Calculus III: MATH 211
PPHAC 117, MWF 11:45 AM - 12:55 PM
Spring 2016

Instructor: Dr. Shannon Talbott
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Office Hours:
Tuesday 2:00 - 4:00 PM; Wednesday 1:30 - 2:30 PM; Friday 9:00 - 10:00 AM; and by appointment

Text: *Vector Calculus, Fourth Edition,* by Susan Colley.
Other materials: In addition, we will use the computer algebra system (CAS) *Sage*. This syllabus as well as any other handouts for the course can be found in our class Google Drive folder "Calculus III".

Course Goals:

In Calculus I and Calculus II, you learned how to analyze changing quantities via techniques of differentiation and integration of functions of one variable. However, our natural world and changing quantities therein are complex entities for which a function of one variable is not sufficient. In this course, we will explore the calculus of functions of several variables as well as geometry in higher dimensions. Students will become familiar with important concepts such as vectors, functions of several variables, coordinate systems beyond the familiar Cartesian coordinates, partial derivatives and line-integrals Specific course goals are to:

- visualize and solve geometric problems using vector analysis

- conceptually understand higher dimensional calculus

- use computational techniques to solve problems in higher dimensional calculus

- appropriately and effectively use a computer algebra system to solve problems

Grading System:

Homework/Quizzes
For each section of material, there will be homework assigned. It is vital that you do all of the homework problems assigned; you should keep all of your work in a notebook or binder for reference. For every hour in class, you should expect to spend 2-3 hours doing work outside of class. You cannot learn math without lots of practice! Approximately every week, we will have either a collected homework assignment or an in class quiz that will be based on the homework. Therefore, the best way to do well on the quizzes is to do all of the assigned homework. There will be no make up quizzes given and no late homework will be accepted. Due to this, the lowest quiz/homework score will be dropped at the end of the semester. Extenuating circumstances will be taken into consideration (with appropriate documentation).

Exams
We will have three in class exams and a final exam. If you will miss an exam (with an approved excuse), you must notify me PRIOR TO the exam. You will then be given a suitable (corresponding to the time beyond the exam date) but more difficult exam. Extenuating circumstances will be taken into account (with appropriate documentation).

Your final exam is Tuesday, May 3, 3:00 - 5:00 PM and will be comprehensive.

<u>Attendance</u>
Regular class attendance is expected of all students. You are responsible for all material assigned or covered in class. If you do miss a class for any reason, it is your responsibility to keep up with the class. You should see a classmate for notes, homework assignments, and any announcements from class. There will be no make-up quizzes given and late homework will not be accepted. Extenuating circumstances will be considered.

Your final grade is based on the following distribution:

Quizzes/Homework	20%
Exam I:	20%
Exam II:	20%
Exam III:	20%
Final Exam:	20%

Course grades will be determined by the following scale:

93-100 : A	80-82 : B-	67-69 : D+
90-92 : A-	77-79 : C+	63-66 : D
87-89 : B+	73-76 : C	60-62 : D-
83-86 : B	70-72 : C-	<60 : F

The exam schedule will be as follows, although slight changes may be made:

Exam I: Monday, February 15
Exam II: Monday, March 21
Exam III: Friday, April 15
Final Exam: Tuesday, May 3, 3:00 - 5:00 PM

Course Policies:

Final Exam: Your final exam is on Tuesday, May 3, 3:00 - 5:00 PM and will be comprehensive. A make-up final exam will not be administered to accommodate any travel plans.

Participation in class discussions: Class participation enhances your learning experience. Students who attend class regularly, participate in discussions, and are in between grades at the end of the semester may receive the higher of the two grades.

Other Expectations of Student Performance/Behavior:
Please turn off your cell phone at the beginning of class. Be considerate of your classmates and keep private discussions during class to a minimum. Please check your email for any announcements regarding this class. If you wish to email me, please use your Moravian email accounts only as I frequently delete spam.

This syllabus is subject to change. Any changes will be announced in class.

Mathematics Department Academic Honesty Policy: The Mathematics Department supports and is governed by the Academic Honesty Policy of Moravian College as stated in the Moravian College Student Handbook. The following statements will help clarify the policies of the Mathematics Department faculty.

Learning Disability Accommodations and Tutoring: Students who wish to request accommodations in this class for a disability should contact the Academic Support Center, at the lower level of Monocacy Hall, or by calling 610-861-1401. Accommodations cannot be provided until authorization is received from the Academic Support Center.

The Writing Center is located in a building that is not accessible to persons with mobility impairments. If you need the services of the Writing Center please call 610-861-1392.