Department of Mathematics and Computer Science, Adelphi University

0145-156-003 Fall 2025 – Prof. A. Wittenstein
CSC 156 Discrete Structures (3 credits)

Contact Information

Office: Science 415
Email: Wittenstein@adelphi.edu
Course Web Page: http://home.adelphi.edu/~wi16133/csc156/f25
Office Hours: MW 5:50-6:20pm

Class Meetings M/W 4:30-5:45pm, SCB 205 (M 8/25 -> M 12/8)

M 9/1, M 10/13, W 11/26 No Adelphi classes
M 12/8 Last Scheduled Class Meeting Before Final Exam
T 12/9 & W 12/10: Make Up/Study Days
W 12/17: Final Exam (time to be determined)

General Education Requirements

This course satisfies:

- Learning Goals: Quantitative (Q).
- Distribution Requirement: Formal Science (FS).

Prerequisites

none, other than knowledge of H.S. Algebra

Catalog Course Description

Learn about Mathematical Logic, Boolean Algebra, Combinatorial Circuits, Set Theory, and their underlying similarities. Learn about numbers and their representations, including binary, hexadecimal, and modular number systems. Learn about mathematical theory related to data structures, including lists, graphs, and trees.

Course Learning Goals

In this course, you will learn how to:

- Analyze, simplify, represent. and explain logical statements
- Perform mathematical operations in binary, hexadecimal, and modular number systems
- Represent information and calculate using mathematical data structures

Grading

Course Assignments = 30% Quizzes = 15% Exam 2 = 15%
Participation Exercises = 5% Exam 1 = 15% Final Exam = 20%

*The final course grade corresponding to each final numerical course grade will be no lower than:

A+ = 97 & up A = 93-96.9 A- = 90-92.9 B+ = 87-89.9 B = 83-86.9 B- = 80-82.9
C+ = 77-79.9 C = 73-76.9 C- = 70-72.9 D+ = 67-69.9 D = 63-66.9 D- = 60-62.9 F = 0-59.9

Attendance

- Only students who are registered for courses, and whose name appears on the official Class Roster, may attend courses at Adelphi University.
- Attendance in class is *mandatory*. Adelphi students make a commitment to be active participants in their educational program; class attendance is an integral part of this commitment.Just as not showing up to a job negatively impacts your paycheck, if you miss a class then your grade may be negatively impacted.
- If you miss a regular class session (one where an exam/quiz is not scheduled), then it is your responsibility to:
  - e-mail the professor before class time to explain the circumstances (or within 24 hours of the missed class if there was a last-minute emergency preventing your attendance)
  - contact a classmate to get the notes that you missed and *hand-write* a copy of the notes
  - e-mail the professor a copy of these handwritten notes before the start of the next class

  If you follow these steps and your absence was for a valid reason, it will likely be considered excused. Otherwise, it will be considered unexcused and will result in a deduction of 1% from your final grade.
- Absence from quizzes and exams will be excused only for a good and **well-documented** reason. The decision to allow a make-up quiz or exam will be made in accordance with the policies of Adelphi University.
- Please arrive to class *on time* whenever possible. Also, lateness or leaving early will count as partial absences. But, I would much rather you arrive late or leave early, then have you miss an entire class session. If you know in advance that you will be absent or late for a class, please e-mail me in advance (if possible) to let me know.

- This is a Traditional In-Person class, and most (70%-100%) class meetings will be in-person. On occasion, the class may meet synchronously on Zoom (when announced in advance on Moodle/AU e-mail by the professor).
- If I know in advance that I will be absent or late for a class, then I will post this information to Moodle, and Moodle will automatically send an e-mail to your Adelphi e-mail account. ***In the rare case that I am not there at the start of class and there is no announcement on Moodle or the classroom door, then you should wait in the classroom until at least 4:50pm, as I am probably just running late.***

