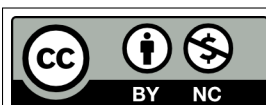


Syllabus: Introduction to Discrete Structures

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1 Details

Course & Section:	<i>Introduction to Discrete Structures</i> , CISC 2210, MW3
Days & Time:	Mondays, Wednesdays (MoWe), 03:40 PM – 04:55 PM
Location:	Ingersoll Hall Extension, Room 4141 (IA-4141 in short)
Instructor:	Miriam Briskman
E-mail:	miriam.briskman@brooklyn.cuny.edu
Response Time:	Within 24 – 48 hours, between 12 PM to 9:30 PM
Office Hours:	Wednesdays, 07:30 PM – 09:30 PM, online through Zoom. You can find the link on Brightspace, in Content → Office Hours. Alternatively, please email the instructor to schedule an appointment.
Course Materials:	[Free] <i>Discrete Math</i>, by Mohamed Jamaloodie et al. Link: https://ggc-discrete-math.github.io/. [Free] <i>A Cool Brisk Walk Through Discrete Mathematics</i>, by Davis Stephen. Link: http://stephendavies.org/brisk.pdf. [Free] <i>Introduction to Discrete Mathematics: An OER for MA-471</i>, by Mathieu Sassolas. Link: https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1183&context=qb_oers. [Free] <i>Discrete Mathematics: An Open Introduction</i>, by Oscar Levin. Link: https://discrete.openmathbooks.org/dmoi3/. [Free] <i>Notes on Discrete Mathematics</i>, by James Aspnes. Link: https://www.cs.yale.edu/homes/aspnes/classes/202/notes.pdf. [Free] <i>Applied Discrete Structures</i>, by Al Doerr and Ken Levasseur. Link: https://discretemath.org/ads-latex/ads.pdf. [Free] <i>CS202: Discrete Structures</i>, by Saylor Academy. Link: https://learn.saylor.org/course/view.php?id=67. Note: This course uses only free, open-source materials.
Prerequisites:	(CISC 1110 or CISC 1115 or (both CISC 1113 and CISC 1114) or CISC 1170 or CISC 1180 or CISC 1215) and (MATH 1011 or MATH 1012 or assignment to MATH 1201)
Tools/Resources:	Brightspace; Access to a computer (OS doesn't matter); A pdfL ^A T _E X compiler or Overleaf ; Adobe Acrobat Reader DC

1.1 Course Description

(3 credits) Elementary set theory, functions, relations, and Boolean algebra. Switching circuits, gating networks. Definition and analysis of algorithms.

Applications of graph theory to computer science. Related algorithms. Introduction to combinatorial computing and counting arguments. Introduction to error analysis. (Taken from CUNYFirst.)

1.2 Course Objectives

By the end of this course, you will master the following skills:

- Knowledge and usage of multiple math topics and tools that will benefit you as a Computer Scientist.
- Typesetting math with L^AT_EX and generation of organized and well-styled PDF documents.
- Simple proofs of mathematical statements (mathematical induction, indirect arguments) and logical propositions (including quantifiers).
- Functional and relational properties (one-to-one, onto, reflexive, symmetric, transitive, equivalence, partial ordering), and operations (composition, transitive closure).
- Counting principles, countable and uncountable sets. Basic probability theory and applications.
- Big- $\mathcal{O}$ Notation. Recursive definitions and solutions of simple recurrence relations.
- Fundamental concepts of set theory and Boolean Algebra.
- Application of matrices, graphs, and trees as data structures/containers.
- Independent searching and verbal expression of answers based on given sources or your opinion.

Please refer to the [Required Electronic Tools and Resources](#) section at the end of this syllabus for information about how to obtain the software required for this course (for free, of course.)

