

Queens College
CSCI 355/655 - Internet and Web Technologies
Spring 2021 (Monday/Wednesday Sections)
Instructor: Raymond Law
<https://venus.cs.qc.cuny.edu/~rlaw/cs355/>

Welcome to the course!

Course Description:

Internet protocol stack, analysis of representative protocols; Internet applications: client-server architecture, popular Internet application protocols, Internet application design, client side programming, server side programming, Web application and Web site design; programming projects.

Learning Goals:

Networking infrastructure, TCP/IP Internet Model. Understand how Internet technologies deliver content across the web. Describe how clients and servers communicate using various protocols. Analyzing the packet structure using inspector tools. Learn techniques and best practices in designing scalable web pages. REST API infrastructure and integration. Cloud Technology and Software.

Textbooks (Free Online):

K. Simpson - *You Don't Know JS Yet Series*

<https://github.com/getify/You-Dont-Know-JS/blob/1st-ed/README.md>

M. Haverbeke: *Eloquent Javascript*

<https://eloquentjavascript.net>

Classes:

15 Synchronous Meetings, 13 Asynchronous Prerecorded Lessons.

Synchronous Meetings will take place on Blackboard Collaborate Ultra. Only registered students will be allowed in the room (You cannot attend a different sections lectures). The tentative schedule of classes will be available on the course website. You can access synchronous sessions by logging into Blackboard.

There will be a total of 14 weekly posts on the course webpage, outlining prerecorded lectures, assessments, readings and external content that is required of you. Within the week assigned, I expect all students to study all the assigned material and attempt all self-assessments. All assigned material has a chance of appearing on examinations, with the exception of material specifically marked as **reference**.

Instructor & Office Hours:

Raymond Law – raymond.law@qc.cuny.edu

office hours: MTWTh 9:15-10:45pm after synchronous sessions via Blackboard Collaborate.

Dates will be available on the course calendar, these are open to all sections.

There are open and reserved office hours. All students may attend open office hours together, while reserved hours require booking a reservation beforehand. Reserved hours can be used for grade discussions. Reservations must be made on the course webpage ahead of time to prevent conflicts. Making a office hour reservation 24 hours ahead is ideal, but I can be flexible with this as long as your bookings aren't consistently last minute. Reservation slots are 15 minutes, but if you require more time, either book multiple slots or book the last slot of the day and I can stay longer. I will add additional office hour slots as necessary (typically near exam dates)

Note: The appointment system we will be using is Google Calendar, but all office hours are conducted via Blackboard Collaborate. When booking a reservation Google Calendar automatically creates a Google Hangouts link, **we will NOT be using this**. The office hours access link will be posted on the course webpage each week.

Course Webpage:

<https://venus.cs.qc.cuny.edu/~rlaw/cs355/>

The course webpage will be where all course material, assessments, and announcements will be posted. You are required to check the webpage daily.

Blackboard:

Synchronous sessions will be conducted on Blackboard Collaborate. Exams will also be administered on Blackboard. The exams will be conducted synchronously, during the scheduled class time. Office hours will also be administered using Blackboard Collaborate, but accessed via the course website. Due to shared classroom limitations, access to office hours will use a different link which will be posted to the course website each week (and not on the course Blackboard page). You are required to maintain your access to Blackboard in good order.

Attendance and WN Policy

The university requires all students to perform one class related activity within the first two weeks on the semester. This will be conducted via a Blackboard Exam available from the first day of classes. This exam serves an additional purpose of getting students familiar with the structure of exams in this course and ensure that students have read the syllabus in full. This exam will be due two weeks from the first day of classes and will not be visible after. This exam will not be graded, but those that do not complete this exam within the first two weeks will be removed from the course with WN on their transcript. In previous semesters this happened to roughly 5% of students, who later frantically emailed me trying to undo this. Once removed I will not vouch to have any student reinstated, so please ensure you complete the attendance exam as soon as possible.

Requirements:

There are three exams, a final project, and scribing exercises. Each exam addresses the entire material previously studied in the course. (In other words, each exam is "cumulative.")

Scribing Exercises:

Currently there are expected to be 14 topics to be covered this semester, most topics will span one or two classes. For each topic, students are required to take notes, type them up, and submit via Blackboard before a set deadline. Each set of notes submitted will net the student 1%, up to a maximum value of 10%. Once a student has achieved 10%, they no longer need to submit scribed notes. Accepted formats include Latex PDF, and Markdown.

You are adults, so there are no length requirements, but I reserve the right to invalidate any submissions if the notes are not up to my standard. (Eg. Submitting wrong or copy and pasted information from my transcripts or external resources) All notes MUST be in your own words. These submissions will also be checked for plagiarism using Stanford Moss. You will be using these notes during your exams, so make sure they are good.

