

MAC 2233 – 004 (CRN: 10755)

Methods of Calculus

In-Person on MWF 12:00-12:50 pm
3 credits

Spring 2023

Professor: Dr. Zvi Rosen

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Office Hours: TBA and by Appointment

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Course Description

A descriptive and intuitive introduction to the methods and applications of differentiation and integration. Primarily for social science and business administration majors. This is a General Education course. **This section is for nonbusiness majors and is aimed at majors in the life and social sciences.**

Instructional Method

This class is designated as in-person, meeting on **MWF 12:00-12:50 pm in GS 109. There is no remote option for this course.**

This course is accessible only through FAU's learning management system, Canvas. You must log into Canvas with your FAU ID and Password to access the materials and assignments in this course. If you do not know your FAU ID or Password, contact OIT for help.

The course is organized into modules with due dates. The course begins with the Introduction module. You will open a new learning module to access the assigned reading materials, videos, assignments, and other relevant materials for each subsequent module.

Prerequisites

College Algebra (MAC 1105) or equivalent (with a minimum grade of C); or ALEKS PPL assessment (score of 45 or better); or Math Placement Multi-Factor 2 (score of 40 or better).

Textbook

Methods of Calculus by Papiya Bhattacharjee. This is an online textbook along with the online homework resource MyOpenMath (MOM).

You will access MyOpenMath through Canvas (<http://canvas.fau.edu>) for homework. You **DO NOT** need a MyOpenMath account and please do not create one. As a student enrolled in this Canvas course a free, no cost account will be made for you. You can review the following information regarding MyOpenMath; you are responsible for reading and reviewing these materials and asking questions prior to the start of the term.

- MyOpenMath Privacy Policy <https://www.myopenmath.com/info/policies/privacy.php>
- MyOpenMath Terms of Service <https://www.myopenmath.com/info/policies/terms.php>
- MyOpenMath Student Data Privacy Statement <https://www.myopenmath.com/info/policies/studentdata.php>

Course Objectives/Student Learning Outcomes

We will cover sections of the textbook selected from chapters 1 through 3, not necessarily all of them at the same pace. Minor reordering of material may occur, for presentation purposes.

- Chapter 1—Linear and Nonlinear Functions
- Chapter 2—The Derivative
- Chapter 3—The Integral

Objectives

Upon successful completion of the course students will be able to:

1. Compute limits.
2. Compute derivatives.
3. Determine the relative and absolute extreme values of a function and solve applied optimization word problems.
4. Sketch and graph curves: determining where a function is increasing or decreasing, concave up or down.
5. Compute anti-derivatives.
6. Find the area under a simple curve.

IFP General Education Outcomes

1. Knowledge in several different disciplines;
2. The ability to think critically;
3. The ability to communicate effectively;
4. An appreciation for how knowledge is discovered, challenged, and transformed as it advances; and
5. An understanding of ethics and ethical behavior.
6. Information available at <http://www.fau.edu/deanugstudies/NewGeneralEdCurriculum.php>

Course Evaluation Method

Homework	24%
Worksheet	5%
Three Midterm Exams (total)	51%
Final Exam	20%

Homework

Homework will be assigned in Canvas and graded in MyOpenMath. Student will access and complete the homework on Canvas. **Homework is not meant to be memorized** as the problems appearing on the exam may not be directly from the homework. Homework assignments will have a due date, so students should pay close attention to both date and time on Canvas. It is the students' responsibility to be aware of the schedule changes announced by the instructor. MyOpenMath grades parts of problems as all correct or all wrong. **There is no partial credit on homework;** however students have multiple chances to solve each problem. **NO make-ups will be allowed for missed homework for any reasons.**

Worksheet

Worksheets will be given in class from various topics of the course, and students will solve the worksheet in class, in small groups, with the help of their peers. Students should pay attention to the dates worksheets are given in class. There will be no makeups unless the student provides proper FAU-approved documentations for justification of missing the worksheet. Any make-ups must be done within 48 hours of the due date. If a make-up is approved at a later date, then the student will not receive any peer help to complete the worksheet.

