

 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Graduate Programs		UGPC Approval _____ UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department Mathematical Sciences College Science		
Current Course Prefix and Number MAA 5228		Current Course Title Introductory Analysis 1	
Syllabus must be attached for ANY changes to current course details. See Guidelines . Please consult and list departments that may be affected by the changes; attach documentation.			
Change title to: Change prefix From: To: Change course number From: To: Change credits* From: To: Change grading From: To: *Review Provost Memorandum		Change description to: Change prerequisites/minimum grades to: MAS 3156 with minimum grade of C or permission of instructor Change corequisites to: Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade.	
Effective Date (TERM & YEAR) Fall 2024		Terminate course List final active term	
Faculty Contact/Email/Phone Jason Mireles-James, jmirelesjames@fau.edu			
Approved by Department Chair _____ College Curriculum Chair _____ College Dean _____ UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____		Date 12/7/2023 _____ 1/17/2024 _____ 1/17/2024 _____ 01/28/2024 _____ 01/28/2024 _____ _____ _____	

Email this form and syllabus to UGPC@fau.edu one week before the UGPC meeting.



FLORIDA ATLANTIC UNIVERSITY

MAA 5228-001 10701

Introductory Analysis 1

Monday, Wednesday, Friday 9:30 AM - 10:50 AM

3 Credit(s)

Fall 2023 - 1 Full Term

Instructor Information

Jason Mireles-James

Email: jmirelesjames@fau.edu

Office: SE 262

Office Hours: Friday 2pm - 3pm

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TA Name: Russell Peel

Office: MLC

Office Hours: Monday and Friday 11pm - noon

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Course Description

Introductory Analysis 1

Prerequisites: MAS 3156 with grade of "C" or better or permission of instructor

Metric space topology, uniform convergence, Arzela-Ascoli theorem, differentiation and integration of single variable functions, power series, Stone-Weierstrass Theorem, measure theory, Lebesgue integral, convergence theorems for the Lebesgue integral, absolute continuity, the fundamental theorem of calculus.

Introductory Analysis is a two-course sequence whose main purpose is to teach the basics of analysis in a rigorous and reasonably complete way. In our current setup, Part I can be called Calculus of one

variable done right. Part II covers the basics of Lebesgue integration. Together with the Introductory Algebra sequence it is supposed to prepare students for more advanced courses in mathematics. In our doctoral program, the qualifying exams are designed (or supposed to be designed) to test your readiness for taking these advanced courses; an immediate consequence of doing well in the Analysis sequence is that you will also do well in the analysis qualifier. Of course, "doing well" does not mean simply getting a good grade, it means having understood the material, being able to prove the theorems, and being able to work most of the exercises on one's own. It may be useful to mention that writing carefully, expressing yourself in coherent sentences in the English language (both in writing and orally), understanding concepts, and proving theorems are essential ingredients of the course.

Prerequisites/Corequisites

Prerequisite(s): One of the following:

- MAS 3156 Graduate / Undergraduate (Minimum Grade of C)
- TRNS (Minimum Grade of 0001)

Instructional Method

In-Person

Traditional concept of in person. Mandatory attendance is at the discretion of the instructor.

Required Texts/Materials

Prin of Mathematical Analysis

ISBN: 9780070542358

Publisher: McGraw-Hill

Edition: 3rd

Course Objectives/Student Learning Outcomes

As described above.

Faculty Rights and Responsibilities

Florida Atlantic University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. To

ensure these rights, faculty members have the prerogative to:

- Establish and implement academic standards.
- Establish and enforce reasonable behavior standards in each class.
- Recommend disciplinary action for students whose behavior may be judged as disruptive under the Student Code of Conduct [University Regulation 4.007](#).

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/.

Course Evaluation Method

There will be regular homework assignments, and midterm exam, and a final exam. Course grades will be based on these. The grading scale is the standard one. That is, A > 89 > B > 79 > C > 69 > D > 59 > F. Homework will make up 60 percent of the course grade, the midterm 15 percent, the final 20 percent, and participation 5 percent.

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](#).

Attendance Policy Statement

Students are expected to attend all 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.

Attending lectures and TA sessions is an important part of the course.

Religious Accommodation Policy Statement

In accordance with the rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs regarding admissions, registration, class attendance, and the scheduling of examinations and work assignments. University Regulation 2.007, Religious Observances, sets forth this policy for FAU and may be accessed on the FAU website at www.fau.edu/regulations.

Any student who feels aggrieved regarding religious accommodations may present a grievance to the director of Equal Opportunity Programs. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

Time Commitment Per Credit Hour

For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of out-of-class student work for each credit hour. Equivalent time and effort are required for Summer Semesters, which usually have a shortened timeframe. Fully Online courses, hybrid, shortened, intensive format courses, and other non-traditional modes of delivery will demonstrate equivalent time and effort.

Course Grading Scale

Letter Grade	Letter Grade
A	94 - 100%
A-	90 - 93%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%

Letter Grade	Letter Grade
C+	77 - 79%
C	73 - 76%
C-	70 - 72%
D+	67 - 69%
D	63 - 66%
D-	60 - 62%
F	Below 60

Grade Appeal Process

You may request a review of the final course grade when you believe that one of the following conditions apply:

- There was a computational or recording error in the grading.
- The grading process used non-academic criteria.
- There was a gross violation of the instructor's own grading system.

[University Regulation 4.002](#) of the University Regulations contains information on the grade appeals process

Policy on Make-up Tests, Late work, and Incompletes

Policy on Makeup Tests: Makeup tests will be allowed for justified absences. They include representing FAU at Sports or other events, medical emergencies.

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.

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/>

Student Support Services and Online Resources

- [Center for Learning and Student Success \(CLASS\)](#)
- [Counseling and Psychological Services \(CAPS\)](#)
- [FAU Libraries](#)
- [Math Learning Center](#)
- [Office of Information Technology Helpdesk](#)
- [Office of International Programs and Study Abroad](#)
- [Office of Undergraduate Research and Inquiry \(OURI\)](#)
- [Science Learning Center](#)
- [Speaking Center](#)
- [Student Accessibility Services](#)
- [Student Athlete Success Center \(SASC\)](#)
- [Testing and Certification](#)
- [Test Preparation](#)
- [University Academic Advising Services](#)
- [University Center for Excellence in Writing \(UCEW\)](#)
- [Writing Across the Curriculum \(WAC\)](#)

Course Topical Outline

Week 8/22-8/26 8/29-9/2 9/7-9/9 9/12-9/16 9/19-9/23 9/26-9/30 10/3-10/7 TopicChapter 1, Sections 1-4.Chapter 2, Section 1.Chapter 2, Section 2.Chapter 2, Section 3.Exam 1 on Tuesday; Chapter 2

Section 4 on Thursday. Chapter 2, Section 5. Chapter 3, Section 1

10/10-10/14 10/17-10/21 10/24-10/28 10/31-11/4 11/7-11/11 11/14-11/18 11/21-11/25 11/28-12/2

12/14 Chapter 3, Section 2 Chapter 3, Section 3 Exam 2 on Tuesday; Chapter 4, Section 1 on
Thursday. Chapter 4, Section 2 Chapter 4, Section 3 Chapter 4, Section 4 Chapter 4, Section 5 Chapter
4. Section 6 Final exam