2 Grading Components

The course's grade is influenced by the following components:

Attendance	15%
Participation	30%
Midterm	25%
Final	30%
Extra Credit	5%

Below is a further description of every course component and additional items that might affect your learning experience:

2.1 Attendance:

- **Attendance is mandatory (counted towards the final grade).**
- Attendance will be taken every lecture, no earlier than 10 minutes into the lecture (e.g., if a class begins at 9 AM, attendance will be taken at or after 9:10 AM). Arriving at the lecture after attendance was taken, even if you are just a minute late after the instructor completed taking attendance, is equal to being absent from that lecture. An 'absent' status means that you lose the attendance points for that day.
 - If you arrive in class within the first 10 minutes of the lecture, you are *guaranteed* to be marked 'present' for that lecture since attendance is taken no earlier than 10 minutes into the lecture.
- If you arrive after attendance was taken, to be marked 'excused' from the lecture, you must provide a document anytime by the end of the semester that shows that you arrived late due to an emergency reason. See [the following section below](#) for a list of possible documents and cases that are considered emergency situations. The absence status will remain if you provide no document or if the document doesn't contain sufficient evidence of an inevitable emergency situation that prevented you from attending the lecture or arriving prior to attendance-taking.
- If the document you provided is approved by the instructor, your absence will change to an 'excused' status, and you will receive back the full attendance points for the lecture that you got excused from. There is no limit on how many lectures you are marked excused from as long as they following the information in [this section](#) and prove that an inevitable emergency situation prevented you from attending a lecture or arriving to it on time.
- There is no limit on how many times you can be absent during the semester – you won't be withdrawn from or fail the class, but you will lose the corresponding attendance points for the lectures you missed.
- However, note that **if you do not attend at least 1 lecture during the first 3 weeks of the semester, the Registrar will automatically withdraw you from the class, and you will lose your federal and state financial aid** if you are eligible for such, which is a situation into which nobody wants to get. If you can't attend the during the first 3 weeks, you can meet this requirement by emailing the instructor or submitting a response to a course assignment on Brightspace. Please mind this important CUNY rule and do your best to avoid this situation.
- If you do not attend sessions regularly, you will loss the ability to take the polls, which represent 30% of your grade (see [Participation](#) below,) and you will miss what we learned and will not hear important notices that the instructor gives in class.

Note that our lectures take place in-person. If during the semester we move to online (remote/at-home) learning, the instructor will notify you as soon as possible via a Brightspace announcement and via email and will let you know how we'll meet online.

Important: Interviews, job shifts, side hustles, or any other kind of employment schedule conflicts that prevent you from attending the lectures of the class or taking any of the in-person exams **won't** be accommodated. That is, if you skip lectures due to work, you will lose attendance and participation points, which together are worth 45% of the course grade. This means you will earn a C for the course in the best case. If you hold such job shifts or consider applying for and landing a job during the semester that will prevent you from attending lectures or taking any of the in-person exams, please swap this course with a different course that fits your schedule.

2.2 Participation:

Participation is mandatory. During a lecture, the instructor will create topic-based **polls** (multiple-choice questions) on the **Poll System website**

https://www.sci.brooklyn.cuny.edu/~briskman/poll_system/studentaccess.

When the instructor tells you that there is a poll, you will log into this website using either your classroom computer or your phone and respond to the poll.

You are highly encouraged to view the 15-minute interactive tutorial below to learn how to log into the website, take polls, and view your poll grades:

https://www.sci.brooklyn.cuny.edu/~briskman/poll_system/tutorial/.

To fulfill the 'participation' requirement, **you should respond to 50 polls throughout the semester**, but you are NOT required to choose the correct answer to get full grade. That is, **even if you mark the wrong answer choice, you will get a full grade for the poll (Yay!)**

To have a poll considered towards your grade, you should be present in class when the poll is given (this is why attendance is indirectly relevant.) If you must miss a class due to religious observance, an emergency, illness, doctor's appointment, etc., please email the instructor at miriam.briskman@brooklyn.cuny.edu, **explaining the reason and attaching supporting documents** (screenshot of calendar, doctor's note, PCR test results, email printouts, scans, etc.) In such a case, the polls given during the lecture you miss will be counted towards the requirement as though you completed them and no points will be taken off due to absence. Without emailing and attaching proper documents, the missed polls will not be counted.

As mentioned in the [Attendance](#) section, **arriving in class after attendance was taken is equal to missing that lecture**: in that case, you could provide a document that shows that you arrived late due to an emergency reason. See [the following section below](#) for a list of possible documents and cases that are considered emergency situations. Without such a document, you won't receive any points from polls on that day, even if you attempt some of polls after arriving in class late or from home.

Using cell phones, laptops, or other non-vital electronic devices during lectures when there are no ongoing polls is prohibited unless you use the device for lecture-related activities (e.g., looking up the lecture slides or taking notes.) If these cases don't apply, but you still continue using your device(s) after the instructor issues you a warning, you will be marked 'absent' from that lecture, and all your poll points for that lecture will be forfeited.

