## UNIVERSITY OF RHODE ISLAND

**Syllabus for CSC101: Computing Concepts** 

Winter (J Term) 2024

Class Days/Times: Online

Credits: 4

**Prerequisites:** None

Gen Ed Categories: B3. Mathematical, statistical, or computational strategies

**B4.** Information Literacy

### **COURSE DESCRIPTION:**

This course introduces computing concepts in an engaging, fun and creative way through computing innovations, programming, data, and artificial intelligence. It also provides the foundational computational thinking skills of programming, algorithm development, and data analysis that can be utilized in other classes. Students will complete several computing projects such as creating digital images and websites, understanding the Internet and cybersecurity, working with data and visualizations, and completing AI activities. Students will use the artifacts from those projects along with information literacy techniques to do a course-long research project on the impact of computing innovations on society.

### **Time Commitment**

Note that this is a four credit course which during the Fall or Spring semester would expect approximately 12 hours per week as indicated in the university manual. Since this section is offered in J-Term, which is only 3 weeks long, the time commitment per week is substantially more. Please expect to **spend 6 to 8 hours a day** on the coursework during the week and 6 to 8 hours on the coursework over each weekend. This is a short amount of time to conduct a four-credit course so it is important that you **start work early** and do not fall behind.

### **COURSE GOALS:**

- Provide students with fundamental knowledge of computing concepts that they can apply in their professional careers and personal lives now and as technology rapidly changes.
- Provide students with mathematical and quantitative concepts and skills through computing.
- Apply information literacy through finding, accessing, scoping, critically evaluating, and using properly cited information to analyze the impact of computing innovations on society.
- Show students that computing is creative, fun, engaging, and useful to inspire them to continue to learn computing concepts and skills.
- Prepare students for further study in Computer Science.

# **REQUIRED TEXTBOOK:**

None. All required readings are available online from the course website.

### **Required Materials & Equipment**

Access to a reliable Internet connection and computer are ESSENTIAL and thus REQUIRED for this course. Registering for an online course implies that you understand and agree to this requirement. Please note that, should something happen to interrupt your Internet access at home, you are responsible for finding acceptable access to the course.

Access to a microphone (built-in or external) to record a final project presentation is required. Access to speakers and/or headphones is also required to listen to videos.

# **Technology Requirements**

Computer access to the Internet is required in order to successfully navigate this course. The course is delivered through the Brightspace platform, which is a set of web applications designed to work with modern web browsers. Recommended browsers include Google Chrome, Safari, and Firefox. Internet Explorer is not recommended.

Chrome is the supported Internet browser for completing course content and is the only required software install (if you don't already have it).

#### **Online Software**

This course requires the use of several free online software programs. The privacy policies for these are below:

- Google (access to all Google products including Google Drive, Google Sites, Google Search, etc.): Privacy Policy | Accessibility Statement
- Pixlr: <u>Privacy Policy</u> | <u>Terms of Use</u>
- Youtube: Policy and Safety | Accessibility Features
- Clipchamp: <u>Clipchamp Privacy Policy</u>
- Canva: Privacy Policy | Terms of Use
- Khan Academy: Privacy Policy | Accessibility Statement
- Code.org: <u>Privacy Policy</u> | <u>Terms of Service</u>

## **CLASSROOM PROTOCOL:**

For this online course, Brightspace is our "classroom". Please refer to the Brightspace Getting Started - Course Information module for detailed information on how this course will run in Brightspace, which tools you will need, and how to use those tools.

In the online learning environment, "attendance" is measured by your PRESENCE in the site as well as your CONTRIBUTIONS to the site. The importance of regular log-ins and active participation cannot be overstated. Your participation will be measured by your regular, on-time forum postings and responses, timely assignment submissions, and completion of course material.

#### **Course Format:**

This course is an online course that requires you to have access to a computer and reliable Internet connection. The course involves the use of discussions, video lectures, readings, and assignments that are organized into lessons accessed from the course website.

- *Videos/Lectures*. You will be assigned to watch on-line video lectures several times each week. These lectures can be streamed from the course website.
- Readings. Reading from the online texts and tutorials will be assigned in the lessons each
  week. Readings will be referenced throughout course lectures, discussions, and
  assignments.
- *Mandatory Discussions*. Mandatory Discussions will form an integral part of your participation grade. Mandatory discussions will be posted in the lessons with prompt(s) for you to respond to by a certain deadline. Your posts should demonstrate you understand the materials. To receive full credit, you need to make at least one post that adds substance to the conversation. Late posts will not be graded.
- *Assignments*. There will be approximately 10 assignments that require you to exercise a particular computer skill (e.g. data manipulation in spreadsheets, web page creation, video editing, etc). Assignments will typically be posted with 1-3 days to complete them.