Classroom Policies and Expectations

- Students are expected to take handwritten notes during class. When PowerPoints are provided in advance, students are expected to print them on their own before class and to take additional handwritten notes on them.
- Students are not to use phones or computers during class, except for tasks directly related to the lesson, like note taking and accessing the PowerPoint being discussed. *Students not following this policy may be asked to leave the class, in which case they will be marked absent for the day.*
- Homework assignments are not to be worked on and not to be submitted online during class time (M/W 4:30-5:45pm) for any reason (unless specifically announced by the professor). *The penalty for this will be a grade of ZERO on that assignment – no warnings or exceptions!*

Course Materials

Required Textbook (online only)

- Our textbook this semester is a customized electronic book called *CSC 156: Discrete Structures* which was created specifically for this course, ISBN: 979-8-203-98935-2
- Please purchase using these instructions:
  1. Sign in or create an account at learn.zybooks.com
  2. Enter zyBook code: ADELPHICSC156WittensteinFall2025
  3. Subscribe for **$74**.

Moodle Learning System

- All grades (for assignments, quizzes, and exams) will be posted to Moodle.
- All lecture PowerPoint slides & assignments will be posted to Moodle.
- If a class meeting is cancelled for any reason, you are required to log on to the class Moodle page for instructions and assignments. **If the University is closed for more than two days due to an emergency, log onto MOODLE each class day for instructions and assignments.**
- Whenever announced, assignments are to be submitted through Moodle.

Other

- You should be prepared to write in class every day; always bring a pencil/pen and a notebook.
- You may use a calculator in this course; either a scientific or a graphing calculator is sufficient.
- You are responsible for checking your Adelphi e-mail account regularly and responding promptly and professionally. When you have a question, please include as much relevant information as possible.

Major Course Topics

1. Logic & Boolean Algebra (includes Propositional Logic, Quantifiers, Gates and Circuits)
2. Number Theory (includes: modular arithmetic, binary & hexadecimal numbers, bitwise operations)
3. Data Structures (includes: Set Theory, Sequences & Recursion, Permutations & Combinations, Graphs & Trees)

*A day-by-day calendar can be found on Moodle. This calendar will be updated throughout the semester as dates may shift, such as when a topic which is planned for 1 day actually takes 2 days, or vice-versa.

Course Assignments

- Since this course meets for three credit hours per week, it is expected that on average you do about 6 hours of work for this course per week outside of class time (including reading / studying / assignment completion):

Reading Assignments

While class meetings will highlight most parts of the material, you are expected to complete the reading assignments on the calendar for each class meeting, as it provides more examples & explanations of the material.

Assignments, participation exercises, quizzes, and exams will assess understanding of classroom and textbook material. Make sure to ask about anything you do not fully understand prior to an exam, quiz, or assignment.

Graded Homework Assignments

Be sure to prepare for these assignments by first completing the reading assignments and practice exercises. Assignments will be graded for accuracy and completeness, not just on whether they were attempted, and **you must include justification for each answer you give.** Late assignments will be penalized 10% per calendar day (including weekends and holidays). However, if the instructor is notified in advance that an assignment will be late for a valid reason (starting the assignment too late, not knowing how to do an assignment, and/or calculator/computer issues on or near the due date are NOT valid reasons), the late penalty may be reduced or eliminated. *Also, late submissions may not be accepted for any credit once grading and/or post-mortem feedback have been provided to the class and/or any of its students for a particular assignment.* In general, class time cannot be allotted to the post-mortem review of homework. For review of graded homework, please attend my office hours and/or see the course tutors. **Homework assignments are not to be worked on and not to be submitted during class time. *The penalty is a grade of ZERO on that assignment – no warnings or exceptions!***

Extra Credit Policy

Due to the importance of using this time for the work this course requires (including reading and studying), **NO Extra Credit opportunities will be given**. In lieu of this, the instructor will consider dropping a grade and/or curving grades when final course grades are calculated after the Final Exam.

The Adelphi Honor Code

"The University is an academic community devoted to the pursuit of knowledge. Fundamental to this pursuit is academic integrity. In joining the Adelphi community, I accept the University's Statement of Academic Integrity and pledge to uphold the principles of honesty and civility embodied in it. I will conduct myself in accordance with ideals of truth and honesty and I will forthrightly oppose actions which would violate these ideals."

