

This is a sample syllabus for MAC2312. Students should reference the section syllabus provided at the beginning of the semester for specifics regarding assignments and grade assignments.

Calculus with Analytic Geometry II

MAC 2312
Traditional Delivery Method
Department of Mathematics, Florida State University

Class time and location

TBA

Instructor

- Instructor: TBA
- Email:
- Office:
- Office Hours:

Teaching Assistants

TBA

Class Home Page

Course Website:

The canvas course website contains all information related to this class including slides, assignments, additional informational handed outs, and links to some useful resources. It will also be used to submit assignments, review your grades, and get course announcements.

Credit Hours

4 hours

Eligibility

You must have the course prerequisites listed below and must never have completed with a grade of C- or better any course for which MAC 2312 is a prerequisite. Students with prior credit in college calculus may be required to reduce credit for MAC 2312 accordingly. It is the student's responsibility to check and prove eligibility.

Prerequisites

You must have passed MAC 2311 (Calculus 1) with a grade of C- or better, or have appropriate college credit.

Liberal Studies

This course has been approved as meeting the Liberal Studies requirements and thus is designed to help you become a critical analyzer of quantitative and logical claims. In order to fulfill the State of Florida's College mathematics and computation requirement the student must earn a C- or better in the course.

Course Description

This course covers techniques of integration; applications of integration; series and Taylor series; differential equations. This course must be taken for reduced credit by students with prior credit for some of the content.

Course Objectives

The purpose of this course is to further explore the methods of calculus and selected applications to real-world problems. The material in this course should be mastered before the student proceeds to courses for which it is a prerequisite.

Students will develop their ability to analyze problems mathematically, assign variables, identify appropriate functions, and apply proper tools to find a solution. Students will also improve their ability to describe problems and solutions using proper vocabulary. Students will demonstrate mastery through discussions, activities, presentations, and performance on homework assignments and tests.

In particular, through Calculus 2, students will...

- calculate integrals using antiderivatives and numerical methods;
- use the integral to calculate volumes, areas, and arclengths;
- test the convergence of sequences and series;
- approximate functions using power series;
- model real-world phenomena using differential equations;
- work alone and with classmates to create well written solutions;
- discuss and explain course material to their peers.

Textbook and Course Materials

- **Textbook:** Calculus (as of Fall 2021): Calculus, by Hughes-Hallett, et. al., 8th edition, Wiley.
- **Course Content:** Chapters 7,9,10,11 of the text, and part of Chapter 8.
- **The course will use WileyPLUS or Wiley's KnewtonALTA online homework system.**

All additional course materials will be delivered through the class Canvas site. Note: the textbook is subject to change.

Course Schedule

This is a tentative schedule.

- Weeks 1-5 Methods of Integration (Ch 7)
- Weeks 6-7: Using the Definite Integral (Ch 8)
- Weeks 8-10: Sequences and Series (Ch 9)

- Weeks 11-12: Taylor Series (Ch 10)
- Weeks 13-15: Differential Equations (Ch 11)
- Final exam week: Final Exam

Student Responsibilities

In case that it is necessary to skip a class, a student is required to notify the instructor beforehand; the absence is excused if it is allowed by the University Attendance Policy (see below). In both excused and unexcused cases, the students are responsible for making up missed materials. All submitted assignments must be done by the author(s). It is a violation of the Academic Honor Code (see below) to submit other's work and the instructor of this course takes the violations very seriously.

University Attendance Policy

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Grading Policy

There will be four unit tests, occasional short quizzes, and a final exam. Tests, quizzes, homework, and the final exam may be multiple choice, short answer, long form written solutions, essays, or a combination of these as announced by the instructor.

Homework assignments will be given in an online system such as WileyPLUS. There will also be in-class poster sessions assigned, and some non-online homework. Students must bring FSU ID cards to all tests.

Numerical course grades will be determined according to the formula $.5U+.05Q+.25F+.1P+.1W$ where U = unit test average, Q = quiz and non-online assignment average, F = final exam grade, P = poster session grade, W = online homework grade. Letter grades will be determined from numerical grades as follows: A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: 0-59. Plus or minus grades may be assigned. A grade of I will not be given to avoid a grade of F or to give additional study time. Failure to process a course drop will result in a course grade of F.

