

MATH 136 – 37097

Section 013

4 credit hours

Honors Calculus I

M W F 11:30 – 12:25

T R 11:10 – 12:05

Spring 2014

COHH 3119

Prerequisite Honors eligible with four years of high school mathematics including Algebra II, geometry, trigonometry, and satisfactory scores on Math Placement Exam and Math Placement Trig Exam; or MATH 117 or MATH 118, with grade of C or better. Or a Gatton Academy student.

Professor: Dr. David K. Neal COHH 4108 745-6213 david.neal@wku.edu
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Office Hrs MW 10:40 – 11:20; T R 1:30 – 2:15; or by appointment

Text The text is not required. Course notes and exercises will be provided in pdf format at <http://people.wku.edu/david.neal/136/>

For additional reference on any topic, use any standard calculus text, such as *Calculus of a Single Variable* (5th Ed.), by Larson and Edwards.

Course Description **MATH 136** is the first of the foundation sequence of courses that apply toward the mathematics major. It also satisfies General Education Category D–II. The course is designed for students majoring or minoring in mathematics and for students studying the physical sciences or engineering. The course covers standard topics of single-variable calculus on limits, differentiation, integration, and their applications. Included are trigonometric, exponential, and logarithmic functions, the Fundamental Theorem of Calculus, and Integration by Substitution.

Gen. Ed. Disclaimer MATH 136 meets five learning objectives as part of the general education requirement for quantitative reasoning, and provides students with the ability to understand and apply mathematical skills and concepts. Further, students will learn to model and solve problems appropriate for the field of study in majors of the sciences.

Learning Objective 1: Interpret information presented in mathematical and/or statistical forms.

Learning Objective 2: Illustrate and communicate mathematical and/or statistical information symbolically, visually and/or numerically.

Learning Objective 3: Determine when computations are needed and execute the appropriate computations.

Learning Objective 4: Apply an appropriate model to the problem to be solved.

Learning Objective 5: Make inferences, evaluate assumptions, and assess limitations in estimation modeling and/or statistical analysis.

- Calculator** A graphing calculator will be needed and the TI-84 is recommended. Students may not use a TI-89 or any calculator with symbolic calculation ability on tests and quizzes.
- Homework** Exercises will be assigned for practice, but these problems will not be graded. Solutions to exercises will be posted on the class web site. There will also be some additional weekly Honors writing assignments. The grades on these assignments will be added to your test grades.

Attendance Policy

This is an Honors class, so you should behave like a real university student and not like a typical university student. In other words, you should never miss class. If you accrue three unexcused absences, then you will automatically receive an F in this course if you do not withdraw on your own.

Tests

Each test will be based on class lectures and assigned exercises. A practice test with solutions will be provided about a week and a half in advance of each test. The tests will be closed-book with no formula sheets allowed. A certain portion of each test may be so that *no calculators are allowed*.

Tentative Test Dates

Test 1: Thurs Feb 13 **Test 2:** Thurs March 6 **Test 3:** Tues April 1
Test 4: Tues Apr 15 **Test 5:** Tues Apr 29
Final Exam: Tuesday May 13 10:30 AM – 12:30 PM.

On test days, the classroom is a testing zone. Do not bring any open notes into the classroom. If you do so, then you will be asked to leave and you will not be given a test. Do not at any time look at or use your cell phone in the classroom. If you do so, then you will be asked to leave and your test will not be graded.

Make-Up Policy

Students are expected to take all tests in class on the days that they are scheduled. No rescheduling will occur. All requests for taking tests at other times will be denied. Your desire to attend another event will not be cause for me to give you a make-up because this class takes priority over all other events scheduled at this time including travel to or from other activities. If you desire to attend another event, then you should cancel, re-schedule, or request to be excused from that event so that you can take your scheduled exam.

Make-ups exams will be given only to students who miss due to a documented physical ailment, such as a ruptured appendix or a broken femur, or due to some other documented calamity such as an earthquake, tornado, nuclear holocaust, etc. But the make-up will have to be scheduled at my convenience due to the time required for me to draft a new exam.

Grading Policy

In order to receive a passing grade for this class, you must demonstrate that you have learned the material and that you have learned it well. The five tests and final exam each will be weighted as one-sixth of your grade, and final grades will be determined as follows:

A: Excellent **B:** Good **C:** Satisfactory

D: Unsatisfactory **F:** Failure **FN:** Failure due to non-attendance

Typically, Excellent is at least a 93% average, Good is at least an 85%, and Satisfactory is at least a 78% average. Any curve will be reserved solely for students who have *zero* unexcused absences.

Withdrawal Date

Friday March 21, 2014 is the last day to withdraw from the course with a grade of W or to change enrollment from credit to audit.

Mathematics Tutor Lab

For free extra help in the class, tutors are available in the Math Lab in COHH and in the Student Learning Center. Please check at these facilities for the specific times and availability of tutors. The Gatton Academy also may provide tutors. Please check on your own for availability.

Disability Services

Students with disabilities who require accommodations, academic adjustments, and/or auxiliary aids or services for this course must contact the Office for Student Disability Services in DUC A-200. The OFSDS telephone number is 745-5004 (or 745-3030 TTY). Please do not request accommodations directly from the professor without a letter of accommodation from the Office for Student Disability Services.