Florida Gulf Coast University Calculus II - MAC 2312 Spring 2019 - CRN11664

Course Time and Place: T,TR 9:30-11:15pm, Merwin 124

Professor: Dr. Peng Feng

Office: Seidler 205
Email: pfeng@fgcu.edu

Office Hours: T, TR 1:30-3:00pm and by appointment

General Course Information and Textbook:

A continuation of MAC 2311, topics in this course include: The definition of definite integral and applications such as area between curves, volumes and work. Techniques of integration such as integration by parts, substitution. More advanced applications of integration such as first-order differential equations, arc length, area of a surface and applications in biology and economics. Infinite sequences and series. This course will emphasize conceptual understanding and modeling of physical phenomena, and will use computer technology as an aid to the modeling process. *Textbook: Calculus: Early Transcendentals*, 8E by Stewart, Brooks/Cole.

Webassign course code: fgcu 6382 9501

Goals:

- To serve as a continuation of Calculus I.
- To set up students' background in Calculus so that they can pursue higher level courses in mathematics such as differential equations.
- To illustrate several of the many fundamental roles played by Calculus in mathematics.

Learning Outcomes:

Homework, class quizzes and tests, and a final exam will be used to assess the Student Learning Outcomes. Students will be able to:

- Effectively write mathematical solutions in a clear and concise manner.
- Locate and use information to solve calculus problems.
- Demonstrate ability to think critically by recognizing patterns and determining and using appropriate techniques for solving a variety of integration problems.
- Demonstrate the ability to think critically by setting up and solving area and volume application problems.

- Work effectively with others to complete homework and class assignments. This
 will be assessed through graded homework assignments and class projects and/or
 discussions.
- Demonstrate the ability to integrate knowledge and ideas of definite and indefinite integrals in a coherent and meaningful manner and use appropriate techniques for solving such problems.
- Demonstrate an intuitive and computational understanding for integral applications by solving a variety of problems from physics, engineering and mathematics
- Demonstrate ability to think critically by demonstrating an understanding for infinite series and their use for approximation.

Suggestions for the Students:

The student should read all new topics before they are discussed in class and complete the homework assignments on time. The professor will devote a portion of classroom activities to the solution of any "troublesome" exercises. The student is expected to spend between 6 and 9 hours per week on reading the text, reviewing and/or rewriting notes, solving problems - in general, STUDYING! Calculators and computers may be used to solve problems.

Students are strongly encouraged to participate in classroom discussions and to be prepared to demonstrate the solutions to assigned homework problems at the 'blackboard'.

Grades:

- Grades will be assigned on the basis of 440 points distributed as follows: 2 Exams (100 each), 1 Final (120) and 7 online Homeworks (20 pts each, lowest one dropped)
 - Percentage Range for Letter Grades:

93	-	100	=	A
90	-	92	=	A-
87	-	89	=	B+
80	-	86	=	В
77	-	79	=	B-
74	-	76	=	C+
67	-	73	=	C
64	-	66	=	C-
60	-	63	=	D
0	-	59	=	F

Attendance:

Students are expected to attend all class periods. There are no "allowable cuts". Students should recognize the very important sequential nature of this course, and that each absence tends to create a learning gap which can be very difficult to bridge. An absence

in a four hour course that meets twice a week can have a disastrous effect on the student's progress and understanding in the course.

Academic Behavior Standards and Academic Dishonesty

All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of honesty can be found in the FGCU Student Guidebook under the *Student Code of Conduct* and *Policies and Procedures* sections. All students are expected to study this document which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at http://studentservices.fgcu.edu/StudentConduct/index.html

Disability Accommodations Services

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university's guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please see me or contact the Office of Adaptive Services. The Office of Adaptive Services is located in the Wellness Building. The phone number is 239-590-7956 or Video Phone (VP) 239-243-9453. In addition to classroom and campus accommodations, individuals with disabilities are encouraged to create their personal emergency evacuation plan and FGCU is committed to providing information on emergency notification procedures. You can find information on the emergency exits and Areas of Rescue Assistance for each building, as well as other emergency preparedness materials on the Environmental Health and Safety and University Police Department websites. If you will need assistance in the event of an emergency due to a disability, please contact Adaptive Services for available services and information.

Student Observance of Religious Holidays

All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs. Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.

University Nondiscrimination Statement

Florida Gulf Coast University is committed to ensuring equity and fairness for all University employees, students, visitors, vendors, contractors and other third parties. As such, the University prohibits discrimination on the bases of race, color, national origin,

ethnicity, religion, age, disability, sex (including sexual harassment/assault), gender identity/expression, marital status, sexual orientation, veteran status or genetic predisposition with regard to admissions, employment, programs or other activities operated by the University. This prohibition extends to enforcement of Title IX of the Education Amendments of 1972. Questions or complaints should be directed to the Office of Institutional Equity and Compliance (OIEC). The OIEC's phone number is (239)745-4366; the OIEC email address is OIEC@fgcu.edu.

"As of Fall 2015, all faculty members are required to use Canvas to confirm a student's attendance for each course by the end of the first week of classes. Failure to do so will result in a delay in the disbursement of your financial aid. The confirmation of attendance is required for all students, not only those receiving financial aid."

Incompletes (I):

Incompletes will be given only for extreme emergency conditions and must be approved by the professor before the final examination begins. The student must be doing passing work at the time the request is made, and must reasonably expect to complete the work within three weeks after the close of the semester.

Make-Up Exam:

Make-up exams will be extremely difficult. There is no make-up for the final.

Important Dates:

For important dates, please see:

https://www.fgcu.edu/academics/academiccalendar/terminfo.aspx?termid=80

Tutoring:

For tutoring hours, please see http://www.fgcu.edu/CAS/Math/tutoring.html

Tentative Schedule:

Chapter 6, Chapter 7, Chapter 8(8.1-8.3), Chapter 11, Chapter 10(10.1-10.4)

Some Important Dates:

- (a) Monday, January 7th Classes Begin
- (b) Friday, January 11th Last Day to Drop/Withdraw via Guline (100% Refund)
- (c) Monday, January 21 M.L.K Observed (no classes)
- (d) Monday, March 3rd-9th, Spring Break
- (e) Friday, March 29 Last Day to Drop/Withdraw without Academic Penalty
- (f) Thursday, April 25th Last Day of class
- (g) Friday, April 26th Study Day (no classes)
- (h) Saturday, April 27th—Final Begins