

## MATH 346-002: Mathematics of Finance I

### *Spring 2020 Course Syllabus*

**NJIT Academic Integrity Code:** All Students should be aware that the Department of Mathematical Sciences takes the University Code on Academic Integrity at NJIT very seriously and enforces it strictly. This means that there must not be any forms of plagiarism, i.e., copying of homework, class projects, or lab assignments, or any form of cheating in quizzes and exams. Under the University Code on Academic Integrity, students are obligated to report any such activities to the Instructor.

### COURSE INFORMATION

**Course Description:** The main topics include basic problems in interest, annuities, certain amortization and sinking funds, bonds and related securities.

**Number of Credits:** 3

**Prerequisites:** MATH 112 with a grade of C or better or MATH 133 with a grade of C or better.

**Course-Section and Instructors**

Course-Section	Instructor
Math 346-002	Professor S. Mahmood

**Office Hours for All Math Instructors:** [Spring 2020 Office Hours and Emails](#)

**Required Textbook:**

Title	<i>Theory of Interest</i>
Author	Kellison
Edition	3rd
Publisher	McGraw-Hill
ISBN #	978-0073382449

**University-wide Withdrawal Date:** The last day to withdraw with a W is **Monday, April 6, 2020**. It will be strictly enforced.

### POLICIES

**DMS Course Policies:** All DMS students must familiarize themselves with, and adhere to, the [Department of Mathematical Sciences Course Policies](#), in addition to official [university-wide policies](#). DMS takes these policies very seriously and enforces them strictly.

**Grading Policy:** The final grade in this course will be determined as follows:

Homework and Quizzes	20%
Midterm Exam I	20%
Midterm Exam II	20%
Final Exam	40%

Your final letter grade will be based on the following tentative curve.

A	90 - 100	C	65 - 75
B+	86 - 89	D	55 - 64
B	80 - 85	F	0 - 54
C+	76 - 79		

**Attendance Policy:** Attendance at all classes will be recorded and is **mandatory**. Please make sure you read and fully understand the **Math Department's Attendance Policy**. This policy will be strictly enforced.

**Homework:** Integrity - Your work is expected to be your own. Help from tutors, classmates etc is encouraged but you are responsible for mastering the material. Homework will be assigned at all classes. Homework will be collected and periodic quizzes will be given. Late homework will not receive full credit. There will be no makeup tests, quizzes, or homework.

**Exams:** There will be two midterm exams held in class during the semester and one comprehensive final exam. The final exam will be held during the following week:

Midterm Exam I	Lecture 9
Midterm Exam II	Lecture 19
Final Exam Period	May 8 - 14, 2020

The final exam will test your knowledge of all the course material taught in the entire course. Make sure you read and fully understand the **Math Department's Examination Policy**. This policy will be strictly enforced.

**Makeup Exam Policy:** There will be **NO MAKE-UP QUIZZES OR EXAMS** during the semester. In the event an exam is not taken under rare circumstances where the student has a legitimate reason for missing the exam, the student should contact the Dean of Students office and present written verifiable proof of the reason for missing the exam, e.g., a doctor's note, police report, court notice, etc. clearly stating the date AND time of the mitigating problem. The student must also notify the Math Department Office/Instructor that the exam will be missed.

**Cellular Phones:** All cellular phones and other electronic devices must be switched off during all class times.

---

## ADDITIONAL RESOURCES

**Math Tutoring Center:** Located in the Central King Building, Lower Level, Rm. G11 (See: **Spring 2020 Hours**)

**Further Assistance:** For further questions, students should contact their instructor. All instructors have regular office hours during the week. These office hours are listed on the Math Department's webpage for **Instructor Office Hours and Emails**.

All students must familiarize themselves with and adhere to the Department of Mathematical Sciences Course Policies, in addition to official university-wide policies. The Department of Mathematical Sciences takes these

policies very seriously and enforces them strictly.

**Accommodation of Disabilities:** Disability Support Services (DSS) offers long term and temporary accommodations for undergraduate, graduate and visiting students at NJIT.

If you are in need of accommodations due to a disability please contact Chantonette Lyles, Associate Director of Disability Support Services at [973-596-5417](tel:973-596-5417) or via email at [lyles@njit.edu](mailto:lyles@njit.edu). The office is located in Kupfrian Hall, Room 201. A Letter of Accommodation Eligibility from the Disability Support Services office authorizing your accommodations will be required.

For further information regarding self identification, the submission of medical documentation and additional support services provided please visit the Disability Support Services (DSS) website at:

- <https://www.njit.edu/studentsuccess/accessibility/>

**Important Dates** (See: [Spring 2020 Academic Calendar](#), Registrar)

Date	Day	Event
January 21, 2020	T	First Day of Classes
January 31, 2020	F	Last Day to Add/Drop Classes
March 15 - 22, 2020	Su-Su	Spring Recess: No Classes/ University Open
April 6, 2020	M	Last Day to Withdraw
April 10, 2020	F	Good Friday - University Closed
May 5, 2020	T	Friday Classes Meet - Last Day of Classes
May 6 & 7, 2020	W & R	Reading Days
May 8 - 14, 2020	F - R	Final Exam Period

## Course Outline

Lecture	Section	Topic
1	Chapter 1	Measurement of Interest
2	Chapter 1	Measurement of Interest
3	Chapter 1	Measurement of Interest
4	Chapter 1	Measurement of Interest
5	Chapter 1	Measurement of Interest
6	Chapter 1	Measurement of Interest
7	Chapter 1	Measurement of Interest
8	Chapter 2	Equations of Value
9		EXAM
10	Chapter 2	Equations of Value
11	Chapter 2	Equations of Value
12	Chapter 2	Equations of Value
13	Chapter 2	Equations of Value

14	Chapter 2	Equations of Value
15	Chapter 2	Equations of Value
16	Chapter 3	Basic Annuities
17	Chapter 3	Basic Annuities
18	Chapter 3	Basic Annuities
19		<b>EXAM</b>
20	Chapter 3	Basic Annuities
21	Chapter 3	Basic Annuities
22	Chapter 3	Basic Annuities
23	Chapter 3	Basic Annuities
24	Chapter 3	Basic Annuities
25	Chapter 4	Yields
26	Chapter 4	Yields
27	Chapter 4	Yields
28	Chapter 4	Yields

*Updated by Professor K. Rappaport - 1/20/2020  
Department of Mathematical Sciences Course Syllabus, Spring 2020*

---