Course Syllabus
Mathematics 1220, Section 01 Spring 2019
Calculus 2

Instructor: Weicong Su
Office: 121 JWB
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Class Time and Place: MWF, 8:35 AM - 9:25 AM, JFB 102
T, 8:35 AM - 9:25 AM, JFB 103

Office Hours: To be determined.


Course Information: Math 1220 Calculus II is a 4 credit course.

Prerequisites: C or better in (MATH 1210 OR MATH 1250 OR MATH 1270 OR MATH 1311 OR MATH 1310) OR AP Calculus AB score of at least 4 OR AP Calculus BC score of at least 3.

Course description: Geometric applications of the integral, logarithmic, and exponential functions, techniques of integration, conic sections, improper integrals, numerical approximation techniques, infinite series and power series expansions, differential equations (continued).

Expected Learning Outcomes: Upon successful completion of this course, a student should be able to:

1. Compute derivatives and integrals for exponential, logarithmic, hyperbolic functions, and inverse trigonometric functions.

2. Integrate integrable functions using integration by parts, u-substitution, trigonometric substitutions, rationalizing substitutions, partial fraction decomposition, and trigonometric identities. This includes knowing which techniques to apply to a given integral.

3. Use LHopital’s Rule to calculate indeterminate-type limits and also know what limits are the nonindeterminate forms and how to compute those limits.

4. Compute improper integrals.

5. Understand the difference between an infinite sequence and infinite series and determine if a sequence converges or diverges.

6. Determine whether or not an infinite series of numbers converges or diverges using a variety of tests.

7. Understand what it means for a Power Series to converge or diverge and be able to find the Taylor Series for a given function.

8. Differentiate and integrate functions in polar coordinates

Tutoring Lab: T. Benny Rushing Mathematics Student Center (adjacent to JWB and LCB), Room 155
M - Th 8 a.m. - 8 p.m.
F 8 a.m. - 6 p.m.
(opens Wednesday) (closed Saturdays, Sundays and holidays)
They are also offering group tutoring sessions. If you’re interested, inquire at the Tutoring Lab.
http://www.math.utah.edu/ugrad/tutoring.html

Private Tutoring: University Tutoring Services, 330 SSB (they offer inexpensive tutoring). There is also a list of tutors at the Math Department office in JWB233.

Computer Lab: Also in the T. Benny Rushing Mathematics Student Center, Room 155C.
M - Th 8 a.m. - 8 p.m.
F 8 a.m. - 6 p.m.
Link to computer lab is http://www.math.utah.edu/ugrad/lab.html
Grading: The grades will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm exams</td>
<td>40%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35%</td>
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Note: There will be three midterms. The lowest among the three midterm exam scores will be dropped. Each of the other two scores accounts for 20% of your final grade.

Homework: I will collect homework on Mondays (or the first day of class of the week) of each week, even if there is a scheduled midterm. I will post your homework assignments on Canvas (or bring hardcopies to the class in case of system breakdowns or any other unexpected events) and it is your responsibility to check Canvas for the homework set corresponding to each weekly assignment.

- Please notice that there is no way to get an A (or even B, C) in this course if you choose not to do any of the homework. On the other hand, turning in all of the homework can help your grade substantially.

- I will grade a few problems on each homework set to check for correctness but will not tell you ahead of time which problems will be graded for correctness. Problems not graded will not count towards the total grade for each homework assignment. Solutions will be given on Canvas (or in the form of handouts) after each homework assignment is graded. It is strongly recommended that you read the solutions especially for ungraded problems.

- Late homework will not be graded.

- Your lowest two homework scores will be dropped.
  - I will drop these two homework scores to allow for illness, oversleeping, hectic schedules, etc. Do not ask for special favors with regard to the homework policy. Also, it is not necessary nor recommended that you tell me why you did not turn in homework.

Midterm exams: We will have three midterm exams, which will take place in the usual classroom, in the usual class time and be 50 minutes long. The exam dates to be determined. The frequency of the midterms is approximately monthly.

