MTH 120 Winter 2016 Calculus I Syllabus

| Instructor: | Dr. David Folk <br> David.Folk@emich.edu |
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| Office: |  |
| 504-K Pray-Harrold |  |

Office hours: Monday, Tuesday, Wednesday, Thursday $\quad$ 12:00 pm-1:30 pm Others by appt

Text: Calculus: Single Variable, 6th ed., Hughes-Hallett et al. ISBN 9780470888643
Calculator: TI-83, 84, 85, 89, 92, or better is required*

| Grading Scheme | Activity | Percent of Final Grade |
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| Homework and quizzes | $14 \%$ |  |
|  | Chapter 1(precalculus) test | $10 \%$ |
|  | Chapter 2 (derivatives) test | $14 \%$ |
|  | Chapter 5 (integrals) test | $14 \%$ |
|  | Chapter 3 (gateway exam) | $10 \%$ |
|  | Chapter 4 (derivative applications) test | $14 \%$ |
|  | Final Exam | $24 \%$ |

Final Exam: 11:00 Class: Tuesday, April 26, 9:30 am-11:15 am
2:00 Class: Thursday, April 21, 1:30 pm-3:15 pm
Tutor info: There is free math tutoring available on a walk-in basis in the Math Lab (411 PrayHarrold). Their hours for tutoring are 8 am to 8 pm Monday through Thursday, and 8 am to 2 pm on Friday. They will also offer tutoring on Sundays from 1 pm to 5 pm in 302 Halle Library. You can find much more information about the lab at www.emich.edu/math/tutoring/

General Education rationale: MATH 120 is an introductory four credit course in calculus. Students in this course will develop the mathematical skills associated with the core topics of limits, derivatives and integration, and learn the wider context for these skills within the mathematical sciences. In a unified fashion, the course makes the case for using functions to model physical phenomena and simultaneously teaches methods to analyze these functions in a meaningful way. Applications of calculus abound in the physical and life sciences and, increasingly, in social sciences like economics as well. It is the theoretical engine that is used in these client disciplines when it comes time to reason in a quantitative way. For these reasons, MATH 120 will count for the Quantitative Reasoning requirement in the General Education program Education for Participation in the Global Community.

Some important notices:

## Students with Disabilities:

Eastern Michigan University has a tradition of providing access to education for students with disabilities that began long before the enactment of federal or state law governing accommodations. To see an outline of the accommodation information for faculty and students provided by the Disability Resource Center, visit the DRC homepage: /www.emich.edu/drc/

## Important Notice for Foreign Students:

Foreign students should be aware of the requirements of the SEVIS program. For information about maintaining your visa, go to www.emich.edu/ois/immigrationstatus.html

## Academic dishonesty:

Academic dishonesty, including all forms of cheating, falsification, and/or plagiarism, will not be tolerated in this course. For the purposes of this course, cutting-and-pasting will be regarded as cheating. Penalties for an act of academic dishonesty may range from receiving a failing grade for a particular assignment to receiving a failing grade for the entire course. In addition, you may be referred to the Office of Student Conduct and Community Standards for discipline that can result in either a suspension or permanent dismissal. The Student Conduct Code contains detailed definitions of what constitutes academic dishonesty but if you are not sure about whether something you are doing would be considered academic dishonesty, consult with the course instructor. You may access the Code online at: www.emich.edu/studentconduct/.

## Student conduct:

Students are expected to abide by the Student Conduct Code and assist in creating an environment that is conducive to learning and protects the rights of all members of the University Community. Incivility and disruptive behavior will not be tolerated and may result in a request to leave class and referral to the Office of Student Conduct and Community Standards (SJS) for discipline. Examples of inappropriate classroom conduct include repeatedly arriving late to class, using a mobile/cellular phone while in the class session, or talking while others are speaking. You may access the Code online at www.emich.edu/studentconduct/.

## Religious holidays:

Current University policy recognizes the rights of students to observe religious holidays without penalty to the student. Students will provide advance notice to the instructor in order to make up work, including examinations, they miss as a result of their absence from class due to observance of religious holidays. If satisfactory arrangements cannot be made with the instructor, the student may appeal to the school director or head(s) of department(s) in which the course(s) is / are offered.

- This will be a 'problem-solving' based course, not a 'lecture-based' course, nor a 'theorembased' course
- Every day that is not a test day, there will either be a quiz or homework problems to hand in.
- During a normal semester, you would normally be expected to work about 15 hours/week outside of class to complete your homework.
- You will be expected to get together with class members outside of class for completing homework, and completing group assignments. You will be expected to complete all of the homework before the next class day. No late work will be accepted, nor will missed quizzes be made up
- As group work will be an integral part of the course, after about two weeks we'll hopefully select permanent groups.
- Each class day will be a mixture of some lecture, problem solving, and group work. I will try to keep the lecturing down to 15 minutes at a time. Much of the group work will either be in the form of extra credit, or starting to solve problems that will be assigned as homework.
- In my experience, running the class in this way allows many more people to complete the course successfully. If you have serious disagreements with the philosophy behind this, I would strongly encourage you to transfer sections.
- A gateway exam is a test of basic skills that you need to be able to do extremely well. You will be given a set of derivatives to do in 30 minutes, and you need to get $80 \%$ ( $8 / 10$ correct on the test.) Little or no partial credit will be given. The first gateway exam will be given in class, all subsequent gateway exams will be given in the testing lab ( $411 \mathrm{P}-\mathrm{H}$ ) and must not be taken during class time.
- As a general rule, the only homework that will be discussed is that for which I have sufficient evidence to conclude that most of us were unable to finish the problem. One option that may be exercised is to put the solution on my web page.


## - Homework:

(a) No individual homework will be accepted
(b) All homework will be due at the very beginning of class. No late homework will be accepted.
(c) You must show all work you did to complete the problems
(d) As much as possible, every problem will be solved numerically, algebraically, graphically, with explanations given in complete sentences.
(e) If you're stuck on homework problems, try
(i) Working with each other is by far the best choice. Although your homework is due in particular groups, you'll find the best way to learn is get as many people in the class involved in active problem- solving together as possible.
Note: This does not mean that simply copying other group's homework will be allowed.
(ii) Going to the student resource center (in and around room 411 Pray-Harrold).
(iii) Going to the math den (corner room 501 on 5th floor P-H)
(iv) Seeing me during office hours
(v) e-mailing me

## - Testing:

(a) No makeup tests will be given, except in the cases of emergencies, unless the makeup can be given before class time of the next class day
(b) You will be allowed to submit corrections on the non-gateway, non-final exams to get $25 \%$ credit back on the correctly corrected parts of those exams.
Important: Your corrections must be in the same order as the problems on the exam, the corrections must be on separate paper (not on the exam), and by 'correction' we mean the whole problem completely re-done correctly.
(c) The final exam will be the only exam curved. The grading scale for all of the other exams will be $90 / 80 / 70 / 60$.

