

Queens College
CSCI 355 - Internet and Web Technologies
Fall 2025 (Tuesday/Thursday Sections)
Instructor: Raymond Law
<https://raymondlaw.github.io/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 1st Ed.*

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

M. Haverbeke: *Eloquent Javascript*

<https://eloquentjavascript.net>

Instructor & Office Hours:

Raymond Law – raymond.law@qc.cuny.edu – Read the Email FAQ on the Course Website before emailing me
Office hours: MTu 9:15-9:45pm, W 4:00-5:00pm, Th 5:30-6:30PM (Will answer any questions in classroom then move to SB A201) - Email first if discussing grades. (privacy and logistical reasons)

Classes:

28 In-Person Meetings

Only registered students will be allowed in the class (You cannot attend a different sections lectures). The tentative schedule of classes will be available on the course website.

Course Material:

CUNY guidelines dictate that for every hour of instruction, there is an expectation of 2 hours of independent study. There will be weekly posts on the course webpage. 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**. Each coding section contains a self-assessment which while not graded, will appear on examinations. From surveying past students, those who had completed Assessment 1 scored about 20% higher than those who had only attempted (but not completed) it prior to the first examination.

Course Webpage: - <https://raymondlaw.github.io/cs355/>

All course material, assessments, and announcements will be there. You are required to check the webpage daily. The content posted on the website is not a substitution for attending class.

Brightspace:

Brightspace will be used for scribing assignments and final project submissions, and as a backup tool in the event the university needs to shift to online classes. You are required to maintain your access to Brightspace 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. I will pass around a sign in sheet for that. Beyond that, there are no attendance requirements, although exams play a major factor in your grade. If you do not want to attend lecture you are not required to.

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.")

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:

$$\Gamma = 0.30 \cdot \max(x_1, x_2) + 0.30 \cdot x_3 + 0.10 \cdot s + 0.30 \cdot p \quad (1)$$

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 natural A grades in each section will be promoted to A+. An A grade that is only achieved due to a curve will not be promoted.

Exam dates:

Exam 1: March 05 (Tenative)

Last Day to Withdraw or P/NC a Fall 2025 Course: Apr 13

Exam 2: Apr 14 (Tenative)

Exam 3 (final): TBA (Scheduled By CUNYFirst)

Exam Policies:

All students must bring their QC ID to be able to take an exam. Exams must be completed individually within the supplied time frame. Asking for or receiving any assistance during an exam is expressly forbidden.

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.

Students are expected to make consistent and honest progress throughout the exam period. Any suspicious activity, including but not limited to unexplained bursts of work after leaving the room or use of unauthorized materials, will be subject to review and possible academic integrity investigation. The instructor reserves the right to take appropriate measures to monitor exam integrity, including but not limited to observation, documentation, and follow-up questioning.

Failure to comply with exam policies or engaging in academic dishonesty will result in penalties consistent with university regulations.

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/saa/> Any such makeups will occur the following semester. (An INC grade will be assigned in the interim)

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.

Scribing Exercises (Note-Taking Assignments):

There are 14 graded topics expected to be covered this semester, with most topics spanning one or two classes.

To support your learning and discourage reliance on AI-generated content, this course requires you to engage in a two-step note-taking process for each topic:

- Take handwritten notes during class.
- Type up those notes afterward to reinforce understanding.
- Submit all three of the following via Brightspace by the set deadline:
 - A photo or scan of your handwritten notes.
 - A typed version exported as a PDF in either Markdown or LaTeX.
 - The original source file (`.md` for Markdown or `.tex` for LaTeX).

We recommend using VS Code with the Markdown Preview Enhanced extension for a powerful, coding-friendly experience, or Dillinger.io if you prefer a simple online editor. Do not use Microsoft Word, Google Docs, or other proprietary formats.

Each complete submission is worth 1% of your final grade, up to a maximum of 10%. Once you've submitted 10 sets of notes, you are no longer required to submit more. (There is no extra credit for submitting more than 10.)

