UNIVERSITY OF RHODE ISLAND

Syllabus for CSC101: Computing Concepts

Winter (J Term) 2022

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 computational thinking and skills, as well as computer science principles. The course focuses on: computing as a creative activity, computing for problem solving, abstraction, data and its analysis, the concepts and technology of the Internet, introducing programming, and computing’s global impacts. Students complete several computing projects such as creating: digital images, video, spreadsheets, visualizations, and programmed web pages. Students also 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. There is a (free) wikiBook that we have written specifically for this course. All readings from it, as well as external online readings, are available 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:
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, assignments, and quizzes 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 on-line texts and tutorials will be assigned in the lessons each week. Readings will be referred to and discussed throughout course lectures and in the online discussions.
- **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.
- **Quizzes.** There will be several quizzes per week on previous readings and lectures. Quizzes are open hand-written notes (no use of the Internet or printed notes); the idea is that you take hand-written notes while watching the video lectures and doing the readings, and then you are allowed to use those notes on the quizzes. Quizzes will be available on the course site from 6am until 11:55pm during the specified quiz open
period (generally 1-3 days). All quizzes are timed (approximately 5-10 minutes). No makeup quizzes will be given for any reason (e.g. for a lost Internet connection or you forgetting to take it). The lowest quiz grade will be dropped.

- **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 multi-media forms.

- **Discussions.** You are expected to read the course discussions several times per week. You may post questions and help to answer other questions. Helpful responses to questions will positively affect your class participation grade.

### 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.*

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Lesson Release</th>
<th>Quiz Dates</th>
<th>Assign Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>Intro to Computing Concepts</td>
<td>Jan 1</td>
<td>Jan 3</td>
<td>Jan 3</td>
</tr>
<tr>
<td>1B</td>
<td>Data Representation</td>
<td>Jan 1</td>
<td>Jan 4</td>
<td>Jan 4</td>
</tr>
<tr>
<td>1C</td>
<td>Images</td>
<td>Jan 1</td>
<td>Jan 5-6</td>
<td>Jan 6</td>
</tr>
<tr>
<td>1D</td>
<td>Video</td>
<td>Jan 1</td>
<td>Jan 7-9</td>
<td>Jan 9</td>
</tr>
<tr>
<td>2A</td>
<td>The Internet</td>
<td>Jan 10</td>
<td>Jan 10</td>
<td>Jan 10</td>
</tr>
<tr>
<td>2B</td>
<td>Web Programming</td>
<td>Jan 10</td>
<td>Jan 11-12</td>
<td>Jan 12</td>
</tr>
<tr>
<td>2C</td>
<td>Computer Programming</td>
<td>Jan 10</td>
<td>Jan 13</td>
<td>Jan 13</td>
</tr>
<tr>
<td>2D</td>
<td>Artificial Intelligence (AI)</td>
<td>Jan 10</td>
<td>Jan 14-16</td>
<td>Jan 16</td>
</tr>
<tr>
<td>3A</td>
<td>Obtaining Data</td>
<td>Jan 17</td>
<td>Jan 18</td>
<td>Jan 18</td>
</tr>
<tr>
<td>3B</td>
<td>Data Analysis</td>
<td>Jan 17</td>
<td>Jan 19</td>
<td>Jan 19</td>
</tr>
<tr>
<td>3C</td>
<td>Data Visualization</td>
<td>Jan 17</td>
<td>Jan 20</td>
<td>Jan 20</td>
</tr>
<tr>
<td>3D</td>
<td>Final Project: Computing Innovations</td>
<td>Jan 17</td>
<td>-----</td>
<td>Jan 21</td>
</tr>
</tbody>
</table>
ASSIGNMENTS AND GRADING POLICY

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

- **Assignments: 45%**
  - Introductory Exercise [25 points]
  - Data and File Formats [75 points]
  - Images [100 points]
  - Video Editing [100 points]
  - The Internet [100 points]
  - Web Programming [100 points]
  - Computer Programming [100 points]
  - Artificial Intelligence (AI) [100 points]
  - Obtaining Data [75 points]
  - Data Analysis [75 points]
  - Data Visualization [75 points]

