

MATH 10120: FINITE MATH

Instructor: Adrian Păcurar

Office: Hayes-Healy (aka Hurley) 295

E-mail: apacurar@nd.edu

Meeting Times: Mon-Fri 1:15-2:35 PM in Hayes-Healy 229

Office Hours: Monday & Thursday 12:00-1:00 PM and 3:00-4:00 PM in Hurley 295 (or by appointment)

Course Website: <http://www3.nd.edu/~apacurar/teaching.html>

About the class: The course covers introductory topics from discrete mathematics (i.e. non-calculus). We begin with basic counting techniques, leading into probability and statistics (this will be the main bulk of the course). Other topics that we may cover: linear programming and optimization problems, game theory, and financial math. Other topics may be covered if time allows.

Textbook: *Finite Mathematics*, 8th Edition, by Howard L. Rolf. You may purchase either purchase a hard copy of this book along with access to the ebook and online homework, OR purchase access to the online homework system and use the ebook that comes with it for reference. Whichever option you choose, is crucial that you get the online homework access code, so be wary of used books (as access codes are not transferable)! I looked at Amazon and the publisher website, and it seems the cheapest option is through the ND bookstore:

- <http://www.bkstr.com/notredamestore/shop/textbooks-and-course-materials>

Calculator: Any basic calculator will do (phones/computers are not OK). There is no need to invest in an expensive graphic calculator. If you already own a graphing calculator, you may use it. Generally the exam questions will not require you to do any long computations, but the WebAssign homework might.

Grading: The final grade for the course is worth a total of 600 points. This is broken into the following components: 180 points for homework (30%), 180 points for quizzes (30%), 180 points for exams (30%), and 60 pts for attendance/discipline/participation (10%). Throughout the semester opportunities for extra credit may arise. Your grades on each of these components will be periodically updated on Sakai:

- <https://sakailogin.nd.edu/>

Letter	Points	Percentage
A	552 — 600	92% — 100%
A-	540 — 551	90% — 92.99%
B+	510 — 539	85% — 98.99%
B	492 — 509	82% — 84.99%
B-	480 — 491	80% — 81.99%
C+	450 — 479	75% — 79.99%
C	426 — 449	71% — 74.99%
C-	408 — 425	68% — 70.99%
D	360 — 407	60% — 67.99%
F	0 — 359	0% — 59.99%

Attendance/Discipline/Participation: I will not consider requests for homework extensions or make-up quizzes/exams. In the case of extraordinary circumstances (serious illness, family emergencies or an absence because of a university sponsored event), you must provide documentation (ex: a note from your doctor). Absences due to athletic events will be excused only if they are pre-approved by the university and you have a written note from the athletic department. **Unexcused absences** are zeros for the day. If you are late to class by more than 5 minutes, or leave before being dismissed, it will be marked as an unexcused

absence. If you anticipate being absent and having to leave early (for legitimate reasons), get in contact with me via email beforehand and we will figure something out. **Technology use** in the classroom is NOT allowed. Being on your cellphone/computer during lecture will be marked as an unexcused absence for the day. **Disruptive class behaviour** (i.e. socializing during lecture) will be marked as an unexcused absence. Students who accumulate **3 unexcused absences will receive an F for the course**.

Homework: Homework is an big component of the course, as it is crucial to your understanding of the material, and tracking your own progress in the course. You will have **daily homework** assignments covering the material for that day. The homework is due on the following day at the beginning of class. I strongly encourage you to collaborate and work in groups, as long as it doesn't interfere with your understanding of the material (i.e. you're not just copying the answers from one another, but rather make sure you understand them!). The homework due dates are posted in the detailed class schedule on the course page.

The online homework system is WebAssign, and you **must** purchase access to WebAssign in order to complete the homework (see the textbook section above for options). Homework one will count for zero points to allow you to get used to the system. After that, each homework will count, equally weighted, towards the 180 point total. There is a separate document with detailed instructions on how to register for the online homework on the course page (look for the 'WebAssign Signup Info' link).

Quizzes: As a way to track your own progress and understanding, we have 9 total quizzes for the course. Usually these are Tuesdays and Fridays at the beginning of the class, except on exam weeks when we will only have a Tuesday quiz. The cumulative quiz grade makes up 30% of your final grade. The lowest 2 quizzes will be automatically dropped.

Exams: There are three exams in the course, each of them making up 10% of your course grade, totaling up to 30% of your final grade. These are given on the Friday of weeks 2, 4, and 6. On the Thursday before each exam, I will hold a review session in the evening (time and place TBA), and a list of review problems will be provided.

Extra credit: During the semester I may provide opportunities for extra credit in the form of challenge problems. In that case, I will notify the entire class via email. In order to get credit, you must present your solution to me in person, with minimal use of notes.

Office hours: My office hours are your chance to get dedicated one-on-one assistance. You are encouraged to attend office hours regularly for help with homework problems and/or review concepts and material discussed in class. Take that chance whenever you need to, and make sure you get the best out of it. When you come to speak with me, you should:

- Put in a good attempt at the problem yourself first. At the very least you'll gain a better understanding of the difficulty.
- Bring along any work you've done: it helps me understand your personal approach to tackling the problem.

Other resources: The Learning Resources Center is offering a weekly math help session this summer. These are walk-ins, so you may come and go as you please to work on homework or ask questions about the material. The session is taking place at 7:30-9:30 PM on Wednesday nights, in room 234 of Coleman Morse.

The Honor Code: This class is conducted under the Notre Dame Honor Code. Violations of the honor code such as cheating and copying are not tolerated. Exams and quizzes are closed book and taken alone. We do not allow calculators on exams or quizzes.