CASPER COLLEGE COURSE SYLLABUS
MATH 2200-02
CALCULUS

Semester/Year: Fall 2015

Lecture Hours: 5	Lab Hours: 0	Credit Hours: 5

Class Time: 1:00-1:50 a.m.	Days: MTWThF	Room: PS 117

Instructor's Name: Jake McIntyre

Instructor's Office: PS 337	Office Phone: 268-2769	Email: jjmcintyre@caspercollege.edu

Office Hours: M-F from 10-10:50 a.m., Monday at 2 p.m. and also Friday from 11-11:50 a.m. in the MLC (PS 104) or by appointment.

Course Description: Introduction to the calculus of single variables. Cover derivatives of polynomial, trigonometric, exponential, and logarithmic functions. Includes limits, applications of derivatives, and related theorems.

Statement of Prerequisites: A "C" or better in Math 1405 or Math 1450; or an ACT composite Math score of 27 or better; or a COMPASS exam score in the Trigonometry domain of 61-100, within the past year.

Goal: The student will be introduced to and practice the theory stated in the course description. Our study will include theory, method and application. We want to know WHY it works, HOW it works, and WHERE it can be applied. Students may also use technology to develop conceptual understanding and work problems that are difficult to do by hand.

Outcomes:
Students should:
1. Be able to analyze limits numerically, algebraically, and graphically.
2. Be able to use the definition of the derivative. They should understand the derivative as a slope to a curve and as a rate of change.
3. Be able to calculate derivatives symbolically using the power, quotient, chain, and product rule as well as implicit differentiation.
4. Be able to use differential calculus to solve at least two of the following applications areas: error analysis, related rates, optimization, and motion problems.
5. Be able to use differential calculus to analyze curves.
6. Be able to use technology to analyze problems involving differential calculus.
7. Be able to apply the definition of the definite integral and understand the relationship between the definite integral and the concept of area.
8. Solve problems using critical thinking and creativity.
9. Use quantitative analytical skills to evaluate and process numerical data

Required Text, Readings, Materials:
- MyMathLab Access Code. You MUST sign-up for MyMathLab, all assignments, grade keeping, and announcements will be done through MyMathLab! (We will not be using Moodle). On the first day of class you will receive a handout with instructions on how to register for this course in MyMathLab.

Methodology:
Instruction: Lectures will be given in class.

Online Work:
       Section Quizzes: For each section covered there will be a quiz.   Quizzes will be given through MyMathLab and can be taken any time after they are opened and have unlimited re-takes until the due date which will be one week after the corresponding section is covered in class. Only the best score will be counted.
       Objective Homeworks: Each section will have several objective homework assignments associated which are broken down by objective. These homework assignments are done through MyMathLab and will not be counted towards the grade unless you want to **LEVEL UP!**

Written Work:
       Daily (almost) POP Quiz: At the beginning of most class periods there will be a short 2-5 minute Multiple-Choice POP quiz on previous material. They cannot be made up if you're late or absent.
       Weekly Take-Home Quizzes: Each week a paper and pencil quiz will be posted in MyMathLab (usually on Friday) which is to be printed out and completed by the following Friday. The problems in the quizzes will cover that week's material and usually be more challenging; being applications, requiring of a proof, or some other written justification. These written quizzes are to be done using a pencil and paper and you must show all work to receive proper credit.
       In-Class Projects/Labs: There will also be on occasion where we will do an in-class project or lab. Some of these projects/labs will require technology (wolframalpha.com, Mathematica, Sage, Excel, etc.). Projects/Labs will also be due a week after assigned.
Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

Exams: There will be four unit exams plus a Derivatives Skills Test
       Unit Exams: The unit exams will be announced at least a week ahead of time. Poor attendance is not an excuse for missing an exam; it is your responsibility to know the dates of the exams. There will be a final comprehensive exam integrated into the Unit 4 Exam.
       Derivative Skills Test: Since differentiation is the main concept of Calculus I and carries over into Calculus II this quiz must be passed with a 90% or better. If you have not passed the skills quiz by the end of the semester you will not pass the class (You will have multiple attempts during the semester).

Leveling Up: You can level up your grades in two ways. If you complete all the objective homework assignments in a section with an 80% score or higher I will add 10 percentage points onto your section quiz score for that quiz's final score. Also if your section quiz **average** is an 80% before a Unit Exam, I will give you a 10 point bonus on that Unit exam.

Evaluation Criteria:
Grade distribution

Exams	65%
Online Work	20%
Written Work	15%

Percent needed for a specific grade
A = 90 – 100%
B = 80-89%
C = 79-79%
D = 60-69%
F = below 60%

Class Policies:

Respect for Others: To avoid disrupting the work of others, please plan to arrive at class on time and be prepared to work (i.e., have your pencil, eraser, book, paper, homework and calculator). Additionally, please feel free to offer your opinions and questions to the class, but do not carry on side discussions. Also refrain from leaving and returning the classroom during the allotted class time. Cell phones, pagers, beepers, laptops, etc. should be turned off during class and please refrain from text messaging. In general, students may not engage in an activity which the instructor deems disruptive or counter-productive to the goals of the class. Instructors have the responsibility to remove offending students from the class. Repetition of offensive behavior may result in expulsion from the class.

Attendance: Attendance will be taken for this class. Students who find themselves in the position of having to miss numerous classes may need to withdraw and take the course when regular attendance is possible. If you do not attend class you are still expected to be familiar with the material and be prepared for tests. If you just quit attending and do not officially withdraw, your grade will also be an "F".

Calculator: You will be allowed to use a scientific (non-graphing) calculator for this course. It must have buttons for trigonometric functions (sin,cos,tan).

Where to Go for Help:
- My office. See the top of the syllabus for contact information and office hours.
- The Math Learning Center (also called the Math Lab) is a place you can go for help. Staff and student workers are there to answer questions, or you can go if you just need a place to do your math homework. The Math Learning Center is located in PS 104. The exact hours it is open will be announced, or you can look on the door. Make sure you get help as soon as you start having trouble!

Dates: Refer to the Casper College Class Schedule for important dates such as holidays and Finals.

Withdraw Deadline: November 12th (I will not give a "W" after the withdrawal deadline!)

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Chain of Command: If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

Academic Dishonesty - Cheating & Plagiarism: Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

ADA Accommodations Policy: If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu . The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

Official Means of Communication: Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly.

Changes: The instructor reserves the right to make any changes if deemed necessary. Information contained in this syllabus, other than the grading, make-up, and attendance policies, may be subject to change with advance notice, as deemed appropriate by the instructor. All changed will be announced in class or emailed to you, so absenteeism is no excuse for not being aware of all changes.

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Tentative Calendar:
This schedule is tentative and subject to change.

Unit 1
1.1, 2.1-2.7
Review
Exam 1

Unit 2
3.1-3.10
Review
Exam 2

Unit 3
3.11, 4.1-4.8
Review
Exam 3

Unit 4
4.9, 5.1-5.5
Review
Exam 4/Final Exam

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