If you step out of the classroom (e.g., going to the restroom), and as a result miss a poll question was assigned while you weren't in the classroom, you won't receive points for that poll even if you attempted to answer it from outside the classroom. We'll have plenty poll opportunities this semester, so don't worry if you miss a poll. Nonetheless, students leaving the classroom in the middle of the lecture (for more than 15 minutes of the lecture time) and not returning by the end of the lecture to the classroom will be marked absent for that lecture and won't receive any points for poll done during that lecture. If the reason you needed to leave the classroom was an emergency, please let the instructor know (you might be asked to provide a document that confirms the emergency). Once the instructor confirms the emergency, you will receive the lost poll points back.

And here are even more opportunities to earn bonus points (yay!): besides poll questions, the instructor might verbally ask questions during the lecture about the currently covered material, either to the entire classroom or to individuals, for a verbal answer. If you answer a question that the instructor asked correctly, you will receive a bonus point that will be added to your poll count as though you answered a poll question correctly.

- There is no penalty for answering a question incorrectly, and the instructor might give you additional chances to revise your answer in order to eventually state the correct answer, at which point you will get a bonus point.
- However, if you refuse to respond to the instructor when your name is called, or say "I don't know the answer" while the instructor is still looking for an answer from you, or attempt to assist a classmate who was asked a question, all your poll points for that lecture will be forfeited (but you will remain 'present' for the lecture unless you leave the classroom for more than 15 minutes as described above).

If you are asked a question, the instructor might also ask you to put your device(s) down for the duration of answering the question and focus on the classroom screen or your paper notes (if you have any) instead while answering the question: in that case, if you still keep staring on typing at your device(s), all your poll points for that lecture will be forfeited (but you will remain 'present' for the lecture unless you leave the classroom).

The purpose of the polls and the verbal questions is to keep you focused on the taught topic and to prepare you for the exams, which will contain questions similar to those discussed during lectures.

2.3 Practice Questions as Ungraded Homework:

Throughout the semester, ungraded homework practice questions based on the material that we cover in class will be posted regularly on Brightspace, for your practice of the material and skills that we study.

- If you'd like to receive detailed feedback on answers that you write, or if you have any questions about a set of practice questions, you may submit answers to as many or as few of the practice questions or parts of practice questions as you want on Brightspace.
- Submitting answers to any set of practice question is fully optional:

- No grade will be assigned whatsoever to any of the homework submissions,
 - Not making submissions or submitting partial answers won't incur any point penalties whatsoever, and
 - No points or extra credit will be given for submitting correct or partially correct answers whatsoever. Submissions will result only in feedback and guidance.
- You may also submit, along with any answers, any questions you might have about the practice questions: the feedback will gladly include detailed answers to all of your questions along with tips and guidance.
 - You can resubmit answers or ask questions as many times as you want per set of questions, even after you receive feedback from the instructor.
 - There will be around 4–6 sets of practice questions throughout the semester.
 - The instructor won't post or share solutions to practice questions with you at any point in the semester, even if you email the instructor to ask for solutions. Instead, you will learn whether you got an answer right or need to fix something in it through the feedback that you'll get if you decide to submit any answers on Brightspace. Feedback will be provided only to the questions/question parts that you attempted to answer.
 - The instructor can't guarantee to look through and provide feedback before an exam if you make a submission on Brightspace just hours (or even just a couple of day) before the exam. To ensure that you get feedback prior to an exam, please do your best to submit answers at least 3 days before the exam is scheduled if you want the instructor to write feedback before the exam.
 - Since these practice questions are optional, there is no due date for any of them – it is up to you when you want to submit them and whether you want to submit any of them. However, submissions that are made after the final exam day of the course won't be checked and won't receive feedback (since this is the end of the semester.)
 - To read the feedback you receive, please log into Brightspace, as the instructor may not always notify you in person that feedback has already been submitted to a certain submission you made.

To learn how to view or submit ungraded homework assignments on Brightspace, please view the following picture-full 7-min Google Forms guide:

<https://forms.gle/oHiSp5FQ6BNFUowy9>

2.4 Midterm Exam and Final Exam:

- The midterm and the final will be held in-person.
- Please view the dates, times, and locations of the exams in the [Schedule](#) section below.