Exam dates: (Monday/Wednesday Syllabus)

Exam 1: Wednesday, March 10 during the scheduled class time

Exam 2: Monday, April 19 during the scheduled class time

Exam 3 (final): Scheduled By CUNYFirst: Wednesday, May 19, 16:00 – 18:00

Final Grade:

Final grade in the course is computed as follows: Let x_n be your percentage score of your first exam, second exam, and third exams, s be your score on scribing exercises and p be the score on the final project. The total grade score for the entire course is obtained as:

$$\Gamma = 30\% \cdot \max(x_1, x_2) + 30\% \cdot x_3 + 10\% \cdot s + 30\% \cdot p$$

Once the total grade score is computed, letter grades are assigned as follows.

Γ	D	D+	C-	C	C+	B-	B	B+	A-	A
grade	60	67	70	73	77	80	83	87	90	93

The top two A grades in each section will be promoted to A+.

Automatic makeup:

Your exam component is calculated as the average of your final and your stronger midterm.

If you are unable to take a midterm, or you have taken it and received an unsatisfactory grade, you cannot take a make-up exam, but the automatic make-up (explained in the grading formula above) will apply in all such cases, and no alternative examination time will be available to individual students, regardless of the reasons for non-attendance.

There will be no makeups for the final, with the exception of extreme health related scenarios provable with credible documentation. Documentation of such events must be submitted to the Undergraduate Scholastic Standards Committee for validation.

<https://www.qc.cuny.edu/Academics/AcademicSenate/USSC/Pages/default.aspx>

By registering for this section and staying in the course, you agree to take all the examinations at the times stated, and acknowledge the grading rules above. Your ability and readiness to follow the course protocol is a component of the technical proficiency required for a passing grade.

Grading Policy:

Exams can only be reviewed during office hours.

Use a reserved time slot to ensure FERPA guidelines are maintained.

If a student believes that a grading error has occurred on an exam, please send an email to me. In your email, details what component element is being contested, and why. There must be "indisputable evidence" that the original grade was incorrect. Feeling that a component was too harshly penalized is not valid; judgement calls are up to the instructor. Please note that unwarranted requests for grade review, which compound the original error, may lead to reduction of the original grade. All such requests must be received within two week of an item being graded.

No Extra Credit

There is no extra credit in this course.

Exam Policies:

Administering exams for large class sizes remotely poses it's own unique set of challenges. To ensure fairness and integrity of the course, all students must adhere to the following exam policies:

Exams must be completed individually within the supplied time frame. Asking for or receiving any assistance during an exam is expressly forbidden. This includes using websites like Chegg or student chat groups. To combat this, all of these will be constantly monitored.

Creating a copy or distributing any part of the exam is expressly forbidden. All exams administered are **marked with both visible and hidden (steganography) identifiers**. If it is concluded that a student has created a copy of the exam or any exam questions and has leaked that information (even after the conclusion of the exam), that student shall immediately fail the course, and an academic integrity report will be filed with the Office of Student Conduct. This includes students who immediately withdraw upon being contacted.

Exams are open note and open search, but all exams are extremely time constrained. If you are fully prepared for the exam, you should just barely have enough time to complete all the questions. Even though it is allowed, I highly discourage wasting time using search engines during exams and recommend just skipping the question if your drawing a complete blank and using the time on a different question. All answers **MUST** be in your own words. Copy and pasted answers from search engines will not be awarded any points and questions are purposely phrased vaguely to give you worst search results possible. Let's not ignore the fact that anyone can post answers on the Internet, which can sometimes be wrong, or more commonly somewhat correct, but also not what I'm looking for. In the past, students who used their time trying to search for answers during the test rarely scored higher than 20s, mainly due to wasting their time.

Instead I recommend having your scribed notes on the side and referencing that. Do not share your scribed notes. If another student submits your scribed notes (even in part), both parties will immediately fail the course and get written up. My goal is to force all students to take their own notes, learning the material in the process, and use the notes as reference during exams.

Exams do not allow Backtracking of questions, that is you cannot return to an earlier question. This can be quite painful as you may be forced to move on to a different problem, only to realize the solution to a previous one, mere moments later. But this is a trade off that I have decided is required for the online format to maintain academic integrity.

Document Submission Policy

The student bears all risks of electronic document submission. Ensure that your submitted files are correct by downloading a copy after submitting and verifying yourself. Should this not be an option, you can email me and I will confirm receipt. I will not award points or allow a late resubmission for a file I cannot open.