Code of Academic Integrity

Students enrolled in this course are expected to abide by Adelphi University's Code of Academic Integrity.

The Code of Academic Integrity prohibits behavior, which can broadly be described as lying, cheating, or stealing. Academic dishonesty/violations of the Code of Academic Integrity include, but are not limited to, the following:

1. **Fabricating data or citations**
2. **Collaborating in areas prohibited by the professor**
3. **Unauthorized multiple submission of work**
4. **Sabotage of others' work, including library vandalism or manipulation**
5. **Plagiarism: presenting any work as one's own that is not one's own**
6. **The creation of unfair advantage**
7. **The facilitation of dishonesty**
8. **Tampering with or falsifying records**
9. **Cheating on examinations through the use of written materials or giving or receiving help in any form during the exam, including talking, signals, electronic devices, etc.**
10. **Other forms of academic dishonesty**

Use of any electronic device (other than scientific/graphing calculators) including cellular phones and smart watches, at any time during an exam or quiz regardless of reason is considered a violation of #6 and #9 above.
In this course, no credit will be given to assignments, or portions thereof, that are substantially similar. I will not try to figure out who copied from whom; it is your responsibility to not let anyone copy your work.
If you are unsure about what plagiarism or another form of academic dishonesty are, please reach out to me to discuss it as soon as possible. An allegation of an academic integrity violation in this course may be referred for further review and could result in disciplinary action.

Generative AI (GenAI) Usage Policy

Generative Artificial Intelligence (GenAI) tools are strictly prohibited in this course. Students are not allowed to use any GenAI models during assignments, projects, quizzes, or exams that count in any way toward the course grade. Prohibiting GenAI ensures that assessments are based solely on students' own understanding.

Since these are core course learning goals, all submissions must be entirely the student's own original work.
Students' Responsibility: Students must ensure they understand the tools they are using to complete course assignments. By handing in work, students are accepting responsibility for following all University and course policies concerning academic integrity and will be reported for violations.
Definition of GenAI: Generative AI (GenAI) refers to a class of artificial intelligence techniques that create new content, such as text, images, or music, by learning patterns from existing data. These models use machine learning algorithms to generate novel outputs based on input data. ChatGPT is the best-known example of GenAI, along with Microsoft Copilot and Google Gemini, but tools like Quillbot and Grammarly also use GenAI technologies.
For additional information, please consult Adelphi's Generative AI Policy.

Student Course Evaluations

About 2 weeks before the start of Final Exams, the course evaluation will become available to you on eCampus. Availability will end just before the first day of the Final Exam Period. Your feedback is valuable to me in making improvements to the course for future students. Please be assured that your responses are anonymous and that the results will not be available to me until after your final course grades are submitted to the University.

Student Access Office and Disability Accommodation

https://www.adelphi.edu/access-office/ sao@adelphi.edu (516) 877-3806 University Center 314
If you require disability-related accommodations for this course, you are encouraged to contact the Student Access Office (SAO) at 516-877-3806 or at sao@adelphi.edu. In support of the most accessible student experience possible, the SAO will work with you to make an individualized assessment of your needs and to eliminate barriers with appropriate, reasonable accommodations.

Student Counseling Center

https://www.adelphi.edu/scc/ scc@adelphi.edu (516) 877-3646 Nexus 132
The Student Counseling Center (SCC) provides free and confidential comprehensive mental health, preventative and educational services to any enrolled Adelphi student. Staffed by licensed mental health professionals including social workers, mental health counselors, clinical psychologists and psychiatric nurse practitioner, the SCC helps students define and accomplish their personal, academic and professional goals.
Services are provided in person and virtually. Counselors help students understand and cope with a variety of stressors and personal issues that may interfere with their academic and personal experiences. The SCC also supports students experiencing mental health distress or who are in crisis. If you need immediate assistance, walk-in services are available year-round Monday-Friday, 9:00 a.m.–5:00 p.m.
Need support when the SCC is not open? For 24/7 free, urgent counseling, referral, or assistance, please contact:
911 (for immediate health-related emergency)
National Suicide Prevention Lifeline 988 **Crisis Text Line**: Text PAWS to 741741
Adelphi Office of Public Safety Off campus: (516) 877-3511, On campus: Extension 5 on any campus phone

