

CSC 161 Fall 2021 - Prof. A. Wittenstein

Computer Applications in Mathematics (3 credits)

Contact Information

Office: Science 415

Email: Wittenstein@adelphi.edu

Course Web Page: <http://home.adelphi.edu/~wi16133/csc161/f21>

Office Hours: TR 5:45-6:15pm on ZOOM, or by appointment

Class Meetings T/Th 4:30-5:45pm, SWL 100/on ZOOM (T 8/31 → T 12/14)

Th 9/16: No class – will be made up on Tues 12/14

T 12/14: Last regular class meeting

T 11/2: No Adelphi classes – Election Day

T 12/14: Make Up Class for Thu 9/16

Th 11/25: No Adelphi classes – Thanksgiving Break

T 12/21: Final Exam 3:30-5:30pm

Prerequisite MTH 142: Calculus II

Course Description

Students will utilize computer technology to solve problems in algebra, probability and statistics, geometry, and calculus. Additionally, students will gain knowledge of fundamental concepts in computer programming.

Course Materials

Textbooks

- Since there is no single text that contains all the topics being taught in this course, the course will utilize online resources, accessible through the course web page and the course Moodle page.

Graphing Calculator

- Each student must have a Texas Instruments (TI) 84 for their own use during this course.
- Students will not be allowed to share or borrow calculators during labs, quizzes, or exams for any reason!

Moodle Learning System

- To access Moodle, log on to your eCampus account, then click on the Moodle tab.
- All grades (for assignments, quizzes, and exams) will be posted to Moodle.
- All lecture PowerPoint slides, assignments, and assignment solutions, will be posted to Moodle.
- If you have not used Moodle before, a tutorial can be found at: <http://fcpe.adelphi.edu/moodle/student/>
- Students are to monitor Moodle announcements or their Adelphi Gmail for any schedule changes (assignment or quiz/exam date changes, instructor running late, etc.) If a class meeting is cancelled for any reason, log on to the class Moodle page for instructions and assignments (if any).

Course Learning Goals & Objectives

- Students will solve multi-step equations in Maple. This will be assessed by Quiz 1 and the Midterm Exam.
- Students will solve problems in probability theory, stochastic processing, and statistics using Excel. This will be assessed by Quiz 2 and the Midterm Exam.
- Students will utilize the TI-84 graphing calculator to solve problems in algebra, geometry, and calculus. This will be assessed by the Midterm Exam.
- Students will show understanding of the basic concepts behind computer programming using the Python Programming Language. This will be assessed by Quiz 3 and the Final Exam.
- Students will solve geometry problems using GeoGebra software. This will be assessed by the Final Exam.

Class Meetings

Provided that health conditions allow, most of our class meetings will be in-person and the remaining ones will be online synchronous on Zoom, all at our assigned class time: T/Th 4:30-5:45. Since this course is Hyflex, enrolled

students can also join the in-person meetings live via livestream, on Zoom. If public health conditions deteriorate during the semester, we may hold more of the class meetings synchronously on Zoom instead of in-person.

For both in-person and online class meetings:

- The class meetings will be a mix of lecture & time for informal in-class practice exercises.
- 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 classroom or Zoom meeting, in which case they will be marked absent for the day.*
- Assignments are not to be worked on and not to be submitted during class time. *All assignments with a time stamp during class time will be given a grade of ZERO.*

Due to the ongoing COVID-19 health pandemic, please be sure to read the attached **Fall 2021 COVID-19 Syllabus Addendum**, which is to be considered as being part of this course syllabus.

STUDENT ACCESS OFFICE:

<https://access-office.adelphi.edu/> sao@adelphi.edu (516) 877-3806 Post Hall 107 (temporarily)

If you have a documented need that may impact your ability to carry out assigned course work and are not enrolled in the Learning Resource Program, you can reach out to the Student Access Office (SAO). SAO will review your concerns and determine, with you, appropriate and necessary accommodations. All information and documentation of disability is confidential.

LEARNING CENTER

<https://learning.adelphi.edu/about/> learningcenter@adelphi.edu (516) 877-3200 Nexus 129

Promotes academic success and an enriched scholastic experience through tutoring, skills development, events and workshops

THE STUDENT COUNSELING CENTER (SCC):

<https://students.adelphi.edu/catalog/counseling-services/> (516) 877-3646 Nexus 129 (temporarily)

Provides confidential and professional psychological counseling services, resources, and referrals to support the academic and personal success, health, and well-being of Adelphi students without additional charge. Counselors are available to help students cope with a variety of stressors and personal issues that may interfere with their academic and personal experiences. The Center also supports students who may be feeling suicidal or in crisis.

