

FALL 2012
MCCC - MAT 190 JC Calculus I
T-Th 11:10 am 1:00 pm
Location: PH 118

Instructor: Paul Winterbottom
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Office **Mon – Wed 12:15 – 1:15 pm**
Hours: **Tues – Thurs 2:30 – 3:00 pm**

LAL: Tues – Thurs 1:30 – 2:30 pm

Course Description: A course designed primarily for students who will major in mathematics, science, engineering, or business. Topics include concepts from analytic geometry, limits, differentiation and integration of algebraic and trigonometric functions, curve sketching and applications. A graphing calculator is required for class, homework, and testing. Classroom instruction and programs will be presented using a TI-84+.

Prerequisites: Math placement test, level two, recommendation of MAT 161 and 162 or MAT 170 with a minimum grade of “C”.

Learning Objectives: Upon completing this course, a student should have the following knowledge and skills:

1. Be able to verify the limit of a linear function by using the $\varepsilon - \delta$ definition of limit.
2. Be able to evaluate limits of many algebraic and trigonometric functions, including one-sided and infinite limits, and limits at infinity.
3. Be able to discuss the continuity and points of discontinuity of many algebraic and trigonometric functions.
4. Be able to differentiate and integrate many algebraic and trigonometric functions.
5. Be able to apply knowledge of differentiation to curve sketching and to solving maximum-minimum problems and related rates problems.
6. Be able to apply knowledge of integration to finding area.
7. Be able to apply knowledge of differentiation and integration to solving rectilinear motion problems.
8. Be able to state and explain or illustrate some theorems, including the Mean Value Theorem, the Mean Value Theorem for Integrals, and the Fundamental Theorem of Calculus.
9. Be able to use the TI-83 Plus graphing calculator in relevant Calculus I concepts.

A few words about your responsibilities: As teachers our job is not only to teach you the subject matter but to prepare you for your entry into the working world. As a student in this class, it is your job to be responsible for yourself. Just as in the working world, if you do not show up to work, you do not get paid. As in the working world, you have deadlines and due dates and so you will in this and all other courses. Please do not hesitate to contact me if you feel you are struggling with the course material. Use the Learning Assistance Lab in College Hall 320, my office hours, or your fellow classmates as resources to help facilitate your learning in this class. Mathematics is best learned by DOING. Keep up with the work on a consistent basis and that should help translate into having a successful term in this class.

Grading: There will be four exams, nine quizzes and a final exam, each worth 100 points. If a student has attended every class and your final exam is higher than your lowest test grade then that test grade will count only 50 points and the final exam will count 150 points. Your quiz grade will consist of both in class and take home quizzes. The top 8 quizzes will count towards 80 points of your quiz grade and the final 30 points will come from class participation and attendance. None of the take home quiz grades will be dropped.

Evaluation of Grade:

A = 92 – 100

A- = 90 – 91

B+ = 88 – 89

B = 82 – 87

B- = 80 – 81

C+ = 78 – 79

C = 70 – 77

D = 60 – 69

F = Below 60

Textbook: *Calculus*, 9th ed, Larson, Hostettler, Edwards, Houghton Mifflin.

Calculator: TI-84+ Graphing Calculator. If a student has a TI-83+ they do not need to by a TI-84+

The Secret to Success in Any Class:

1. ATTEND EVERY CLASS
2. Take good notes in class.
3. Read the textbook.
4. Try (and hopefully do) all homework assigned after every class.
YOU SHOULD EXPECT TO SPEND 2 TO 3 HOURS OUTSIDE OF CLASS FOR EVERY HOUR IN CLASS
5. Ask questions in class.
6. Don't wait until you have done poorly on a test to seek help. If you can't do the homework, then you won't be able to do the test questions. **GET HELP!!**

Either:

a) **See me**

b) Try the **Learning Assistance Lab, located on the second floor of the Library, College Hall**. In addition to tutorial help, the LAL also provides computer software, computers, calculators, videos, supplementary books, etc. All students have access the College computer network.

Policy:

1. There are no make-up quizzes or tests.
2. I will sign a withdrawal slip up until the last day of class.
3. Students are expected to attend every class.
4. If a test is missed, the lowest test grade will count twice and the highest grade a student can receive is a "C".

Classroom Policy

1. Casual talking during class is not permitted, as it is a sign of disrespect toward the professor and other students. Students who engage in conversations will receive only one warning. If talking persists, the students' grades will be lowered by ONE GRADE LEVEL and he/she will be referred to the Dean's office for further disciplinary action.
2. If you are late to class, you must take a seat at the back of the room. Do not come to the front of the room once the lecture has started.
3. All cell phones must be turned off in the classroom
4. **Missing the Final Exam will result in an automatic grade of "F" for the course.**