

Course Description. The purpose of the course is to demonstrate that mathematics is *universal*, and arises naturally in our everyday lives. The main topics we will cover are: the mathematics of democracy, the mathematics of path-finding, the mathematics of probability, and the mathematics of finance.

Textbook. *Excursions in Modern Mathematics*, by Peter Tannenbaum. The ninth edition is preferred, but the eighth edition is also fine.

Course Website. All the information about the course will be posted on Blackboard (<https://blackboard.stonybrook.edu/>).

Course Staff.

Name	E-mail	Office Hours
John Yang (Instructor)	jonguk.yang@stonybrook.edu	3-121: Mon, Wed 10-11 MLC: Tue 11-12
Aaron Ackbarali (TA)	aaron.ackbarali@stonybrook.edu	S-240A: Wed 1-2 MLC: Wed, Fri 10-11
Xujia Chen (TA)	xujia.chen@stonybrook.edu	S-240A: Tue 10:30-11:30 MLC: Thu 10-12

Note 1: All office hours are held in the Math Tower. Math Learning Center is located in S-235.

Note 2: Any email about the course sent to the instructor or the TA must contain the word “MAT118” in its subject line (otherwise, it is very likely that we will miss your email).

Marking Scheme. Your final grade will be determined as follows (the total number of each item is indicated in brackets):

Project Written Reports (3 @ 10% each)	30%
Project Oral Presentation (1)	5%
Tests (2 @ 15% and 20%)*	35%
Exam (1)	30%
Course Grade	100%

*The test with the higher mark will be worth 20%, and the test with the lower mark will be worth 15%.

Project Written Reports. The students will need to complete three projects in this course. For each project, there will be four topics for the students to choose from. The students working on the same topic are encouraged to work together, but each student will have to submit his/her own written report. In order to do his/her project on a certain topic, a student must first sign up for that topic on the appropriate sign-up sheet posted on the course website (note: each topic will have a maximum of 15 spots).

Project Oral Presentation. For each project topic, a group of 4 or fewer students will work together to prepare a 10 minute presentation of their final results. The presentation will be given in-class. Every student must present at least once during the course. A student can only present if he/she is signed up as a “presenter” on the topic sign-up sheet.

Tests. There will be two tests in this course, both of which will be held in-class:

	Date	Time	Chapters Covered
Test 1	Friday, September 29th	9:00 AM to 9:50 AM	1 and 2
Test 2	Friday, November 3rd	9:00 AM to 9:50 AM	5 and 6

To request special consideration for missing the midterm, bring supporting documentation to the instructor in-person during office hours at least a week **before** the test date. In case of illness, bring a doctor’s note to the instructor within one week **after** the test date. For students who have missed one test because of a legitimate reason, the weight of the missed test will be shifted to make the other test worth 25%, and the exam worth 40%. For students who have missed both tests because of legitimate reasons, the full weight of the tests will be shifted to the exam to make it worth 65%.

Exam. The exam will take place **Wednesday, December 13th, 8:30 PM to 11:00 PM**. The location of the exam will be posted on the course website once it has been set.

Practice Problems. Each week, a list of problems will be selected from the textbook and posted on the course website. These problems do not need to be handed in for marking. However, it is strongly recommended that students do them to study for this course.

Recitations. All students must be enrolled in a recitation section. The purpose of the recitations is to give the students an opportunity to ask questions about the lecture material, the projects,

and the practice problems.

Disability Support Services (DSS) Statement. If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: <http://www.stonybrook.edu/ehs/fire/disabilities>.

Academic Integrity Statement. Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/commcms/academicintegrity/index.html>.