Center for Academic Support and Enrichment

https://www.adelphi.edu/case/ case@adelphi.edu (516) 877-3200 Nexus 132
The Center for Academic Support and Enrichment (CASE) offers programs and services—like individual tutoring in writing and subjects across the curriculum, small group study sessions, academic coaching and targeted workshops—that help students explore, deepen and extend their classroom learning. Support programming focuses on establishing foundational skills and techniques of studentship, like time management and note-taking. Enrichment services develop higher-order critical thinking skills and problem-solving skills inherent in both abstractions and applications of curricular study. Contact them via email, phone or via eCampus to review their full slate of real-time (in person and remote) and asynchronous services. These are included in your tuition, so you've already bought them!

Sexual Misconduct, Discrimination & Harassment

The University will not tolerate discrimination, harassment or violence based on the protected status of an individual's race, creed, color, national origin, sex, gender identity, gender expression, age, marital status, disability, ethnicity, sexual orientation, predisposing genetic characteristics, religion, pregnancy, military status, veteran status, status as a

victim of domestic violence, criminal conviction status, or any other basis protected by applicable local, state or federal laws. This includes sexual assault, domestic violence, dating violence, stalking and sexual harassment.
The University is dedicated to preventing, investigating, and remedying incidents of discrimination, harassment, violence and related retaliation. Reports of prohibited conduct can be made through our online reporting form found here or by contacting the Title IX Coordinator: E-mail: titleix@adelphi.edu Phone: 516-877-4819

Faculty are considered a "Responsible Employee" at Adelphi University. That means they are obligated to report information shared with them related to sexual misconduct, discrimination and harassment. Reporting to the Title IX Office ensures our commitment to providing a safe environment for all members of the campus community. The choice of how to proceed with the Title IX Office is up to you. You will not be penalized for reporting what you have experienced, and the law prohibits retaliation against anyone who participates in the Title IX process. To learn more about campus resources and the University's policies, visit our Title IX web page.

Student Pregnancy and Parental Leave

Adelphi will make reasonable modifications to its policies, practices, or procedures as necessary to prevent sex discrimination and ensure equal access to its education program. To request reasonable modifications, please contact the Title IX office (see above). For more information, visit the Student Pregnancy and Parental Leave Policy webpage.

Student Participation & Recording/Sharing of Video Course Content

Students enrolled in this course are expected to actively participate in the course, which includes consenting to be part of any class sessions, or portions thereof, that may be recorded. Classes may be recorded at the instructor's discretion to provide students with access to recordings outside of class (asynchronously). Students enrolled in this course may also be recorded while taking remote exams (if remote exams are needed due to public health/emergency conditions).

On any days that the class meets synchronously on Zoom, students are encouraged to remain on camera while learning to facilitate interactions with instructors & classmates. All students are encouraged to speak with instructors about any challenges or potential limitations to their on-camera participation in a remote, live-streamed, or online class.

Additionally, in order to protect the privacy of other students enrolled in the course, students will refrain from allowing family members or others to participate, listen in, or otherwise impinge upon the shared virtual space of synchronous remote or online learning classrooms. Students are prohibited from recording or sharing in any way video content from online classes with others.

STUDENT ACKNOWLEDGEMENT:
I HAVE READ AND UNDERSTOOD THE SYLLABUS FOR FALL 2025 CSC 156-003

Signature: _____ Printed Name: _____ Date: _____

Chosen Pronouns: _____ Name you wish to be called: _____

Learning and Testing Accommodations: Extended Time ____ Separate Location ____ Other _____

Allergies: _____ Any dates you will need to miss class: _____