

Fayetteville State University
College of Arts and Science
Department of Mathematics and Computer Science
MATH 242 – 01 Calculus with Analytic Geometry
FALL 2010

I. Locator Information:

Instructor: Dr. Mohammad Siddique

Course # and Name: MATH 242 – 01 Calculus with Analytic Geometry

Office Location: LS Building 307

Semester Credit Hours: 4

Office hours: MF 8:45 am- 9:45 am, MW 1: 00 pm – 2:30 pm,

TR 9:00 am – 10:30 am or by **Appointment**

.Day and Time Class Meets: MWF 11:00 – 12:15 am,

Class Location: SBE 211

Office Phone: (910) - 672 2436

Total Contact Hours for Class: 4

Email address: msiddiqu@uncfsu.edu

FSU Policy on Electronic Mail: Fayetteville State University provides to each student, free of charge, an electronic mail account (username@uncfsu.edu) that is easily accessible via the Internet. The university has established FSU email as the primary mode of correspondence between university officials and enrolled students. Inquiries and requests from students pertaining to academic records, grades, bills, financial aid, and other matters of a confidential nature must be submitted via FSU email. Inquiries or requests from personal email accounts are not assured a response. The university maintains open-use computer laboratories throughout the campus that can be used to access electronic mail.

Rules and regulations governing the use of FSU email may be found at

<http://www.uncfsu.edu/PDFs/EmailPolicyFinal.pdf>

II. Course Description: The third course of a three-semester sequence in calculus with analytic geometry, including studies of multivariable calculus with applications, vectors and vector functions in two and three dimensions; functions of several variables; differentiation; integration; vector calculus. Prerequisites: MATH 241.

III. Disabled Student Services: In accordance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act (ACA) of 1990, if you have a disability or think you have a disability to please contact the Center for Personal Development in the Spaulding Building, Room 155 (1st Floor); 910-672-1203.

III. TEXTBOOK: James Stewart, Calculus Concepts and contexts, Thomson Brooks Cole Company, 4th edition

V. Student Learning Outcomes – This course provides necessary background in calculus for students in mathematics computer science, engineering, physics, chemistry, and other sciences. After the completion of this course, students will have a working knowledge of the basic concepts in calculus described in III and be able to solve practical problems.

VI. Course Requirements and Evaluation Criteria

COURSE REQUIREMENTS

1. Students are expected to attend all class sessions. Excessive absences may result in a reduction of your final grade.

2. Students are expected to enter the class room on time, and remain for the full class period. Students should not make other appointments in conflict with their class schedule. Three late arrivals and early departures will constitute an absence from the class.

3. All tests will be announced prior to their administration. A make-up exam will be given only if the student has a documented and valid written justification for unavoidable absence from the exam. There is no more than one make-up exam for each student during the semester. Each student is required to attend the departmental colloquium at least three times during the semester as part of the project.

4. The Instructor's office hours are times when you may seek assistance without prior appointment. You are encouraged to seek help as needed.

5. Students must refrain from smoking, eating and drinking in the classroom. The rights of others must be respected at all times.

6. Students are encouraged to ask questions of the instructor in class and to respond to those posed by the instructor. They should not discourage others from asking or answering questions.

7. Students are expected to complete all class assignments, to spend adequate time on their class work, and to read each topic prior to class discussion to insure that the course outcomes are met. At least two hours of home study is expected for each class.

8. Talking in class between students is strictly prohibited. Discussions should be directed to the instructor. Unacceptable behavior in the class will result in a reduction of your final grade.

9. Dishonesty on graded assignments will not be tolerated. Students must neither give nor receive help on any work to be graded. The university policy on cheating will be applied to any violations. The minimum penalty will be a grade of zero on the assignment.

EVALUATION CRITERIA

There will be chapter tests, quizzes/homework and a comprehensive final exam. The grading scale and weights given to various activities for determining the course grade are given below.

- * Four tests will count as 60% of your overall grade (the lowest test will be dropped).
- * Quizzes/Homework will count as 15% .
- * The final examination will count as 25%.

To see how your grade will be calculated, suppose your test scores are 91, 72, 84, 90, and 83, your homework average is 90, and you score an 85 on the final exam. Since the lowest test grade is dropped your grade would be calculated as follows:

$$0.6 \times [(91 + 84 + 90 + 83) / 4] + (0.15 \times 90) + (0.25 \times 85) = \mathbf{76.95}$$

Since 77 is between 70 and 79, you would receive a grade of C.

A	90 -100%	Tests	60%
B	80 - 89%	Quizzes/Homework	15%
C	70 - 79%	Final Exam	25%
D	60 - 69%		
F	below 60%		

VII. Academic Support Resources – one-on-one tutoring is available at University College Learning Center (HTC 216 –C) <http://www.uncfsu.edu/learningcenter/math/>. University College Learning Center is open 8:00 a.m. to 8:00 p.m. Monday through Thursday and 8:00 a.m. to 5 p.m. on Friday. Also 24/7 Academic Assistance program “**Smarthinking**” is available to all FSU students; access through <http://blackboard.uncfsu.edu>. Extra help or tutoring, provided by a graduate assistant may be available through the department of Mathematics and Computer Science. Please see Ms. Briggs at SBE 339 (Tel. 910-672-1294) for detail information.

VIII. COURSE OUTLINE

**The instructor may modify this schedule as needed to best meet the course objectives and student needs.*

Week 1: 9.1, 9.2	Week 8: 12.1, Test #2
Week 2: 9.3, 9.4,	Week 9: 12.2, 12.3,
Week 3: 9.5, 9.6, 9.7,	Week 10: 12.4, 12.5,
Week 4: 10.1, Test 1#	Week 11: 12.6, 12.7, 12.8,
Week 5: 10.2, 10.3, 10.4, 10.5,	Week 12: 13.1, 13.2, Test #3
Week 6: 11.1, 11.3, 11.4,	Week 13: 13.3, 13.4, 13.5,
Week 7: 11.5, 11.6, 11.7,	Week 14: 13.6, 13.7, 13.8,
	Week 15: Test #4

Comprehensive Final Examination

IX. TEACHING STRATEGIES

The majority of the material of the course will be given in lecture format. There is a short review before and after each lecture. There will be a comprehensive review after the completion of each chapter. Power point, Graphing Calculator and Maple will be used in the class to help students develop a firm grasp of the underlying mathematical concepts.

IX. Bibliography

- Anton B. Davis, Calculus, John Wiley & Sons, Inc. New York, 2002 (7th ed.).
- Earl W. Stokowski, Calculus with Analytic Geometry, PWS-Kent Publishing company, 1994 (6th ed.).
- C. H. Edwards and D. J. Foulis, Calculus with Analytic Geometry, Worth Publishers Inc., New Jersey, 1997 (5th ed.).
- Denis D. Berkey and Paul Blanchard, Calculus of One Variable, Harcourt Barce College Publishers, 1997 (3rd ed.).
- S. I. Grossman and R. B. Lane, Calculus, Saunder College Pub. 1997 (5th ed.).
- 6. G. B. Thomas and R. L. Finney, Calculus with Analytic Geometry, Addison-Wesley Pub., 1996 (9th ed.).