Exams

There will be four midterm exams which consist of a mix of multiple choice and free response questions. Multiple choice questions are graded correct (for full credit) or incorrect (for no credit), so be careful selecting your response. You should study for the tests by reviewing your notes, homework assignments, and textbook. **No books, calculators, phones, notes, or help from any persons or internet are allowed during exams. Your best 3 out of the 4 midterm exams will be counted towards your final grade.**

Tentative exam dates:

Exam 1: February 10, 2023, in class

Exam 2: March 03, 2023, in class

Exam 3: March 31, 2023, in class

Exam 4: April 21, 2023, in class

In-Person: All exams will be taken in-person during the class period and will be proctored. Exams will be timed.

There will be no makeups or late exams, unless the student provides proper FAU-approved documentations for justification of missing the exam. All make-up exams, if allowed, must be completed within 48 hours of the due date.

Final Exam Saturday, April 29, 2023. Room: SE 330/340/350. TIME TBA.

The Final Exam consists entirely of multiple choice questions. Each question is graded correct (for full credit) or incorrect (for no credit), so be careful selecting your response. No books, calculators, phones, notes, or help from any persons are allowed during the final exam. The comprehensive final exam covers all the chapters and concepts that are taught during the semester. The Final Exam will be taken online in the Canvas Learning Management System and will be graded in MyOpenMath. Final exam will be proctored by the course instructor and the TAs. **Chromebooks cannot be used to take the final exam. There are no make-ups on final exam.**

Note: Homework grades will be maintained in MOM and will show in CANVAS. Please check your grades regularly on Canvas and notify your instructor immediately should there be any discrepancy.

Note: Should the implementation of online exams/tests/quizzes be necessary, then exams will be proctored via Respondus Lockdown Browser, and there will be a lockdown browser and camera purchase requirement for proctoring purposes. When you take an exam online, make sure to show your work on a piece of paper, write neatly, and mark the problems clearly. After completing the online test you will scan the work along with your FAU ID and upload a pdf copy on Canvas. The scanned work should be uploaded within 10 minutes of submitting the exam. **Chromebooks cannot be used to take online exams.**

Course Grading Scale

Percentage	90-	87-	84-	80-	77-	73-	65-	55-	0-54
Score:	100	89	86	83	79	76	72	64	
Grade:	A	A-	B+	B	B-	C+	C	D	F

Policy on Makeup Exams

Students are responsible for arranging to make up work missed because of legitimate reasons, such as illness, family emergency, military obligation, court-imposed legal obligations or participation in University-approved activities, such as participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the students' responsibility to give the instructor notice prior to any missed work. Any student missing a test without an official excuse will receive a zero grade. **Any excusable absence must be documented by a verifiable source, the instructor must be provided with the FAU-approved documents, and the instructor must be notified AT LEAST THREE DAYS prior to the due date. Except in extraordinary circumstances, all make-up tests must be taken within 48 hours of the due date of the missed work. In an emergency situation the student must inform the instructor about their missed work within 2 days of the due date of the missed work, along with university-approved documents in order to be allowed to make-up the missed work. The FAU-approved documents should be from a third party, who are not related to the student. All make-ups, if approved, has to be completed within 48 hours of the due date. There are no make-ups for final exam. There are no make-ups for any homework, since all homework for this course will be open and available to the students from the beginning of the semester. All make-ups, if approved, must be completed before taking the final exam.**

The grade of I (incomplete) can only be given under the conditions specified in the "Incomplete Grades" section of the FAU Catalog, and supporting documentation will be required.

Classroom Etiquette Policy

Disruptive behavior is defined in the FAU Student Code of Conduct as "... activities which interfere with the educational mission within classroom. Students who disrupt the educational experiences of other students and/or the instructors course objectives in a face-to-face or online course are subject to disciplinary action. Such behavior impedes students' ability to learn or an instructor's ability to teach. Disruptive behavior may include but is not limited to non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a

way as to be disruptive; or, other violations of an instructor's expectations for classroom conduct."

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

Attendance Policy

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Students will be expected to spend a considerable amount of time each day of the week on learning the materials from this course. It is the students' responsibility to be aware of the due dates for each assignment and complete them on time. It is the students' responsibility to read and be aware of every correspondence and communications made by the instructor with them. Students are encouraged to communicate with the instructor via FAU email or Canvas mail.

