

CSC106 Spring 2015 Syllabus

University of Rhode Island
Department of Computer Science & Statistics
Syllabus for CSC106, Section 1 *The Joy of Programming*
Spring 2015

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| Instructor: | Dr. Vic Fay-Wolfe (wolfe@cs.uri.edu) |
| Office Hours: | Listed on Staff Help Hours course web site |
| Teaching Assistants: | Molly Clark, Megan Olson, Jordan Damcicis |
| Class Days/Time: | T,TH 2-3:15pm Tyler 055, F 9-9:50 Tyler 055 |
| Course Web Site: | sakai.uri.edu (assignments, readings, lectures, etc) |

Course Description & Outcomes

Description. The art of problem solving through computer programming. Students explore innovative and cutting edge applications that include mobile apps, multimedia, computer games, graphics, and animation.

Student Learning Outcomes. After successfully completing CSC106 a student should be able to:

- Translate an informal problem description into a well-formulated statement.
- Investigate solutions to various computing problems within a specified application domain.
- Design computing solutions for various problems.
- Implement computing solutions using a given programming language.
- Debug computing solutions.
- Communicate a solution strategy for the various problems considered in class.
- Successfully move on to more advanced programming courses.

Course Format

This course is a hybrid online/in-person "flipped classroom" class format. The course lectures are video lectures streamed over the Internet that are to be done on your own. The class meeting time will be used to answer questions on the readings and video lectures (that were done before class), to take a quiz on the readings and lectures, and to work on assignments with assistance of the teaching staff. Attendance during the scheduled lecture time is mandatory. The scheduled once a week lab times are optional help sessions unless announced by the instructor that there is mandatory attendance. The course involves the use of discussion boards, video lectures, assignments, and quizzes that can be accessed from the course website. There are additional in-person help hours where you can work with the CSC106 teaching staff for in-person assistance.

- **Video Lectures.** You will be assigned to watch on-line lectures for each class meeting as listed in the Lessons link on the course web site. These lectures can be streamed from the course website. Lectures will typically be posted on the day of one class meeting with the expectation that you watch them before the next class meeting.
- **Readings.** Readings from on-line tutorials will be assigned for most class meetings, and will be listed on the Lessons link of the course web site. Readings will be referred to and discussed throughout course lectures, online forum, and in-person meetings. You will be expected to have read them prior to the class meeting for which they are assigned.
- **Quizzes.** There will be a quiz during each in-person class meeting. Quizzes will be administered via the online Sakai quiz mechanism in the classroom. Typical quizzes are 5 questions in 5 minutes based on the readings and video lectures assigned for that class meeting. All quizzes are open *hand-written* (no computer printouts) notes. No makeup quizzes will be given. The lowest two quiz grades will be dropped to allow for students that have to miss a class or two for various reasons.
- **Assignments.** There will be 10-12 assignments that require you to exercise computer programming skills that you have learned. Assignments will typically be posted on Thursdays and due by midnight the Monday 10 days later.
- **Final Project.** The final project will require you to write an original Android app and an original Javascript using what you have learned in CSC106.
- **Exams.** There are no exams in this course. The Final project is in lieu of a final exam.
- **Class Participation.** Attendance is mandatory for this course. Attendance, good behavior, and staying in class directly

affects the Class Participation portion of your grade.

- **Discussion Board.** You are expected to read the discussion board 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.
- **Challenge Problems:** Challenge problems are *optional* assignments that are a challenge compared to the required course assignments. Independent learning without direct help from the teaching staff will be required in order to complete the assignments. These problems will be graded as *extra credit*. They may be turned in at any time from the first day of the course to the last scheduled class (i.e. before final exam period). The extra credit will be one point per successful challenge problem added to your overall course average (not just your homework points).

Getting Help

- [Use the Discussion Board](#) for questions on assignments and course material.
- [Attend in-person Help Hours](#) for detailed questions on assignments and course material.
- [Email the TA](#) for questions concerning grading at csc106s1@gmail.com.
- [Email the Instructor](#) for all other matters.

Required Texts/Readings

There is no required textbook for this course. All readings will be available from the course website.