- **Quizzes: 25%**
  - Week 1A: Introductory [5 points]
  - Week 1B: Data Representation [5 points]
  - Week 1C: Images [5 points]
  - Week 1D: Video [5 points]
  - Week 2A: The Internet [5 points]
  - Week 2B: Web Programming [5 points]
  - Week 2C: Computer Programming [5 points]
  - Week 2D: Artificial Intelligence (AI) [5 points]
  - Week 3A: Obtaining Data [5 points]
  - Week 3B: Data Analysis [5 points]
  - Week 3C: Data Visualization [5 points]

- **Final Project: 20%**
  - Final Project - Computing Innovations [100 points]

- **Mandatory Discussions: 5%**
  - Week 1 - Week 3 [2 points each]
  - Adding substantive responses to the mandatory discussion questions that demonstrate thought and understanding of the topic being discussed will gain full credit.

- **Participation: 5%**
  - Regular, timely submissions of course material and engagement.
  - Assisting other students with help/guidance.
○ The class participation grade is subjective and accounts for general course conduct and overall understanding of the course material.

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:

<table>
<thead>
<tr>
<th>Late Date</th>
<th>Deduction</th>
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</thead>
<tbody>
<tr>
<td>1 day late</td>
<td>5% of total assignment points</td>
</tr>
<tr>
<td>2 days late</td>
<td>10% of total assignment points</td>
</tr>
<tr>
<td>3 + days late</td>
<td>Assignment will not be accepted</td>
</tr>
</tbody>
</table>

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.

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

Grade Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100</td>
</tr>
<tr>
<td>Grade</td>
<td>Percentage</td>
</tr>
<tr>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>A-</td>
<td>90-93</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
</tr>
</tbody>
</table>

**ACADEMIC SUPPORT SERVICES**

**Office of Disability Services**

1. Any student with a documented disability is welcome to contact me early in the semester so that we may work out reasonable accommodations to support your success in this course. Students should also contact Disability Services for Students, Office of Student Life, 330 Memorial Union, 401-874-2098.

2. From the University Manual: **6.40.10 and 6.40.11 Accommodations for Qualified Students With Disabilities.**

Students are expected to notify faculty at the onset of the semester if any special considerations are required in the classroom. If any special considerations are required for examinations, it is expected the student will notify the faculty a week before the examination with the appropriate paperwork.

**Enrollment Services**

URI's Enrollment Services website 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.
PROFESSIONAL CONDUCT

Cheating and plagiarism are serious academic offenses, which are dealt with firmly by the College and University. Scholastic integrity presumes that students are honest in all academic work. **Cheating** is the failure to give credit for work not done independently (i.e., submitting a paper written by someone other than yourself), unauthorized communication during an examination, or the claiming of credit for work not done (i.e., falsifying information). **Plagiarism** is the failure to give credit for another person’s written or oral statement, thereby falsely presuming that such work is originally and solely your own.

If you have any doubt about what constitutes plagiarism, visit the following website: [https://honorcouncil.georgetown.edu/whatisplagiarism](https://honorcouncil.georgetown.edu/whatisplagiarism), the URI Student Handbook, and University Manual sections on plagiarism and cheating at [http://web.uri.edu/studentconduct/student-handbook/](http://web.uri.edu/studentconduct/student-handbook/).

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 Instructor.

Please note the following section from the **University Manual**:

8.27.17. Instructors shall have the explicit duty to take action in known cases of cheating or plagiarism. The instructor shall have the right to fail a student on the assignment on which the instructor has determined that a student has cheated or plagiarized. The circumstances of this
failure shall be reported to the student’s academic dean, the instructor’s dean, and the Office of Student Life. The student may appeal the matter to the instructor’s dean, and the decision by the dean shall be expeditious and final.

Such action will be initiated by the instructor if it is determined that any written assignment is copied or falsified or inappropriately referenced.

Any good writer’s handbook as well as reputable online resources will offer help on matters of plagiarism and instruct you on how to acknowledge source material. If you need more help understanding when to cite something or how to indicate your references, PLEASE ASK.

**Please note:** Students are responsible for being familiar with and adhering to the published “Community Standards of Behavior: University Policies and Regulations” which can be accessed in the University Student Handbook.