Need support when the SCC is not available? Get Help: <https://scc.adelphi.edu/contact/>

For 24/7 emergency counseling, referral, or assistance, please contact:

Long Island Crisis Center (516) 679-1111

National Suicide Prevention Lifeline (800) 273-TALK (8255)

Public Safety: Off campus: (516) 877-3500, On campus: Extension 5

911 (for immediate health-related emergency)

Honor Code & Academic Honesty

The Honor Code states that "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."

Students enrolled in this course are expected to abide by Adelphi University's policies on Academic Honesty, which can be viewed on the web at <http://academics.adelphi.edu/policies/honesty.php>. The purpose of the Honor Code and policies on is to protect the academic integrity of the University by encouraging consistent ethical behavior in assigned coursework by students. The following is excerpted from the Student Honor Code:

The code of academic honesty prohibits behavior, which can broadly be described as lying, cheating, or stealing.

Violations of the code of academic honesty will 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.

Violations of these standards, including (but not limited to) plagiarism of any portion of an assignment or misconduct during quizzes & exams, will be dealt with in accordance with University regulations & procedures and reported to the Provost's office.

In this course, no credit will be given to student 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.

Also, students may not share files or portions of files pertaining to course assignments for any reason. Again, I will not try to figure out who shared a file whom; it is your responsibility to not share your files or allow any other students access to them, even unintentionally.

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 the end of the semester and after your final course grades are submitted by me to the University.

Grading

Assignments 25% Midterm Exam 25%: Thursday 10/28: in class-date tentative

Quizzes 25% Final Exam 25%: Tuesday 12/21: 3:30pm-5:30pm

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

Attendance is required. Adelphi students make a commitment to be active participants in their educational program; class attendance is an integral part of this commitment. Students are responsible for completing course work missed through absences. After 4 absences, your grade will be lowered by one-third of a grade (e.g., A to A-, A- to B+, etc.). You are also responsible for whatever work is covered in class **whether or not you are there**. 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. *Since this course is designated as Hy-flex, please pay attention to announcements in class & on Moodle as some class sessions will be held in-person & others will be held on Zoom synchronously during our scheduled class time.*

Please arrive to class *on time* whenever possible, meaning to arrive to the classroom on time for in-person classes and to log on to Zoom on time for online classes. In both cases, lateness or leaving early will count as partial absences, but I would rather you arrive late or leave early, then miss an entire class session. If you know in advance that you will be absent or late for a class, please e-mail me to let me know.

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 Gmail account. ***In the rare case that I am not present (meaning in the classroom for in-person classes & logged on to ZOOM for online classes) at the start of class and there is no announcement, then you should wait until at least 4:55pm, as I am probably just running late.***

RELIGIOUS OBSERVANCE

Adelphi University requires that students who anticipate being absent, due to their religious observance, to notify their professors at the start of the semester. This will allow me to take these observances into consideration for the course exam and assignment schedules. Students must contact the instructor to work out suitable arrangements for make-ups or other satisfaction of academic requirements for the missed classes. If you need to be absent for any class meetings due to religious observance, please notify me within the first two weeks of the semester.

Course Topics & Approximate Timeline

1. Weeks 1-3: Using Maple in Mathematics
2. Weeks 3-5: Using Microsoft Excel in Math
3. Weeks 5-7: Using the TI-84 in Mathematics
4. Week 8: Review & MIDTERM EXAM
5. Weeks 9-12: Introduction to Computer Programming
6. Weeks 13-14: GeoGebra for Geometry and Algebra
7. Weeks 14-15: Review & FINAL EXAM

*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 3-6 hours of work for this course per week outside of class time.

Reading Assignments

While the class meetings will highlight the important parts of the material, you are expected to complete the reading assignments on the course calendar before each class meeting, as they provide additional examples and explanations of the material. The assignments, quizzes, and exams will assess understanding of classroom and textbook material. Therefore, make sure (during class, during office hours, and/or by e-mail) to ask the instructor about anything you do not fully understand prior to each assignment due date, quiz, or exam.

Graded Assignments

Graded assignments count for 25% of the semester grade. They will be assigned every week or two and typically due about a week later. They are to be submitted through the Moodle Learning System, unless announced otherwise. **Late assignments will not be accepted for credit.** Assignments will be graded based on the accuracy and completeness of your work, not on effort or completion.

Graded assignments are meant as a form of assessment in this course. Students should make sure they understand the material (lecture and reading assignments) prior to working on these exercises.

Assignments will be graded for accuracy and completeness, not just on whether they were attempted. The weight of each assignment in the Assignment grade will be based on the importance and/or approximate length of the assignment. Assignments fully meeting all requirements will receive a grade of 96% (A). Only assignments exceeding requirements will receive a grade of 97% or above (A+).

Assignments are to be submitted electronically through Moodle by 11:55pm on the due date. Late assignments will be penalized 10% per day. 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 computer trouble on or near the due date are NOT valid reasons), the late penalty may be reduced or eliminated at the instructor's discretion. 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.