All notes must be written in your own words. Submissions that contain material copied from transcripts, slides, external resources, or AI tools may be invalidated. Submissions will be checked for plagiarism using Turnitin. I reserve the right to reject any submission that does not meet expectations of originality and effort.

Final Project Logistics

The course final project and requirements will be posted on the website at the end of week 12. A valid submission consists of a diagram, project code, and a recorded screencast where students will walkthrough their project explaining it's functionality. All components are required for a project grade. Students will have at least 2 weeks to work on the project. No late submissions will be accepted.

Code Restrictions

Due to this course covering low level architectural topics in JavaScript, there will be restrictions on the code students can submit. Specifically for submitted projects and during exams, the use of Promise-based APIs and Third Party Modules are disallowed as they abstract away the complexities covered. The details of this will be explained before each exam and in the project description.

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.

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.

Electronic 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.

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.

WA (Proof of Immunization) Policy:

The grade of WA (Administrative Withdrawal) is assigned by the university's Registrar's Office for non-compliance with administrative requirements, most commonly related to immunization records. As this is an institutional policy and not an academic one, I am unable to assist with these matters. For help in resolving a WA grade, please contact the Health Service Center or the Office of Student Advocacy & Appeals as soon as possible

WU Policy

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

Physical Document Policy:

Any physically submitted documents (eg. exams) will not be returned. Exam grades with a question by question score breakdowns will be posted to Brightspace. Exams can only be reviewed during office hours. To ensure FERPA guidelines are maintained, email me to reserve a time slot when discussing grades.

Grade Dispute Policy:

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. All such requests must be received within two week of an item being graded.

Beyond obvious mistakes on my part, I do not entertain grade change requests. Final grades are determined solely by academic performance in the course, and personal circumstances cannot be considered. My job is to teach the course material and to assess the competence of hundreds of students each semester. This is solely where your grade is derived from.

Course Retake Policy

If you are retaking the course and you submitted a final project previously, you must complete a new Final Project with different API's. You can not reuse either API's that you previously used.

In contrast, if you are retaking the course, you may resubmit your previous scribing notes, although I do recommend improving upon them.

Inperson to Online Shift:

While this course is intended to be in-person, should the university require that we go back remote, our backup system will rely on Brightspace. If this happens, I will email all students an updated syllabus.

No Extra Credit

There is no extra credit in this course.

Late Submission Policy

Late submissions are not accepted. You will always be given at least one week for scribing notes and at least two weeks for the final project.

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 have listed the main entities that I have interacted with in the past, but this list is not exhaustive.

Office of Student Advocacy and Appeals <https://www.qc.cuny.edu/saa/>

Office of Student Conduct <https://www.qc.cuny.edu/scsl/>

Department of Computer Science <https://www.cs.qc.cuny.edu/index.html>

Office of the Provost <https://provost.qc.cuny.edu>

Office of Special Services <https://www.qc.cuny.edu/sp/>

SPSV requests go through CUNY Accommodate. <https://cuny-accommodate.symplicity.com/>

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

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 Brightspace assignment 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.

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.

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.

Addendum from the Office of Special Services

The Office of Special Services (SPSV) is committed to supporting students with qualifying disabilities under the Americans with Disabilities Act (ADA) by providing reasonable accommodations to ensure equal access. If you have previously received accommodations due to a disability, believe you may have a disability, or have a temporary disability, please visit the office's website (<https://www.qc.cuny.edu/sp/>) for further information on the assistance they can offer you. Accommodations are not retroactive, so you are encouraged to get registered sooner rather than later. You may also contact their office at qc.spsv@qc.cuny.edu or call 718-997-5870 during office hours for assistance as well.

Syllabus Changes

Although every effort will be made to follow the syllabus as listed, in the event of unforeseen circumstances, I reserve the right to make changes as needed. I will notify students of these changes as soon as I can.