- At least a week before an exam, you will be given a preparation guide that will explain what topics the exam includes, the types of questions the exam will have, how to take the exam, and what aid materials you are allowed/disallowed to use during the exam.
- The instructor will also post sample exams and solutions to them on Brightspace.
- The final exam is NOT cumulative, and it will test you on everything that we cover *after* the midterm exam.
- An exams might contain extra credit questions at its end. Answering an extra credit question correctly will grant you the points indicated next to that question on the exam sheet as a bonus. The extra credit points will be counted towards the grade of the exam.

2.4.1 Missing an Exam Due To Emergency:

If you must miss an exam due to a serious documented emergency reason, such as an illness, religious observance, family emergency/event of a first-degree relative and grandparents/grandchildren, or having two other exams on that day, please contact the instructor by e-mail at miriam.briskman@brooklyn.cuny.edu at least 3 hours before the start time of the exam to schedule a make-up exam on a day/time convenient to you. Talking to the instructor in class or during office hours is not enough because she must keep a written note of your request.

In your email, attach documents confirming your emergency situation (examples: a signed and dated letter from a physician, hospital, or ER containing a full description of the medical situation you are encountering that prevents you from taking the exam in case of an illness; signed and dated positive results of a PCR or another blood antibody test done in a medical facility in case of the flu or COVID-19; a signed and dated letter from your religious authority in case of a holiday or religious observance; a signed and dated letter from a wedding hall where your first-degree relative has their wedding; an official jury duty summoning letter; your other classes' instructors emailing the instructor directly using their Brooklyn College email addresses in case of 2 other exams you have the same day, etc.) Note that, in certain cases, the instructor might also ask you to physically bring and show her the document that you have chosen to email her in class or the day you arrive on campus to take your make-up exam.

If you do not e-mail the instructor, explaining your emergency reason and attaching supporting documents at least 3 hours prior to the exam's start time, you will receive a grade of 0 for the exam you miss, without exceptions.

For your convenience, below is a non-exhaustive list of examples of situations that are NOT considered serious emergency reasons and, thereby, don't qualify you for taking a make-up exam (you must, in those cases, take the exam on time as listed in the [Schedule](#) section below):

- Regular or follow-up non-emergency doctor's appointments,

- Illnesses for which you can't obtain a letter from a medical provider or ER that fully and clearly describe the medical condition due to which you can't take the exam,
- Home rapid tests for COVID-19, virus, and flu of any kind,
- A holiday that doesn't require major observation/service activities that prevent one from taking an exam,
- A holiday for which you can't obtain a letter from your religious authority,
- Birthday parties of any kind,
- Home-celebrated wedding or engagement parties of any kind,
- Family events of relatives of degree 2 and higher (except grandparents/grandchildren),
- Having just one other exam in another class the same day,
- Vacations or traveling of any kind,
- Flights or trips of any kind (except for your or a first-degree relative's serious, urgent, and non-postponable medical procedure purposes),
- Conferences of any kind,
- Workshops of any kind,
- Interviews, job shifts, side hustles, or other employment schedule conflicts of any kind,
- Extra-curricular activities or volunteering of any kind,
- Forgetting, not seeing, or not noticing that there is an exam that day,
- Confusing the exam time or location, or arriving after an exam's end time,
- An alarm clock that didn't wake you up on time,

and other non-emergency or undocumented situations.

In case you are seeking an excuse from a non-exam lecture, note that a regular or follow-up doctor's appointment for which you obtain a letter from your doctor that describes the appointment's reason or experienced medical situation will excuse you from the missed lecture or a late arrival the same day you had the appointment, for up to 3 excused absences/lateness instances throughout the semester.

2.4.2 A Few Words on Cheating:

Cheating is the **illegal** act of copying from a classmate, from the internet, or from any other source to which you are not permitted to refer while working on an assignment, and submitting what you copied as your own answer, or letting someone else copy from your answers. If your instructor notices that you cheat on any of the assignments or exams, she is required to report your misbehaving to the college, and you will receive a score of 0 for that exam or assignment. Please view the [Brooklyn College Policy on Academic Integrity](#) section below for more information about the college's attitude towards this crime.

