

CISC 2210: Introduction to Discrete Structures

Fall 2021, Section MW2

1 Basic Information

- Instructor: Moshe Lach
- Email: lach@sci.brooklyn.cuny.edu
- Class meeting times: Mondays and Wednesdays 2:15-3:30 pm
- Class location: TBD
- Office hours: Mondays 4-5 pm, Wednesdays 5-6 pm, and after class; or by appointment
- Office location: TBD
- Class Discord server: link will be posted on [Blackboard](#)
- When sending an email to the class, I will send it to the addresses listed on [BC WebCentral](#). Additionally, I will post the email in the “announcements” channel in the Discord server.

2 Course Outline and Readings

All readings are required and important. Except where otherwise noted, readings are from the free online textbook [*Elements of Discrete Mathematics*](#) by Richard Hammack.

1. Sets:
 - Sections 2.1-2.7
 - Handout on the summation (σ) and product (π) notations
 - Section 2.8
2. Logic I: Chapter 3
3. Counting: Sections 4.1-4.8
4. Discrete Probability: Chapter 5, except for Section 4
5. Algorithms: Chapter 6

6. Logic II: Chapter 7
7. Proofs I: Chapter 8, until Section 5
8. Proofs II:
 - Sections 9.1 and 9.2
 - Chapter 10, until Section 3
 - If there's time: Chapter 11, until Section 4
9. Proofs III:
 - Section 12.1
 - Section 12.3 (skip p. 301)
 - Chapter 13, until Section 2
10. Induction
 - Chapter 14, until Section 4
 - Handout on induction and recursive functions
11. Functions: Chapter 17
12. Relations: Chapter 18
13. Graphs: Sections 16.1-16.3 and 16.6 of *Discrete Structures*, by Harriet Fell, Javed A. Aslam, et al.
14. Matrices: Chapter 5 of *Applied Discrete Structures*, by Al Doerr and Ken Levasseur
15. Infinite Sets: Sections 18.1-18.3

3 Homework

Homework will generally be assigned at every class meeting. Most homework problems will come from the readings, but additional problems will occasionally be assigned.

Homework solutions may be submitted in person (they will be returned promptly) or on **Blackboard**. They will be graded *very* leniently; as long as you submit something for an assignment, you'll be given full credit for it.

Each assignment will have a due date, which is the recommended date for its completion. But I will accept homework up to one week after the deadline. Assignments submitted more than one week past the deadline will not be given credit.

It is fine to collaborate with others on homework; it is fine to get help from others. But everything you submit must have been written by you.

In order to be successful in this course, it is crucial to devote a lot of time and effort to working on homework.

4 Exams

There will be three “midterm” exams, *tentatively* scheduled for Monday, October 4; Monday, November 1; and Monday, November 29.

The final exam is scheduled for TBD from TBD to TBD, according to the Registrar’s Office: TBD. The final exam will be cumulative.

Many exam questions will be similar to homework problems.

Further guidance for exams will be announced approximately two weeks before the first exam.

5 Grading

The final course grade will be based on:

- Three “midterm” exams: 20% each
- Final exam: 30%
- Homework: 5%
- Attendance and participation: 5%

Note: Participation may occur in person (during class or office hours) or online (over Zoom, Discord, or email).

Grades will not be curved, unless there is a clear need. Letter grades will be assigned according to this table:

Numeric score	98-100	93-97	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	< 60
Letter grade	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

6 Other Notices

6.1 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 and the Brooklyn College procedure for policy implementation can be found at www.brooklyn.cuny.edu/bc/policies. 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.

6.2 Disability-Related Accommodations

The Center for Student Disability Services (CSDS) is currently working remotely. 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 testingcsds@brooklyn.cuny.edu. If you have already registered with CSDS, please email Josephine.Patterson@brooklyn.cuny.edu or testingcsds@brooklyn.cuny.edu to ensure the accommodation email is sent to your professor.

6.3 Student Bereavement Policy

Brooklyn College's student bereavement policy can be found [here](#).

6.4 Non-attendance Due to Religious Beliefs

Information concerning state law regarding non-attendance because of religious beliefs can be found in the front matter of the *Undergraduate Bulletin*: TBD

Note: If possible, please inform me at the beginning of the semester if you will need to miss any classes due to religious beliefs, so that I do not schedule exams for those classes.

7 Important Dates

Wednesday, August 25	First day of Fall 2021 classes
Tuesday, August 31	Last day to add a course
Friday-Wednesday, Sept. 3-8	No classes scheduled
Wed.-Thurs., Sept. 15-16	No classes scheduled
Monday, October 11	No classes scheduled
Thursday-Sunday, Nov. 25-28	No classes scheduled
Monday, December 13	Last day to withdraw from a course with a grade of W
Tuesday, December 14	Reading day; final examinations begin
Tuesday, December 21	Final examinations end
Monday, December 27	Final grade submission deadline

The full academic calendar, including many other important dates, is available [on the Office of the Registrar's website](#).