Final Project Addendum

If you are retaking the course, you must complete a new Final Project with different API's.

Collaboration Policy:

With regard to assessments and projects, they are designed to be completed individually. While students are encouraged to discuss concepts and share ideas. These discussions must be kept at a general level, without exposing your solutions. Please acknowledge these collaborations in your submissions.

All submitted code must be written by yourself. Students are only allowed to copy code that was directly supplied by instructors. Sharing of code with other students is strictly prohibited. You must never receive or view someone else's solutions to a programming assignment.

By taking this class you are pledging to not share your solution with your classmates.

Students may not post solutions for any current assignment to public websites. This includes public repositories on GitHub and other version control software. If you are using these tools make sure the repositories are set to private. As of 2019 the 3 major code repository sites GitHub, BitBucket, and GitLab offer free private repos. Protect your code, the college does not distinguish between sharer and receiver. If your solution is submitted by another student, both students face penalties.

	COURSE FACULTY	CS 355 GRADS	CLASS- MATES	OTHER PEOPLE
DISCUSS CONCEPTS WITH:	✓	✓	✓	✓
ACKNOWLEDGE COLLABORATION WITH:	X	✓	✓	✓
EXPOSE YOUR CODE/SOLUTIONS TO:	✓	✓	X	X
VIEW THE CODE/SOLUTIONS OF:	X	X	X	X
COPY CODE/SOLUTIONS FROM:	X	X	X	X

Plagiarism Detection:

We use Stanford MOSS (<https://theory.stanford.edu/~aiken/moss/>), an Artificial Intelligence tool that detects plagiarism by comparing each submission against all other submissions. Stanford MOSS can defeat most anti-plagiarism tricks including renaming variables, reorganizing statements, and reversing if/else statements. All assignment submissions (as well as those from previous semester submissions if applicable) are passed through Stanford Moss to detect for plagiarism.

Academic Violations:

All alleged academic violations (including cheating on exams, plagiarism and abetting plagiarism) is referred to the Office of Student Conduct. If found responsible, students will immediately receive an F as a course grade plus whatever penalties the university imposes. Possible penalties include a required ethics class, loss of financial aid, and suspension depending on the severity.

Special Cases:

Any personal requests/extensions/date changes will generally be answered with No. As a rule I try not to give preferential treatment to anyone in my classes. If you believe your case warrants it please bypass me and contact the appropriate student body instead. I've listed the main entities that I've interacted with in the past, but this list is not exhaustive.

Undergraduate Scholastic Standards Committee

<https://www.qc.cuny.edu/academics/academicsenate/ussc/Pages/default.aspx>

Office of Student Conduct

<https://www.qc.cuny.edu/studentlife/services/studev/Pages/default.aspx>

Special Services for Students with Disabilities

<https://www.qc.cuny.edu/StudentLife/services/specialserv/Pages/default.aspx>

SPSV requests must be submitted within the first two weeks of the course.

Contact the office directly and they will communicate with me. **Do not send me documentation.**

Department of Computer Science

<https://www.qc.cuny.edu/academics/degrees/dmns/computerscience/Pages/default.aspx>

Office of the Provost

<https://provost.qc.cuny.edu>

Addendum from the Department Chair

F (Failing) is assigned for work that, in the judgment of the instructor, does not deserve college credit. WU (Withdrawn Unofficially) is assigned by the instructor to indicate that the student stopped attending the course before the end of the semester; or as a result of excessive absences there is no basis to give a final letter grade of A+ to F, and the conditions for a grade of INC do not apply. Therefore, a student who attended classes and showed up for exams is to be evaluated based on his/her work, and gets a grade of A+ to F, not WU. On the other hand, a student who stopped attending classes at some point and skipped the final exam without any attempt to communicate with the instructor should get WU, not F (certainly not D or better). Any request from a student who disappeared from your class to change his/her WU to F should be rejected.

Addendum from the University

Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.

WU Policy

Students who make an attempt for any two exams (regardless of grade, this includes submitting a blank test) will not receive a WU.

F Replacement Policy

After the final exam, students will have the option to conditionally replace their final course grade with an F should it be non-passing (A new Blackboard exam to record the students decision will be released on completion of the final). This is to optimize university retake policies where a C- or D can often be more harmful than an F. This option must be elected to while the semester is still in session and will not be available once final grades are submitted.

CR/NC Policy

Should the college adopt a CR/NC policy, F replacement policy will be ignored and all grades will be assigned as normal as this becomes the new optimal strategy.

Syllabus Changes

While every effort will be made to follow the syllabus as listed, in the case of unforeseen circumstances, I reserve the right to make changes as needed.