2.5 Extra Credit:

As part of the Participation requirement, even those polls answered incorrectly are counted towards the participation requirement. Now, for every 10 polls that you answer correctly, **1** extra credit point will be added to your course grade! You can get up to **5** points in this extra credit opportunity alone. This could have a positive impact on your course's letter grade. [Example: If Alice answered 45 poll questions correctly out of the 50 polls to which she responded, and got a course grade of 95, which is A in our course, she will get full 30% for the Participation requirement, and will also get 4.5 points added to her course grade, turning it into $95 + 4.5 = 99.5$, which is A+ in our course.]

3 How to Succeed in This Course?

- **Be Present on Lectures.** Being present during lectures is highly correlated with doing well in class. A great deal of essential information is available only during lectures, such as information about the imminent exams or some hints on the homework assignments. Moreover, the only way to take a poll is if you are actually present in the lecture. Also, you can ask questions on what you find unclear, which will help in understanding the subject.
- **Visit Office Hours.** Many questions rise outside of class, such as while studying for an exam or when preparing homework answers. Furthermore, students might want to sharpen some of the topics covered in class. Office hours are best for addressing this! Please refer to the [Details](#) section at the top of this syllabus to find the regular office hours scheduled for the semester. The instructor will notify you when additional, non-regular office hours will be held. Likewise, she will notify you if/when particular regular office hours are canceled. There is no need to e-mail before joining an office hours session. If you wish to visit office hours but cannot make it to the regular ones, please e-mail the instructor to schedule an appointment (either in-person or online) at a time convenient to you.

If you wish to join an online office hours session on Zoom, log into Brightspace, click on our class's link, click on **Content** and then on **Office Hours** on the left-hand side menu. The page that opens will contain a link; click this link to access the office hours session.

If you notice that the instructor is late for more than 10 minutes after the office hours session began, please send the instructor an email right away to remind the instructor! :)

- **Do the Homework Assignments.** This will give you a great practice of the learned topics and help you prepare for the exams. Homework assignments directly reflect what we learned in class, and you are welcome to ask questions about homework during class, office hours, by e-mail, and of course on Brightspace if you choose to submit any answers for feedback.
- **Study for Exams.** In the present, exams are one of the *only* ways to assess how well one understands a subject (humanity is yet to invent super-microwave-telepathic devices that can help with this task.) Therefore, our exams are of a considerable portion of the class's grade.

Find out what is the best strategy for you to prepare for an exam. Do you like writing notes and summaries of the material? Studying in groups or talking about what you learned with friends? Re-doing some of the homework questions for practice? A combination of several strategies?

- **Keep an Eye on the Calendar and Due Dates.** One trait that many successful students have is organization and time management. Keeping notes about days when exams are scheduled, and other important academic information could greatly assist you in planning your studies. To assist you with this task, you should regularly refer to the [Important Dates](#) and [Schedule](#) sections below.
- **Always Ask Questions!** If you feel that something we discuss is confusing or unclear, or if you think a clarification could make things better, do not hesitate to ask! In fact, there is a high chance that some of your friends in class have the exact same question as yours, so you should never assume that a question is “too stupid” to ask – there are NO stupid questions!

You can also email the instructor at miriam.briskman@brooklyn.cuny.edu. If she doesn't do not respond to you within 24 – 48 hours, between 12 pm to 9:30 pm (Yes! She will reply to your questions on weekends whenever she can,) from the time you sent the email, you might want to re-send your e-mail since it might have reached SPAM or otherwise lost.

When you write e-mails, please include the class's code (CISC 2210), section (MW3), and a few words on what you are writing about in the e-mail message in the **Subject** line of the e-mail. Otherwise, the e-mail will enter SPAM, and the instructor will not be able to see it and respond to you. Please write your name in the body of the email so that the instructor know who is writing. It might sound funny, but students forget to mention who they are while writing an email, even if they had never wrote to the recipient before! :-D

Note that if an issue you are emailing the instructor about is too long or difficult to answer via email, she will let you know that this is the case and will ask you to join

an office hours session or make an appointment, during which she will gladly answer your question in a complete, clear, and comprehensive manner.

4 Grades

Students will receive a letter grade for the course according to the following score distribution established by CUNY:

<60	60-62	63-66	67-69	70-72	73-76	77-79	80-82	83-86	87-89	90-92	93+
F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A

A grade of A+ will be granted for numerical grades of 97 or higher after all extra credit points you received are applied to the grade.

