTORING SERVICES

Tutoring Services provides students with free one-on-one tutoring support for any Shoreline Community College classes. Students can received 2 hours of free tutoring a week per class they are registered for in a quarter.

They also host drop-in learning centers, such as the Biology/Chemistry Learning Center, Business Technology & eLearning Center, Physics Learning Center, Conversation Groups, and more (schedules and availability vary).

For more information and to apply for tutoring assistance or to apply to become a tutor, please visit our office in 4228 (Library), email pttutors@shoreline.edu, call 206-546-4776, or check out the webpage: www.shoreline.edu/tutoring.

The college also provides students with free online tutoring in a variety of courses through the Western eTutoring Consortium

COUNSELING CENTER

The Counseling Center provides free, confidential and professional counseling services, resources, and referral to support the academic and personal success, health, and well-being of our students and campus community.

Students often visit the Counseling Center to discuss a wide variety of topics: depression, anxiety, relationship concerns, and stress management; indecision about major or career path; and academic concerns such as failing grades, struggling with a subject, or managing a learning disability. The Center also supports students who may be feeling suicidal or in crisis.

• FOSS – 5245, 206-546-4594, www.shoreline.edu/counseling-center

Need support when they are not available? For 24/7 emergency counseling, referral, or assistance please contact:

• King County: 24-Hour Crisis Line | 866-427-4747

• Snohomish County: 24-Hour Crisis Line | 800-584-3578

• Live Chat: crisischat.org

• Crisis Text Line: Text 741741

• 911 (for immediate health-related emergency)

SUCCESS COACHING

Shoreline Community College provides students with Success Coaching to help students develop and grow their academic skills. Coaching is an ongoing professional relationship where you work on study strategies, goal planning, time management, balancing life's priorities, focus, motivation. and organization. Coaches also help you identify and connect to other resources. Coaching is not counseling, advising, or tutoring.

For more information: shoreline.edu/advising/success-coaches.aspx.

To schedule an appointment: successcoaching@shoreline.edu or 206-546-4559.

ADDITIONAL CAMPUS RESOURCES

Check out the <u>Current Students page</u> for more information about Academic Support, Student Services, Campus Life, and much more.

PRIVACY POLICIES

To learn about the practices regarding personal information that may be collected from users in this course, check the privacy policies below:

- Repl.it Privacy Policy
- Coding Bat Privacy Policy
- <u>Canvas</u>
- Panopto
- Shoreline Privacy Policies
- Student Policies
- Microsoft 365
- Google Privacy Policy

ACCESSIBILITY POLICIES

Below are links to accessibility policies for sites used within this course:

- <u>Canvas</u>
- Panopto Accessibility Features
- Shoreline Community College (Audio Version)
- Microsoft Office 365
- Google (covers YouTube)