Final exam: The final exam will be comprehensive and will occur during the regularly scheduled final exam time, given by the University.

Online Grades: I will put your grades online on Canvas. I do my best to update the grades on a regular basis and keep everything accurate. However, I would advise you to check your grades often to make sure there were no data entry mistakes. I'm always happy to correct any mistakes I've made. You just need to let me know about them.

Grading scale: A (90-100), A- (87-89), B+ (84-86), B (80-83), B- (77-79), C+ (74-76), C (70-73), C- (67-69), D+ (64-66), D (60-63), D- (56-59), E (0-55). I do not intend to curve the grades which means you will be fully responsible for your final grade. You will get a good or undesirable grade only because of your own academic performance but not because somebody else is doing good or bad.

Calculators:
You will need a calculator for this course. A scientific calculator will be sufficient. Graphing or programmable calculator will not be allowed on exams. Please also take the following note as an advise.

- Calculators do not help improve mathematical skills. Use a calculator only when necessary.

ADA Statement: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDA will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability and Access.

Cheating: Violation of academic integrity is strictly prohibited. Cheating on any homework or exam will result in a grade of zero for that work. Depending on the severity of the cheating, the instructor reserves the right to fail you from the class. In all cases, the incident will be reported to the Dean of Students, or to the International Students Office in the case of an international student.
Webpage: All information concerning this class will be posted on the Canvas webpage of the class. Any important information will be given in class and on the Canvas webpage. You are responsible for checking the webpage on a regular basis (you can have the communication from Canvas forwarded to your email address).

Additional policies:

- I do NOT allow the use of laptop computers or cell phones in my classroom, in order to minimize student distractions. At this point, it is almost impossible to take notes for a math class on a laptop in real time. Thus, it is unnecessary in class. If you are using a tablet or ipad or some similar device to take notes and the screen lies parallel to your desk, that is totally fine.

- There will be no retakes of exams, for any reason.

- You may take an alternate exam if you talk to me about it first and explain the emergent, extenuating circumstances that make it necessary. It is 100% your responsibility to communicate with me as soon as possible, before the exam occurs. Talking to me after the problem will be a sufficient reason for me to allow you to get a zero on that test. I reserve the right to make alternate exams more difficult than the scheduled exam.

- I will kindly demand respectful behavior in my classroom. Examples of disrespect include, but are not limited to, reading a newspaper or magazine in class, social chatting with your friend in class, use of your cell phone or cuddling with your girl/boyfriend in class. If you choose to be disrespectful with distracting behavior during our class, please keep in mind that you put me in a position of choosing between protecting/taking a stand for you OR for the other students or myself whom you are disrupting. I can guarantee I will choose to stand for the students who are there to learn without disruptions and I will thus take action to terminate your distracting behavior, and that action may not be desirable for you.

- There will be no cursing nor negative ranting (for example, "math sucks") on any written work turned in. The penalty for such things on your written work will be a zero score on that assignment or test.

- You need to have a valid email address registered with Campus Information System. I will regularly send emails to the class and will hold you accountable for receiving that information. If you have troubles receiving my weekly emails, you can (1) check to make sure your email address at Campus Information System is correct, (2) make sure my emails are not going directly to your junk mail folder, or (3) contact the webmaster at Campus Information System.

- If you have questions about any exam/homework grade, or you want to appeal the grading of the exam/homework, you must bring it to me within one week of the exam/homework. I’m happy to look over your appeal and/or questions and give my feedback in order to benefit your learning. But, it must be done in this timeframe of a week from when I hand back the exam/homework.

- I will offer an extra credit question on every midterm and final exam, to help make up for arithmetic mistakes. But, I will not offer any additional extra credit at the end of the semester or any other way for you to improve your grade at that time. No exceptions. Please respect this and do not ask for special favors or extra credit when you realize you don’t like your grade. Most likely, I just won’t respond to such emails or questions in person.

Disclaimer: The instructor reserves the right to explain and modify the content of the syllabus. I will let you know in class any modification to this syllabus and post the new syllabus on the Canvas webpage.