5 Important Brooklyn College Policies

5.1 Center for Student Disability Services

The Center for Student Disability Services (CSDS) is committed to ensuring students with disabilities enjoy an equal opportunity to participate at Brooklyn College. In order to receive disability-related academic accommodations students must first be registered with CSDS. Students who have a documented disability or suspect they may have a disability are invited to schedule an interview by calling (718) – 951 – 5538 or emailing

Josephine.Patterson@brooklyn.cuny.edu. If you have already registered with CSDS, email Josephine.Patterson@brooklyn.cuny.edu or testingcsds@brooklyn.cuny.edu to ensure the accommodation email is sent to your professor.

If the CSDS decides that you are eligible for a time extension on exams (such as time-and-a-half or double-time,) you will still take the exam with the rest of the class at the day + time that is listed in the Schedule section below and will be fully accommodated: you will receive the time extension you are eligible for. That is, you won't take the exam at the CSDS test center.

5.2 Nonattendance Because of Religious Beliefs

The Brooklyn College undergraduate Bulletin for the years 2025 – 2026 states:

The New York State Education Law provides that no student shall be expelled or refused admission to an institution of higher education because he or she is unable to attend classes or participate in examinations or study or work requirements on any particular day or days because of religious beliefs. Students who are unable to attend classes on a particular day or days because of religious beliefs will be excused from any examination or study or work requirements. Faculty must make good-faith efforts to provide students absent from class because of religious

beliefs equivalent opportunities to make up the work missed; no additional fees may be charged for this consideration.

Based on the description above, if you are incapable of attending a class because of religious observance, you should e-mail the instructor at least 48 hours before that class so that proper accommodations could be made. If this is an exam day, we will schedule a make-up exam when it is convenient to you, and if an assignment is due, the due date will be extended, and the instructor will tell you when the new due date is.

5.3 Brooklyn College Policy on Academic Integrity

The faculty and administration of Brooklyn College support an environment free from cheating and plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both.

The complete text of the CUNY Academic Integrity Policy can be found at this site:

<https://www.cuny.edu/about/administration/offices/legal-affairs/policies-resources/academic-integrity-policy/>

If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member **MUST** report the violation. Students should be aware that faculty may use plagiarism detection software.

This means that if you cheat on a test or assignment, the instructor of this course **MUST file a report which will initiate academic penalties. Additionally, the assignment in which you cheat will get an unfortunate score of 0.**

5.4 Brooklyn College Bereavement Policy

Students who experience the death of a loved one should refer to:

<https://www.brooklyn.edu/policies/bereavement/>

5.5 Brooklyn College Library

New student? Returning to campus? Looking for materials for your class or research? Check out the plethora of resources that the Brooklyn College Library is providing to you:

<https://library.brooklyn.cuny.edu/resources/>

You will certainly find something useful there!

5.6 More Information: Bulletin

For more information about the policies of Brooklyn College and other essential information, please refer to the Bulletin, which you can find on the following web-page:

<https://www.brooklyn.edu/registrar/bulletins/>

6 Required Electronic Tools and Resources

6.1 L^AT_EX and The pdfL^AT_EX Compiler

For our course assignments and activities, you will typeset your answers using a markup language called **L^AT_EX**: it is similar to the HTML language that is used to create web-pages, except that L^AT_EX is used to create and structure documents, mostly PDF documents. **pdfL^AT_EX** is a popular type of a L^AT_EX compiler that turns your L^AT_EX source code into a PDF file. You will submit both L^AT_EX code you wrote and the PDF file that you generated from your code.

No prior knowledge or experience of L^AT_EX is required: the first few lectures of the semester will be dedicated to learning all the basic and necessary L^AT_EX commands that are needed throughout the semester. Additional L^AT_EX commands and statements will be discovered gradually as we keep covering new topics.

Get L^AT_EX up and running on your computer free-of-cost with one or more of the following:

- If you have a Windows, Mac, or Linux computer, installing MiKTeX, a free and open-source app, is recommended: <https://miktex.org/>.
- You may also edit and compile L^AT_EX code via your Google Chrome browser using the free LaTeX Editor extension: <https://chromewebstore.google.com/detail/latex-editor/jjbmkdcalfjgaakgpbnhgpjngegpm>.
- Overleaf is a free, online website for creating L^AT_EX PDF documents: <https://www.overleaf.com/>.

6.2 Downloading Adobe Reader DC

Some of our course assignments and even exams will require the filling of textboxes inside a PDF file. All PDF forms/textboxes in our course must be filled and signed using **Adobe Reader DC**, a free software.