- *Final Project.* You will choose a final project topic that addresses the impact of a computing innovation on society. You will use information literacy skills to research the topic and present background and your analysis in both web and multimedia forms.
- *Discussions*. You are expected to read the course discussions several times per week. You may post questions and help to answer other questions.

## **Tentative Course Schedule**

\*Schedule subject to change. Check the course website for the current schedule. Each topic in the list below is a lesson on the course site that includes learning objectives, readings, videos, quizzes, discussions, and assignments.

Week	Topic	Lesson Release	Assign Due
1A	Intro to Computing	Dec 29	Jan 2
1B	Data Representation	Dec 29	Jan 3
1C	Images & Google Sites	Dec 29	Jan 4
1D	The Internet	Dec 29	Jan 7
2A	Web Programming	Jan 8	Jan 8
2B	Computer Programming	Jan 8	Jan 9
2C	Artificial Intelligence	Jan 8	Jan 10
2D	Data Exploration & Collection	Jan 8	Jan 14
3A	Data Analysis	Jan 15	Jan 16
3B	Data Visualization	Jan 15	Jan 17
3C	Final Project: Computing Innovations	Jan 15	Jan 18

## ASSIGNMENTS AND GRADING POLICY

Grades will be determined based upon the following weights and points:

- Assignments: 65% [100 points each]
  - Intro to Computing
  - o Data and File Formats
  - Images & Google Sites

- The Internet
- Web Programming
- Computer Programming
- Artificial Intelligence (AI)
- Data Exploration & Collection
- Data Analysis
- Data Visualization
- Final Project: 20% [100 points]
  - Final Project Computing Innovations
- Mandatory Discussions: 15% [5 points each]
  - Week 0 Week 12
  - Adding substantive responses to the mandatory discussion questions that demonstrate thought and understanding of the topic being discussed will gain full credit.

## **Grading Questions**

Student grades will be regularly posted in Brightspace. Questions on grading should be made in writing (email is acceptable) to the TA within 3 days of receiving the grade. If the question cannot be resolved with the TA, the question should be made in writing to the instructor. Students have 3 days from the time the grade is posted to challenge the grade. After 3 days, these grades become "frozen" and cannot be challenged.

# Feedback on Assignments and Grades

Feedback and grades on your submitted assignments will be provided to you within 1-2 days after the submission deadline on the assignment.

# **Late Policy**

Assignments must be submitted in Brightspace, in the correct format, by 11:55pm of the due date (unless otherwise specified). If you need an extension on an assignment's due date, you must request it from a CSC101 staff member well in advance of the due date.

### Late penalty point deductions:

1 day late	5% of total assignment points
2 days late	10% of total assignment points

3 + days late	Assignment will not be accepted

No assignment will be accepted more than two days late without a valid excuse. *A computer malfunction is not a valid excuse*. To avoid problems with computer malfunctions, start early, save work regularly, and maintain backup copies in several places. If you lose Internet connection, you are expected to find an alternate source (extreme circumstances are handled on a case by case basis).

The late penalty policy applies to assignments only, not the final project or mandatory discussions. The final project must be submitted on or before the due date; *late final projects will not be accepted*.

### **Grade Scale**

A	94-100
A-	90-93
B+	87-89
В	83-86
В-	80-82
C+	77-79
С	73-76
C-	70-72
D	60-69
F	0-59

## ACADEMIC SUPPORT SERVICES

### **Anti-Bias Statement**

We respect the rights and dignity of each individual and group. We reject prejudice and intolerance, and we work to understand differences. We believe that equity and inclusion are critical components for campus community members to thrive. If you are a target or a witness of

a bias incident, you are encouraged to submit a report to the URI Bias Response Team at <a href="https://www.uri.edu/brt">www.uri.edu/brt</a>. There you will also find people and resources to help.

