

Analytic Geometry and Calculus II Syllabus

MAC2312, Summer 2019, June 24 - July 26

Course & Faculty Information

Lecturer: TBA

E-mail: TBA

Time: Monday through Friday (3 contact hours each day)

Contact hour: 75 hours

Credit: 5

Office hours: By Appointment

Course Description

This course selected topics include conics, translation and rotation of axes, techniques of integration, arc length and other applications of the definite integral, polar coordinates, indeterminate forms and improper integrals, infinite sequences and series and Taylor's Formula.

Notes: I will prepare a set of guided notes for each section to be used during lecture.

Textbook Information

Calculus, 10th Edition, Ron Larson. ISBN: 1285057090

Notes: I will prepare a set of guided notes for each section to be used during lecture.

Classroom Policies:

Students should demonstrate respect for the instructor and fellow students at all times. This includes arriving to class on time, being prepared for class, having all required materials, silencing all cell phones, and avoiding idle chatter during class time. You are not allowed to use your cell phone in class for any reason (even as a calculator!). If you have special circumstances and you need to check your phone, please inform the instructor. I reserve the right to give a pop quiz if I notice students using their cell phones or chatting in class.

Grading Scale:

Quizzes & In-Class Assignments	15%
Attendance	5%

Exams	50%
Final Exam	30%

Letter Grades will be assigned as follows:

<u>Percent Score in the Class</u>	<u>Letter Grade</u>
90% - 100%	A
80% - 89%	B
70 - 79%	C
60 - 60%	D
< 60%	F

Borderline grades will be determined by a student's score on the final exam.

Assessments:

- **Quizzes:** A short quiz will be given daily to record attendance and to ensure that students are keeping up with the assigned homework. These daily quizzes will be based on the homework assigned from the previous class. *Two quiz scores will be dropped at the end of the summer term.*
- **In-Class Assignments:** Graded review assignments will be given on Fridays where an exam is not given. These assignments are meant to prepare students for the next exam and will count as quiz grades.
- **Exams:** There will be three exams, Exam #1 (7/6), Exam #2 (7/20), and a cumulative final exam (7/27)
- **Homework:** Homework from the textbook will be assigned for each lecture. Students are expected to complete each homework assignment and are encouraged to work together on these assignments. The homework itself will not be graded, but problems from the homework assignment will be given on the daily quizzes.

Summer 2019 Class Schedule

Week 1

- Mon** 5.6 Inverse Trigonometric Functions: Differentiation
Tue 5.7 Inverse Trigonometric Functions: Integration
Wed 5.8 Hyperbolic Functions
Thur 7.1-7.2 Area of a Region Between Two Curves and Volume: The Disk Method
Fri Review & In-Class Assignment

Week 2

- Mon** 7.2, 7.4 Volume: The Disk Method and Arc Length and Surfaces of Revolution
Tue 7.5, 8.1 Work and Basic Integration Rules

Wed 8.1, 8.2 Basic Integration Rules and Integration by Parts
Thur 8.3 Trigonometric Integrals
Fri **EXAM #1 (5.6 – 5.8, 7.1 – 7.2, 7.4 – 7.5, 8.1 – 8.2)**

Week 3

Mon 8.5 Partial Fractions
Tue 8.4 Trigonometric Substitution
Wed 8.7-8.8 Indeterminate Forms and L'Hopital's Rule and Improper Integrals
Thur 8.8, 10.1 Improper Integrals and Conics and Calculus
Fri Review & In-Class Assignment

Week 4

Mon 10.2-10.3 Plane Curves and Parametric Equations and Parametric Equations and Calculus
Tue 10.4-10.5 Polar Coordinates and Polar Graphs and Area and Arc Length in Polar Coordinates
Wed 9.1&9.2 Sequences and Series and Convergence
Thur 9.3-9.5 The Integral Test and p-Series, Comparisons of Series and Alternating Series
Fri **EXAM #2 (8.3 – 8.8, 10.1 – 10.5, 9.1 – 9.2)**

Week 5

Mon 9.6, 9.8 The Ratio and Root Tests and Power Series
Tue 9.8-9.9 Power Series and Representation of Functions by Power Series
Wed 9.7 Taylor Polynomials and Approximations
Thur Review
Fri **FINAL EXAM (Comprehensive)**

Academic Integrity

As members of the Seminole State College of Florida community, students are expected to be honest in all of their academic coursework and activities.

Academic dishonesty, such as cheating of any kind on examinations, course assignments or projects, plagiarism, misrepresentation and the unauthorized possession of examinations or other course-related materials, is prohibited.

Plagiarism is unacceptable to the college community. Academic work that is submitted by students is assumed to be the result of their own thought, research or self-expression. When students borrow ideas, wording or organization from another source, they are expected to acknowledge that fact in an appropriate manner. Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass-off such work as the student's own. Any student who fails to give full credit for ideas or materials taken from another has plagiarized.

Students who share their work for the purpose of cheating on class assignments or tests are subject

to the same penalties as the student who commits the act of cheating.

When cheating or plagiarism has occurred, instructors may take academic action that ranges from denial of credit for the assignment or a grade of "F" on a specific assignment, examination or project, to the assignment of a grade of "F" for the course. Students may also be subject to further sanctions imposed by the judicial officer, such as disciplinary probation, suspension or dismissal from the College.