Equipment And Software

- You must have access to a computer with Windows, Mac, or Linux that can get on to URI Secure wireless. There are URI lab computers in Tyler 055 that are available at some times during the week if you are stuck, but you will need reliable access to your own computer (or that of a friend etc)
- You must bring a (charged) computer to class. A Chromebook, tablet, or phone can work if necessary once or twice, but you need a computer that you can bring to class.
- You must bring headphones to every class to use with your computer/device.
- You must have access to an Android device to test apps that you write. You should bring the device to class during the weeks that we are learning Applinventor. Most Android phones and tablets are fine. You can purchase an Android tablet at Walmart for as low as \$40.

Course Grading, Late Policy, & Extra Credit

Grades will be determined based upon the following weights:

- Homework assignments: 45%
- Quizzes: 25%
- Final Project: 20%
- Participation: 10%

Grading Questions

Student grades will be regularly posted in the online Sakai Gradebook. Questions on grading should be made in writing (email is acceptable) to the TA within one week 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 one week from the time the grade is posted to challenge the grade. After one week, these grades become "frozen" and cannot be challenged.

Class Participation Grading

Class participation grading is subjective and incorporates attendance, behavior in class, participation in the Discussion Board, and the instructor's perception of student understanding.

Late Policy

Assignments must be submitted in Sakai, in the correct format, by midnight of the due date (unless otherwise specified). If you need an extension on an assignment's due date, you must request it from a CSC106 staff member well in advance of the due date.

Late penalty point deductions:

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

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|---------------|---------------------------------|
| 3 days late | 15% of total assignment points |
| 4 + days late | Assignment will not be accepted |

No assignment will be accepted more than three days late without a valid excuse (weekends only count as one day). *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 homework 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.*

Extra Credit (Challenge Problems):

Challenge problems are graded as pass/fail. You must complete the entire challenge problem to receive the extra credit (no partial credit is given). You will receive 1 point extra credit added to your final average for each challenge problem submitted that receives a passing grade.

Typical Grade Scale. This uses the overall weighted average of the graded components in this course using the weights listed above. This scale is just typical, and may be modified by the instructor of each section each semester.

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

Special Accommodations & Tips for Success

Disability Accommodations

Any student with a documented disability is welcome to contact me as early in the semester as possible so that we may arrange reasonable accommodations. As part of this process, please be in touch with Disability Services for Students Office at 330 Memorial Union, 401-874-2098.

Academic Integrity

Assignments are to be the result of your individual efforts, unless you are told otherwise. It is easy to copy material on the computer; such copying constitutes plagiarism and will earn a 0 on the assignment. In some cases, a charge of plagiarism may result in a failure of the course. Additionally, the charge of academic dishonesty will go on your record in the Office of Student Life. If you need help with an assignment, or are not sure if something is acceptable, discuss it with a CSC106 staff member.

Expected Course Schedule This is the initial course schedule. The current course schedule will be updated on the course web site.

- [For Class Thursday Jan 22: Course Intro](#)
- [For Class Tuesday Jan 27: HTML 1](#)
- [For Class Thursday Jan 29: HTML 2](#)
- [For Class T Feb 3: AppInventor Intro](#)
- [For Class TH Feb 5: AppInventor Architecture](#)
- [For Class T Feb 10: AppInventor Condition Canvasses, Variables,ables](#)
- [For Class TH Feb 12: AppInventor Animation](#)
- [For Class T Feb 17: Lists of Data and Map Tour App](#)
- [For Class TH Feb 19: App Inventor Repeating \(Looping\)](#)
- [For Class T Feb 24: Quiz App and Software Engineering](#)
- [For Class TH Feb 26: Sensors And Final Project App](#)
- [For Class T March 3: Khan Javascript: Basic Drawing](#)
- [For Class TH March 5: Khan Program Design](#)
- [For Class T March 10: Khan Javascript Variables](#)
- [For Class TH March 12 - Javascript Animation and Text](#)
- [For Class T March 24: Khan Javascript Functions](#)
- [For Class TH March 26 - More on Functions](#)
- [For Class T March 31: Khan Javascript Conditionals](#)
- [For Class TH April 2: Khan Javascript Loops](#)
- [For Class T April 7 - More on Loops](#)
- [For Class TH April 9: Khan Javascript Arrays](#)
- [For Class T April 14: Khan Javascript Intro To Objects](#)
- [For Class TH April 16: Khan Javascript Object-Oriented Programming](#)
- [For Class T April 21 - Programming Javascript Games](#)
- [For Class TH April 23: Cyber Security](#)
- [For Class T April 28:Final Project, Next Steps In Programming](#)