Special Course Requirements

All of the course materials for this course are made available through Canvas using the MyOpenMath learning platform. The Textbook and the learning platform provide no additional cost to the student to use.

Netiquette

Due to the casual communication common in the online environment, students are sometimes tempted to relax their grammar, spelling, and/or professionalism. Please remember that you are adult students and professionals—your communication should be appropriate. For more in-depth information, please see the FAU statement on netiquette.

Classroom Etiquette/Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as “... activities which interfere with the educational mission within classroom.” Students who disrupt the educational experiences of other students and/or the instructor’s course objectives in a face-to-face or online course are subject to disciplinary action. Such behavior impedes students’ ability to learn or an instructor’s ability to teach. Disruptive behavior may include but is not limited to non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor’s expectations for classroom conduct.

For more information, please see the FAU Office of Student Conduct.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU’s Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to

<http://www.fau.edu/counseling/>

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU’s campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility.

Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

Drops/Withdrawals

You are responsible for completing the process of dropping or withdrawing from a course. Please click on the following link for more information on dropping and/or withdrawing from a course. Please consult the [FAU Registrar Office](#) for more information.

FREE MATH TUTORING

The MLC provides the following FREE tutoring for all FAU students in their math courses:

- ONLINE: Please see <https://www.fau.edu/mlc/remote/> for available days/times and links to online tutoring. All tutoring is drop-in (no appointments are needed) and is available via Zoom.
- IN PERSON:
 - Drop-in tutoring in the MLC GS211 during all hours of operation
 - Monday – Thursday: 10am – 5pm
 - Friday: 10am – 4pm
 - Small group tutoring by appointment is available (check the MLC webpage for instructions)

Please go to <https://www.fau.edu/mlc/> for more information OR email mlc@fau.edu should you need further information or have questions.

Weekly Pacing Guide

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						7-Jan Class Starts
Week 1	9-Jan 1.1	10-Jan	11-Jan 1.1/1.2	12-Jan	13-Jan 1.2	
Week 2	16-Jan NO CLASS	17-Jan	18-Jan 1.3/1.4	19-Jan	20-Jan 1.3/1.4	
Week 3	23-Jan Review 1.1-1.4	24-Jan	25-Jan Worksheet 1	26-Jan	27-Jan 2.1	
Week 4	30-Jan 2.1	31-Jan	1-Feb 2.2	2-Feb	3-Feb 2.2	
Week 5	6-Feb Exam 1 Review	7-Feb	8-Feb Worksheet 2	9-Feb	10-Feb Exam 1 [1.1-2.2]	
Week 6	13-Feb 2.3	14-Feb	15-Feb 2.3	16-Feb	17-Feb 2.4	
Week 7	20-Feb 2.4	21-Feb	22-Feb 2.5	23-Feb	24-Feb 2.5	
Week 8	27-Feb Exam 2 Review	28-Feb	1-Mar Worksheet 3	2-Mar	3-Mar Exam 2 [2.3-2.5]	4-Mar Sp Break
Week 9	6-Mar Sp Break-No Class	7-Mar Sp Break-No Class	8-Mar Sp Break-No Class	9-Mar Sp Break-No Class	10-Mar Sp Break-No Class	
Week 10	13-Mar 2.6	14-Mar	15-Mar 2.6	16-Mar	17-Mar 2.7	
Week 11	20-Mar 2.7	21-Mar	22-Mar 2.8	23-Mar	24-Mar 2.8	
Week 12	27-Mar Exam 3 Review	28-Mar	29-Mar Worksheet 4	30-Mar	31-Mar Exam 3 [2.6-2.8]	
Week 13	3-Apr 3.1	4-Apr	5-Apr 3.1	6-Apr	7-Apr 3.2	
Week 14	10-Apr 3.2	11-Apr	12-Apr 3.3/3.4	13-Apr	14-Apr 3.3/3.4	
Week 15	17-Apr Exam 4 Review	18-Apr	19-Apr Worksheet 5	20-Apr	21-Apr Exam 4 [3.1-3.4]	
Week 16	24-Apr Final Review	25-Apr Reading Day	26-Apr Reading Day	27-Apr Finals Begin	28-Apr	29-Apr Final Exam

The due dates of all homework are available on Canvas.

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The instructor reserves the right to adjust this syllabus as necessary