Please download and install Adobe Reader DC on you computer, completely for free, through the link below:

<https://www.adobe.com/acrobat/pdf-reader.html>

Avoid using Adobe Fill & Sign, or a browser version of Adobe, to fill any PDF forms in the course since these lack some functionalities that the forms require.

6.3 Brightspace

You will be using **Brightspace** (<https://brightspace.cuny.edu>) where you will find assignments, sample exams, answers to exams, and other helpful resources such as YouTube videos or websites. You will submit your assignments directly on Brightspace.

If you have any trouble with your Brightspace account, please refer to the following Brooklyn College Library page, where you can find contact information for technical help on Brightspace (and other helpful resources:)

<https://libguides.brooklyn.cuny.edu/accounts/brightspace>

Brooklyn College created a Student User Guide on Brightspace here:

<https://libguides.brooklyn.cuny.edu/brightspace/home>

and City College compiled some helpful Brightspace guides here:

<https://www.ccny.cuny.edu/it/brightspaceguides>

Brightspace is the chosen tool for this class since all the necessary materials will be provided there, in one place. Moreover, each time you submit an assignment, Brightspace sends you an automatic e-mail notification stating that the work was successfully submitted. If you receive no such e-mail notification, something in the submission process went wrong, and you **MUST** resubmit your assignment. Emails, on the other hand, may not be delivered at all, unless the instructor replies to you. **So, don't submit assignments by email!**

6.4 Accessing Your College Student Email Address

You will regularly receive Brightspace Notifications and emails to your college email address. View the 3-min Google Forms guide at

<https://forms.gle/4SUd4aVcht7fzoVV6>

to find out how to access this mailbox and never miss an important college emails and notifications that are sent to you from other classes you are taking.

6.5 What If You Don't Have a Computer / Internet at Home?

See the following guide about getting free internet service and visiting and using the computers of the Computer Lab on the Brooklyn College campus that recently re-opened:

https://www.sci.brooklyn.cuny.edu/~briskman/guides/Computer_Internet_Services.pdf

7 Important Dates

August 28 (Fr): Start of Fall 2026 Term

August 31 (Mo): First lecture of CISC 2210, section MW3

September 03 (Th): Registrar drops everyone waitlisted for Fall 2026 courses

September 03 (Th): Last day to add a course

September 07 (Mo): Labor Day: College Closed

September 11 – 13 (Fr – Su): No classes scheduled

September 18 (Fr): Grade of W is assigned for officially withdrawing from a course

September 21 (Mo): No classes scheduled

October 12 (Mo): Columbus Day: College Closed

October 13 (Tu): Conversion Day: Classes follow Monday schedule

November 06 (Fr): Last day to withdraw from a course with a grade of W

November 08 (Su): No classes scheduled

November 25 (We): Thanksgiving Eve: No classes scheduled

November 26 – 27 (Th – Fr): Thanksgiving: No classes scheduled

November 28 (Sa): Thanksgiving: No classes scheduled

December 14 (Mo): Last day of classes!

December 15 – 21 (Tu – Mo): Week of Final Examinations for the Fall 2026 Term

December 28 (Mo): Fall 2026 Course Grades will be Posted on CUNYfirst by 11:59 PM.

Please refer to the Brooklyn College Academic Calendar for the Fall 2026 semester to view other important dates not mentioned above:

<https://www.brooklyn.edu/registrar/academic-calendars/#fall>

8 Schedule

Note that the schedule below is tentative; if changes are made, the instructor will notify you and will post the updated syllabus/schedule on Brightspace.

