MATH-M212 – Calculus II Fall 2020 Syllabus

Land Acknowledgment: [School Name] is located on the traditional and ancestral land of the Ohlone and the Muwekma Ohlone people. This region holds great historical, spiritual, and personal significance for its original stewards, the Native nations and peoples of this area. We acknowledge their connection to this land, and give thanks for the opportunity to live, work, and learn on their traditional homeland.

Class Time: Live Lectures MWF – 12:20 PM – 1:10 PM

Location: Classroom Zoom Room: LOCATION

Recording of lectures will be posted to the course website for

asynchronous viewing by 5pm each day

Course Topics Overview:

This course will be a continuation of Calculus I and will cover three major themes:

- Integration Theory: anti-derivatives, integration, techniques of integration, improper integrals
- Applications of integration: applications of integration to physics and geometry, differential equations, slope fields, first order differential equations, second order differential equations and applications
- Approximations: Taylor polynomials, infinite series, Taylor series

Pre-requisites: C or better in MATH-M211

Important Note: Students enrolling in my class are accountable for all of the material in pCalculus I; If you have not mastered those concepts you should visit me or a TA and we will provide resources that can help you learn and review the concepts from Calculus I, which should prepare you for this course. If you still have more to learn after that review, you might consider auditing Calculus I again before taking this course, because this course will build on that knowledge and grow your understanding of these topics.

<u>Instructor</u>: [Name of Instructor] (pronouns: she, her, hers) Instructor@school.edu

About Your Instructor: I became fascinated by math while going to university. I was intimidated by math at first, and after I got the lowest grade I had ever had on my first midterm, I wondered if I was cut out for this field. However, I accessed tutoring services and put in some extra hours, and I earned a significantly higher grade on the final. In time, I developed a passion for the subject, even doing a PhD. I hope to share that passion with you.

Contacting me by email: At some points in the term, my inbox gets quite full, but I do want to hear from you. If you email me and don't hear back from me within two business days, please send a follow up email. I will appreciate the gentle reminder.

Teaching Assistant: [TA name]. (pronouns: he, him, his).

TA1@school.edu

Office Hours: Tuesdays and Thursdays, 12pm – 1:30pm or by appointment

Questions for the TA or me:

The chat room on our course website will be our **primary** form of communication for asking questions pertaining to course content. The reason for this policy is because if one student has a question about course materials or assignment, that question is usually shared by their peers. The chat feature archives all communication and allows everyone in the course to benefit from each other's questions. The TA will be checking the chat several times throughout the week to respond to questions, and will let me know about questions that need me to personally address. If you see a question in the chat that has not been answered yet, and you know the answer, please share that knowledge with your classmates. Be mindful that chat messages are not private, and will be viewable to everyone in the course. If you need to discuss something with myself or your TA one-on-one, please reach out by email.

I care about the success of each student, even if I cannot meet with all of you individually due to the size of this class. When you have questions about the course material, questions about the subject more broadly, concerns to discuss, accommodations you need, or thoughts you want to share, please start by contacting our TA. [TA name] cares about students' success and has expertise to share. If the [TA name] is unable to help you, then please come to my student drop-in hours.

Textbook Information

Required text: Picard, J.L. (2015). *Calculus: Eighth Edition in Modules*. New York: Worth Publishers.

• It is essential that you purchase the eighth edition. Do not use older versions.

Course Elements

Exams: There will be two midterm exams and a comprehensive final. I am interested in your learning and your approach to problems. Therefore, partial credit will be given when you have solved parts of the problem correctly. Showing your work allows us to assess whether you are on the right track.

Quizzes: There is a quiz every week covering the material from the previous week. If you do all of your homework and understand the material, there is no reason for you not to do well on the quizzes. I assign these quizzes for two reasons. One reason is to show me how well students are understanding the material, whether there are some students who are not there yet, and whether I need to review certain concepts with the class. The other reason is to let you assess how well you are understanding the concepts and where you need to focus more of your efforts to learn the course material. If you are struggling on the quizzes, it means that you need to seek help from me, one of the TAs, the Department resources listed below, or your peers, so that we can help you learn the material.

Course Policies:

Attendance: I do not take attendance. You are adults and I expect you to be motivated to grow your knowledge and abilities by engaging in assignments and course lectures. I recommend that all students attend live lectures if possible, because I believe attending lectures is the best way to learn the concepts and improve your math skills. If you must miss a live lecture, it is your responsibility to access the recording when it becomes available on the course website.

Grading policy: I provide multiple opportunities for students to receive feedback on their performance throughout the course to give students opportunities to see how they are doing and so that they can identify places they need to apply more effort or new strategies along the way, seek help if they are struggling and improve throughout the semester. My hope is that all students will develop the knowledge they need to do well in this course and that all students—even those who perform well early in the semester—will improve and develop greater knowledge and skills through practice on the quizzes and exams. Students earn the grades they receive; I do not curve grades or add extra points or extra credit in this course because I do not believe students grades should be tied to other students' grades (on a curve) and because there are plenty of opportunities for students to improve their grades throughout the semester with the quizzes and exams.

Note: In previous years, some students have told me that they had times during the course when they felt that they were not doing well and became uncertain about whether they belonged in this class or should change majors. I advised them to hang in there, and in the meantime to access the tutoring centre, put in some extra hours studying, and join a study group. A number of these students contacted me later in the year to tell me that, now that some time had passed and they had taken some positive steps, they did feel like they belonged in the class and in the major. For recommendations for resources available to help you succeed in this course, please see the Academic Supports section of the syllabus below.

Preferred Names: If your preferred name is not the same as the name that appears on the university provided roster for the course, please let me know so that I can use your preferred name.

Course Conduct: I am committed to creating a learning environment where diverse perspectives are recognized and valued as a source of strength. I request that all students work with me to create a class culture based on open communication, mutual respect, and inclusion. As a class we will approach all discussions with respect and civility. Disagreements and debates in academic discourse are expected and welcome, but personal attacks are never OK, and will not be tolerated. I strive to ensure an open and welcoming classroom for all students. If I ever miss the mark, please don't hesitate to come and talk to me. We are all learning together.

Caregiver Responsibilities Policy: I have great respect for students who are balancing their pursuit of education with the responsibilities of caring for children or other family members. If you run into challenges that require you to miss a class, or if your caregiving responsibilities are

interfering with your ability to engage in remote learning, please contact me or the TAs. There may be some instances of flexibility we can offer to support your learning.

Academic Integrity

The Mathematics Department expects students to comply fully with University policies on academic integrity. The usual policy for a student caught cheating in M212 includes a course grade of F. Additional penalties may include probation, suspension, or expulsion from the University. All suspected cases of academic misconduct will be reported to the Office of Student Ethics. You are capable of meeting my expectations for this course. If you are concerned about how well you are doing in this course, please come speak with me instead of considering academic misconduct.

Academic Supports:

This campus provides extensive academic supports for students, and these supports are there to let students achieve the academic success they are truly capable of. I have provided a list of the academic support offices offered by [school name] below.

Math Department Help Desk: The Math Department offers help sessions for students enrolled in M212. I strongly suggest that all students make use of these resources as every student can improve and challenge themselves by attending these help sessions. Please check the Math Department website for information about their virtual drop-in hours, or to schedule an appointment.