Missed Assignments Policy

All unexcused late or missing work, including exams, will receive a score of zero.

Policy on Responding to Students

Email responses typically within 24 to 48 hours. Graded assignments typically returned within two weeks after due date.

Academic Honor Policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "... be honest and truthful and ... [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>)

Examples of violations of the Academic Honor Policy are given in its document (found at <http://fda.fsu.edu/content/download/21140/136629/AHPFinal2014.pdf>). It is a violation to assist another person in violating the Academic Honor Policy.

Academic Success

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Dean of Students office to learn more.

Free Tutoring from FSU (Tallahassee Campus)

On-campus tutoring and writing assistance are available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services' comprehensive list of on-campus tutoring options - see the Academic Center for Excellence (ACE) Tutoring Services' website (<https://ace.fsu.edu/tutoring>) or contact tutor@fsu.edu. High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

Free Tutoring from FSU (Panama City Campus)

The PC campus provides both in-person and remote tutoring. In-person tutoring is available at the Robbins Center for Academic Excellence and Innovation in the Holley Building (which also houses the Digital Design Studio). Remote tutoring will be available through Zoom. To inquire about tutoring options for the PC campus, please visit the [Peer Tutoring website \(https://pc.fsu.edu/students/academic-advising-student-success-center/peer_tutoring\)](https://pc.fsu.edu/students/academic-advising-student-success-center/peer_tutoring) or contact an academic advisor in the Advising Center in the Holley Building to discover your options.

Americans With Disabilities Act

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course.

To receive academic accommodations, a student:

- (1) must register with and provide documentation to the Office of Accessibility Services (OAS);
- (2) must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and,
- (3) should communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the

Office of Accessibility Services (Tallahassee Campus)

874 Traditions Way

108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

(850) 644-9566 (voice)

(850) 644-8504 (TDD)

oas@fsu.edu

<https://dsst.fsu.edu/oas>

Student Disability Services (Panama City Campus)

Office of Student Affairs

4750 Collegiate Drive

2nd Floor Barron Building (Room 215)

Florida State University Panama City

Panama City, FL 32405

(850) 770-2172 (office)

(866) 693-7872 (toll free)

Email: sds@pc.fsu.edu

<https://pc.fsu.edu/students/student-affairs/sas>

Free Counseling Services

Counseling services are available remotely and on-campus during the pandemic (with CDC guidelines in place). These services are at no cost for FSU Panama City students in order to help students with a variety of issues including time management, stress, depression, and anxiety. To inquire about counseling services or to schedule free and confidential counseling services, students can call (850) 770-2174 (office) or (850) 739-0591 (cell) or Toll Free: (866) 693-7872 (ext. 2174) to make an appointment. If a counselor is unavailable, leave a phone number or e-mail address and you will be contacted as soon as possible. Appointments may also be made by emailing Kathleen Duval, LCSW at krduval@fsu.edu. Again, these services are free and confidential for FSU students. Additional information regarding FSU PC counseling services is available at the FSU PC counseling services website: <https://pc.fsu.edu/students/student-affairs/counseling-services>

Student Resilience Project

The Student Resilience Project is a web-based, research-informed toolkit developed to encourage students' wellness by helping them learn to manage stress in healthy ways and increase their sense of belonging. The website features videos, skill-building activities, resources and information, including podcasts by campus experts and is located here: <https://strong.fsu.edu/>

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

Confidential Campus Resources

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program
University Center A, Rm. 4100
(850) 644-7161
Available 24/7/365
Office Hours: M-F 8-5
<https://dsst.fsu.edu/vap>

Counseling and Psychological Services
Askew Student Life Center, 2nd floor
942 Learning Way
(850) 644-8255
<https://counseling.fsu.edu/>

University Health Services
Health and Wellness Center
(850) 644-6230
<https://uhs.fsu.edu/>

SAMPLE