Week	Date	Topics, Exams, and Assignment Deadlines
1	08/31 (Mo)	Welcome! Syllabus Review • Read the Abridged Syllabus <u>before</u> this lecture
	09/02 (We)	Topic 1: Discrete Structures: Overview • Read slides 1 – 16 of Topic 1, inclusively, <u>before</u> this lecture
2	09/07 (Mo)	College Closed: No CISC 2210, MW3 lecture!
	09/09 (We)	Topic 1: Discrete Structures: Overview – Cont’ • Read slides 17 – 28 of Topic 1, inclusively, <u>before</u> this lecture
3	09/14 (Mo)	Topic 2: Sets & Sequences • Read slides 1 – 20 of Topic 2, inclusively, <u>before</u> this lecture
	09/16 (We)	Topic 2: Sets & Sequences – Cont’ • Read slides 21 – 54 of Topic 2, inclusively, <u>before</u> this lecture
4	09/21 (Mo)	No classes scheduled: No CISC 2210, MW3 lecture!
	09/23 (We)	Topic 2: Sets & Sequences – Cont’ • Read slides 55 – 66 of Topic 2, inclusively, <u>before</u> this lecture
5	09/28 (Mo)	Topic 3: Logic & Simple Proof Methods • Read slides 1 – 18 of Topic 3, inclusively, <u>before</u> this lecture
	09/30 (We)	Topic 3: Logic & Simple Proof Methods – Cont’ • Read slides 19 – 30 of Topic 3, inclusively, <u>before</u> this lecture

Week	Date	Topics, Exams, and Assignment Deadlines
6	10/05 (Mo)	Topic 3: Logic & Simple Proof Methods – Cont' • Read slides 31 – 48 of Topic 3, inclusively, <u>before</u> this lecture
	10/07 (We)	Topic 3: Logic & Simple Proof Methods – Cont' • Read slides 49 – 67 of Topic 3, inclusively, <u>before</u> this lecture
7	10/12 (Mo)	College Closed: No CISC 2210, MW3 lecture!
	10/13 (Tu)	Conversion Day: We have a lecture today! Topic 4: Relations • Read slides 1 – 16 of Topic 4, inclusively, <u>before</u> this lecture
8	10/14 (We)	Topic 4: Relations – Cont' • Read slides 17 – 28 of Topic 4, inclusively, <u>before</u> this lecture
9	10/19 (Mo)	Topic 5: Functions • Read slides 1 – 17 of Topic 5, inclusively, <u>before</u> this lecture
	10/21 (We)	Topic 5: Functions – Cont' • Read slides 18 – 29 of Topic 5, inclusively, <u>before</u> this lecture
10	10/26 (Mo)	Topic 6: Counting & Combinatorics • Read slides 1 – 19 of Topic 6, inclusively, <u>before</u> this lecture
	10/28 (We)	Topic 7: Discrete Probability • Read slides 1 – 11 of Topic 7, inclusively, <u>before</u> this lecture
11	11/02 (Mo)	Topic 7: Discrete Probability – Cont' • Read slides 12 – 20 of Topic 7, inclusively, <u>before</u> this lecture
	11/04 (We)	Midterm Exam: 03:40 PM – 04:55 PM, at room TBA
12	11/09 (Mo)	Topic 8: Recurrence & Recursion • Read slides 1 – 9 of Topic 8, inclusively, <u>before</u> this lecture
	11/11 (We)	Topic 8: Recurrence & Recursion – Cont' • Read slides 10 – 20 of Topic 8, inclusively, <u>before</u> this lecture
13	11/16 (Mo)	Topic 8: Recurrence & Recursion – Cont' • Read slides 21 – 31 of Topic 8, inclusively, <u>before</u> this lecture
	11/18 (We)	Topic 9: Boolean Algebra • Read slides 1 – 33 of Topic 9, inclusively, <u>before</u> this lecture
14	11/23 (Mo)	Topic 10: Matrices • Read slides 1 – 17 of Topic 10, inclusively, <u>before</u> this lecture
	11/25 (We)	No classes scheduled: No CISC 2210, MW3 lecture!
15	11/30 (Mo)	Topic 10: Matrices – Cont' • Read slides 18 – 43 of Topic 10, inclusively, <u>before</u> this lecture
	12/02 (We)	Topic 10: Matrices – Cont' • Read slides 44 – 67 of Topic 10, inclusively, <u>before</u> this lecture

Week	Date	Topics, Exams, and Assignment Deadlines
16	12/07 (Mo)	Topic 11: Graphs & Trees • Read slides 1 – 26 of Topic 11, inclusively, <u>before</u> this lecture
	12/09 (We)	Topic 11: Graphs & Trees – Cont’ • Read slides 27 – 38 of Topic 11, inclusively, <u>before</u> this lecture
17	12/14 (Mo)	Topic 11: Graphs & Trees – Cont’ • Read slides 39 – 56 of Topic 11, inclusively, <u>before</u> this lecture
Finals	TBA	Final Exam: TBA, at room TBA

– End of CISC 2210 Syllabus –