Since class time cannot generally be allotted to the review of assignments, please attend my office hours, or look at posted solutions on Moodle when available, if you need to review any graded assignments.

STUDENT ACKNOWLEDGEMENT:

I HAVE READ AND UNDERSTOOD THE SYLLABUS FOR FALL 2021 CSC 161-001

Signature: _____ Printed Name: _____ Date: _____

Allergies: _____

Accommodations: _____

Any days you will need to miss class: _____

Fall 2021 COVID-19 Syllabus Addendum for CSC 161

Student Participation & Recording/Sharing of Video Course Content

Students enrolled in this course, which is a HyFlex course, are expected to actively participate in those courses, which includes consenting to be part of recorded class sessions. 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.

Students are encouraged to remain on camera while learning in a remote or online format to facilitate interactions with instructors and classmates. All students are encouraged to speak with their instructors at the beginning of the semester 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 participate, listen in, or otherwise impinge upon the shared virtual space of the remote or online learning classroom. Students are prohibited from recording or sharing in any way video content from in-person or online classes with others, pursuant to The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99), that protects student privacy. Sharing of content is defined as discussing or disclosing any and all information about a student in the presence of others, electronically, in person, or otherwise. *See also*, the Adelphi University Code of Conduct.

Vaccination Policy

If you are not in compliance with the University's immunization policy (including but not limited to the COVID-19 vaccine), you will receive alerts and reminders to submit proof of vaccination. If you remain noncompliant beyond the deadlines indicated above or any University-approved grace period, you will not be permitted on campus, which will prevent your in-person attendance in this course.

Mask Policy

In accordance with current University-wide policy, **regardless of vaccination status**, individuals in our classroom are required to wear masks. In the event that any student does not wear a mask in the classroom, the instructor will ask the student to put on a mask. If the student does not comply, the student will be dismissed from the class. Disposable masks will be provided by Adelphi, free of charge, if needed.

Infractions relating to failure to comply with the requirement to wear a mask may be addressed through the Code of Conduct, available at <https://operations.adelphi.edu/catalog/conduct/>.

More information about masks, distancing and safety guidelines is available at <https://www.adelphi.edu/coronavirus/health-wellness-safety/personal-safety-practices/>

I will inform you by Moodle/Gmail of any changes to this University mask policy (if any) during the semester.

Food Consumption in Class

Due to the current mask policy, individuals in a classroom will not be permitted to consume food or drink a beverage unless they have an approved accommodation requiring the ability to eat during class sessions. Such accommodations must be approved through the Student Access Office in the normal fashion. More information is available at <https://access-office.adelphi.edu/accessibility-support-services/>. If you have such an accommodation, please notify the instructor prior to the course before or during the first week of classes.

Cleaning and Disinfecting

Adelphi University maintains a rigorous regimen of regular cleaning throughout our campus and has always used hospital-grade products and procedures to ensure a clean campus. In light of the current public health crisis, the University will adhere to best practices of thorough cleaning and disinfection in accordance with CDC best practices for prevention of COVID-19 and the New York State Department of Health guidelines.

As an additional measure, wipes will be supplied in classrooms identified for in person/ on ground classes, to disinfect keyboards, partitions and/or desktops.

In the Event of a Positive Case of COVID-19

Nassau County Department of Health will conduct contact tracing and inform all those who have been deemed sufficiently exposed of next steps (which would likely include testing and quarantine).

If a space must be closed for disinfection, any occupants will be notified. More information about our Cleaning and Disinfecting Protocols in the Event of a Positive COVID-19 Case is detailed beginning on page 22 of Adelphi's Guide for Returning to the Hybrid Workplace, available at <https://www.adelphi.edu/restart/reports/>.

If you Exhibit COVID-19 Symptoms or are Required to Undertake a Quarantine

Before coming to campus, every individual completes a daily health monitoring checklist: <https://www.adelphi.edu/it-services/au2go/>. It is extremely important for the health and safety of yourself and your community that you complete the checklist honestly. If you test positive for COVID-19, exhibit any of the symptoms of COVID-19, or otherwise are required to stay home after completing the daily health checklist, please notify Prof. Wittenstein immediately, and join the class via livestream (Zoom), if possible.

Similarly, you may be contacted and notified by a contact tracer or other appropriate authority that you have been in close contact with an individual who has tested positive for COVID-19. In such cases, you should notify Prof. Wittenstein that you will be undertaking a quarantine and provide the dates you have been directed to undertake quarantine. During your quarantine, please join the class via livestream (Zoom), if possible.

In the Event of a Shift to Remote Instruction

Despite our best efforts, we cannot predict the course of the pandemic or of county and state regulation. Adelphi University may be required to change the modality for this course to one suitable for remote instruction at any time; either for a defined period such as two weeks or for the remainder of the semester. *In such a case, this course will continue to meet via Zoom and not in-person during that period.*