

	Name	email @tufts.edu	Class time	Office Hours
<b>Instructor:</b>	Arkadz Kirshtein	arkadz.kirshtein	TR 6:00 - 7:15 pm	TR 4:30 - 5:30 pm
	Office: JCC-520i		JCC-140	<b>Zoom</b> or in-person

**Office hours:** If necessary please do not hesitate to reach out to the instructor for additional office hour appointments.

### Required Materials:

- Textbooks: There are no required nor recommended texts for this class.
- Access to **Canvas**, where assignments, and links to course materials will be posted.
- Access to **Zoom** to attend office hours
- Programming Software: Our course will use the “python” programming language to perform machine computations. There are a few ways that you should learn to interact with “python” for our class:
  - via **Google’s Colab**
  - by executing “python” code in a “python” interpreter on your computer
  - (optionally) using **jupyter notebooks** on your computer.
- Access to “**LaTeX**” software or use of **Overleaf** to type the homework and produce the result in PDF format.
- **Gradescope** for assignment submission. Please remember to login using Tufts credentials or your submission might be lost.
- Discussions Forum: Students are encouraged to regularly visit the Discussions forum for the course (linked on Canvas). Students can ask questions about homework, projects, coding, and any other topics related to the course. The instructor and TA will regularly check these discussions, and jump in when needed, but it is mainly intended for students to help each other.

### Course Grading & Expectations:

There will be no exams in the course, however, students are required to abide by the university and the department’s guidelines on academic integrity. The full department policy on exams and grading can be found on the department website, [here](#), as well as the university’s policies, [here](#).

There will be *weekly problem sets*, two *midterm reports*, and a *final report*. Problem sets will be collected at “21:00” (i.e. “9:00pm”) on Wednesdays. You should expect to hand in one assignment each Wednesday (not including your engagement submission; see below); during weeks in which there is midterm or final report due, there *might not* be a problem set assigned. During the term, I will collect and mark 9 to 12 problem sets, 2 midterm course reports, and 1 final report.

Together with your engagement score your marks on these assignments will determine your score (and thus your grade) in the course, as indicated in the table [1](#).

grade component	# of marks	score (points)	% of grade
problem sets	10	50 each	57
reports	3	100 each	38
engagement	1 (cumulative)	5	5

Table 1: Grading

The final score will be calculated using the following formula:

$$0.57 * 2 * W + 0.38 * P + E,$$

Where  $W$  is the average weekly problem set score,  $P$  is the average between 3 projects (midterm and final together), and  $E$  is the engagement score. The course average is converted into a letter grade according to the standard conversion in the Mathematics Department, which can be seen here <https://math.tufts.edu/resources/grading-schemes>.

The engagement score is intended to encourage participation in the class. Some time during the semester you will submit a brief written document to “gradescope” – typically, a response to a prompt made in the class – and these submissions together with class participation will determine your cumulative engagement score. These assignments will only be announced in class and due before next class.

As indicated, I will drop one homework mark. Late problem sets will be accepted, with a 10% point reduction before midnight same day and 30% reduction before midnight next day. Project reports will be accepted with a 10% deduction for each day up to 3 days late. Without compelling reason no assignment will be accepted after its late submission deadline. Of course, if there are extenuating circumstances let me know and I will make an assessment.

**Remark:** one time during the semester you have no-questions-asked and no-penalty 24hr deadline extension pass. All you have to do is to notify me *before* the actual deadline “Hi. I need a NQA 24hr extension on this assignment. Thank you”. However, if you are willing to explain your circumstances and I deem them worthy, you could keep this pass for another time.

**Remark 2:** barring some unforeseen circumstances, any deadline extension request should come strictly before the deadline.

### Learning Objectives:

The learning objectives for this course include 1a, 1e, 4a, 4c, 5a, and 6a on the list of [mathematics undergraduate learning objectives](#).

### Resources and policies:

Please [follow this link](#) to find information on

- In-person classroom health and safety policy at Tufts
- Mental Health Support
- Academic support at the *StAAR Center*
- Accommodations for Students with Disabilities
- Policy on sharing course materials (including videos)
- The *First Center*

### Diversity and Inclusion:

Tufts is enriched by the many experiences and perspectives each individual member brings to our community. We are committed to providing every student, faculty and staff member with the best possible experience, regardless of their race, color, national or ethnic origin, ancestry, age, religion or religious creed, ability, sex or gender, gender identity and/or expression, sexual orientation, military or veteran status, genetic information. See [Non-Discrimination Statement](#) and [other resources on diversity and inclusion](#).

### Final Comment:

- You are responsible for knowing all information contained in this syllabus. All other announcements will be posted on Canvas. You are expected to check these announcements and messages regularly and inform your instructor of any issues with deadlines in a reasonable amount of time.
- Ask questions if you don’t understand. Don’t be afraid to visit me during office hours, where we can go over material and homework you don’t quite understand.
- Come to class! I don’t take attendance, but that’s where the learning takes place. Also please arrive on time and try not to leave early so as not to disturb your classmates.
- You do not have my permission to post photos or recordings of this class online or propagate them or any other course material in any other fashion.
- Sleep! It’s the number one way to improve your mathematics ability. Just not during class...
- Mathematics jokes are welcome at any time during class. Please keep it appropriate though...