SYLLABUS

Course: Multivariable Calculus, MATH 237-M01, 4 credit hours, Summer 2015

Class Meetings: 8:00-9:35 a.m. MTWRF in COHH 3121, May 18 – July 2 (except May 25)

Instructor: Dr. Mark Robinson

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Office Hours (Tentative): 9:45 – 11:00 a.m. MTWRF or by appointment

Textbook: *Multivariable Calculus*, Tenth Edition, by Larson and Edwards.

Purpose of Course: This course represents the traditional third semester of calculus. Standard material on vector-valued functions, functions of several variables, partial derivatives, multiple integrals, and vector fields is included.

Prerequisite: MATH 137 with a grade of C or better.

Learning Outcomes:

- Interpret information presented in mathematical form.
- Communicate mathematical information symbolically, visually, and/or numerically.
- Know the difference between functions of a single variable and functions of several variables, and be able to distinguish between ordinary derivatives, partial derivatives, and directional derivatives
- Understand multiple integration and line integration, and be able to use them to find areas, volumes, and lengths.
- Understand how to apply appropriate mathematical models to solve real-world problems.

Course Outline: Chapters 11-15 in the text.

Attendance: Regular class attendance is strongly recommended. Attendance will be taken at each class meeting. It is the responsibility of the student to find out what work and announcements were missed during an absence.

Audit Policy: No more than four absences are allowed to receive an audit.

Homework, Classwork, and Quizzes: Homework will be assigned regularly. Assignments will be collected occasionally and selected problems will be graded. Any late assignment will be assessed a lateness penalty (20% off for each day late), except in extreme instances as judged by the instructor. Students will be given extra credit for working problems on the board. In-class exercises may be collected and graded occasionally. Short quizzes may also be given. Some use will be made of the computer software *Mathematica*, but no prior knowledge of *Mathematica* is assumed.

Exams: There will be four examinations, the last of which will be a comprehensive Final Exam. The tentative exam schedule is as follows:

Exam #1 Friday, May 29 Exam #2 Friday, June 12 Exam #3 Friday, June 26 Final Exam Thursday, July 2 Any change in this schedule will be announced in class several days in advance of the affected exam.

Make-Up Policy: Missing an exam is a serious matter. A make-up for a missed exam will be given only in the most extreme instances if there is an acceptable excuse as judged by the instructor; otherwise a zero will be assigned. A make-up for a missed quiz or classwork exercise will be given only if the student has an acceptable excuse.

Grading: The course grade will be determined from the following components:

Homework, Classwork, Quizzes	75 points
Exams #1-3 (100 pts. each)	300 points
Final Exam	125 points
	500 points

The grading scale will be approximately as follows (the final scale may vary somewhat):

90-100% A 80- 89% B 70- 79% C 60- 69% D 0- 59% F

Borderline cases will be given special consideration and factors such as attendance, class participation, improvement, and final mastery of course content (as reflected by the Final Exam) will be taken into account.

Important deadline dates: The last day to drop this class without a grade or to change from audit to credit is Wednesday, May 20. The last day to withdraw from this class with a W or to change from credit to audit is Wednesday, June 10.

Notice: Credit for a course in which a grade of "F" has been received can be earned only by repeating the course in residence unless prior approval is given by the head of the department in which the course was taken.

Student Disability Services: In compliance with university policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center in Downing Student Union, room 1074. The phone number is 270 745-5004/V or 270 745-3030/TDD. Please do not request accommodations directly from the professor or instructor without a letter of accommodation from the Student Accessibility Resource Center.