### **Disability Services for Students**

Your access in this course is important. Please send me your Disability Services for Students (DSS) accommodation letter early in the semester so that we have adequate time to discuss and arrange your approved academic accommodations. If you have not yet established services through DSS, please contact them to engage in a confidential conversation about the process for requesting reasonable accommodations in the classroom. DSS can be reached by calling: 401-874-2098, visiting: web.uri.edu/disability, or emailing: dss@etal.uri.edu. We are available to meet with students enrolled in Kingston as well as Providence courses.

## **Academic Enhancement Center**

Located in Roosevelt Hall, the AEC offers free face-to-face and web-based services to undergraduate students seeking academic support. Peer tutoring is available for STEM-related courses by appointment online and in-person. The Writing Center offers peer tutoring focused on supporting undergraduate writers at any stage of a writing assignment. The UCS160 course and academic skills consultations offer students strategies and activities aimed at improving their studying and test-taking skills. Complete details about each of these programs, up-to-date schedules, contact information and self-service study resources are all available on the AEC website, <a href="https://uri.edu/aec">uri.edu/aec</a>.

- STEM Tutoring helps students navigate 100 and 200 level math, chemistry, physics, biology, and other select STEM courses. More detailed information and instructions can be found at <a href="uri.edu/aec/tutoring">uri.edu/aec/tutoring</a>.
- Academic Skills Development resources help students plan work, manage time, and study more effectively. UCS160: Success in Higher Education is a one-credit course on developing a more effective approach to studying. Academic Consultations are 30-minute, 1 to 1 appointments that students can schedule on Starfish with Dr. David Hayes to address individual academic issues. Study Your Way to Success is a self-guided web portal connecting students to tips and strategies on studying and time management related topics. For more information on these programs, visit <a href="uri.edu/aec/academic-skills">uri.edu/aec/academic-skills</a> or contact Dr. Hayes directly at <a href="davidhayes@uri.edu">davidhayes@uri.edu</a>.
- The Undergraduate Writing Center provides free writing support to students in any class, at any stage of the writing process: from understanding an assignment and brainstorming ideas, to developing, organizing, and revising a draft. Services are offered through two online options: 1) real-time synchronous appointments with a peer consultant (25- and

50-minute slots, available Sunday - Friday), and 2) written asynchronous consultations with a 24-hour turn-around response time (available Monday - Friday). Synchronous appointments hosted by WC Online are video-based, with audio, chat, document-sharing, and live captioning capabilities, to meet a range of accessibility needs. View the synchronous and asynchronous schedules and book online, visit <u>uri.mywconline.com</u>.

## **Academic Integrity**

Students are expected to be honest in all academic work. A student's name on any written work, quiz or exam shall be regarded as assurance that the work is the result of the student's own independent thought and study. Work should be stated in the student's own words, properly attributed to its source. Students have an obligation to know how to quote, paraphrase, summarize, cite and reference the work of others with integrity. The following are examples of academic dishonesty.

- Using material, directly or paraphrasing, from published sources (print or electronic) without appropriate citation
- Claiming disproportionate credit for work not done independently
- Unauthorized possession or access to exams
- Unauthorized communication during exams
- Unauthorized use of another's work or preparing work for another student
- Taking an exam for another student
- Altering or attempting to alter grades
- The use of notes or electronic devices to gain an unauthorized advantage during exams
- Fabricating or falsifying facts, data or references
- Facilitating or aiding another's academic dishonesty
- Submitting the same paper for more than one course without prior approval from the instructors

#### Acceptable Use of Generative AI tools (like ChatGPT):

ChatGPT and other generative AI tools are very good at answering question prompts in many subject areas, including Computer Science. Use of generative AI tools in this course is permitted (and encouraged!) but must be used responsibly and appropriately to enhance individual student learning outcomes from this course.

Follow these rules if utilizing generative AI tools in this course:

- You may consult the AI tools on general questions
- You MAY NOT copy and paste your assignment questions into the tool
- You MAY NOT copy and paste any results from the tool into your assignment

• If you use an AI tool while working on an assignment, you MUST provide the prompt that you used and the result of the prompt as an appendix to your assignment

Any violation of academic integrity may result in a grade of 0 on the assignment and the incident may be reported to the Dean and the Office of Student Life. See the <u>University Manual</u> for more information about the potential consequences of cheating.

### **Enrollment Services**

URI's <u>Enrollment Services website</u> provides information and links to important university resources to help students succeed. Visit enrollment services for additional information on registration and records, financial aid, tuition and billing, student FAQs and forms, academic calendars, etc.