

# MATH 3200—Calculus I

Section 50, MW, 5:15–6:30 pm, NIB 135, CRN: 23625  
Spring 2010—3 credits

**Instructor:** Taylor Jensen

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**Office:** NIB 137

**Office Hours:** MTWR 2:30–5:00 pm

**Additional Help:** NIB 134 *or* Browning Learning Resource Center

Required Text (Online): *Foundations of Analysis Notes* by Joe Taylor

Prerequisite: You *must* have passed both Math 2200 (Discrete Math) and Math 2210 (Multivariable Calculus) to be enrolled in this class.

## Course Description

Math 3200 is designed for those interested in advanced mathematics. The course introduces the construction of rigorous proofs of mathematical claims in beginning analysis. Additionally, completion of Math 3200 partially fulfills requirements for Mathematics Endorsements Level 3 and 4 through the Utah State Office of Education.

## Behavior Policies

1. **Your attendance and behavior are expected to reflect your dedication to excellence as a university student.** You are expected to attend class, participate in discussions and group work, and to use class time for Math 3200 activities only.
2. **You must abide by all regulations set forth in the “Student Rights and Responsibilities Code” (DSC Policy 5.33).** These regulations can be found online at <http://www.dixie.edu/humanres/polstu.html> (then click on the link to DSC Policy 5.33). In particular, you should be aware of your obligations pertaining to academic performance (“Academic Performance Responsibilities,” DSC Policy 5.33.5).
3. When completing homework, working together is ok—in fact, I encourage it. However, copying another person’s work is not ok. (Apply common sense when it comes to homework.)

## Attendance & Homework Policies

**The goal of attending class and doing homework should be to gain *understanding* of how valid, rigorous proofs in analysis are constructed.** With that in mind, let me present my attendance and homework policies:

1. Class attendance is *mandatory*. To that end, I will enforce a “three strikes and you’re out” policy—that is, you may miss up to two regular class days with no penalty. After that, you will receive a penalty to your final overall grade of  $1/3$  GPA point (e.g., a solid “A” becomes an “A–”), *per missed class day*.
2. Completing homework on time is *mandatory*. You will turn in a homework set every week. Once again, I will enforce a “three strikes and you’re out” policy. Hence, you are allowed to miss the deadline on two homework sets with no penalty. After that, you will receive a penalty

to your final overall grade of 1/3 GPA point (e.g., a solid “A” becomes an “A–”), *per late assignment*.

3. You will read a section from the textbook *before* attending the scheduled lecture about that particular section. After actively participating in the classroom discussion on the section, you will then complete all assigned homework exercises from that section.

4. Each class day is divided into two time periods: first, I will *lecture* on the section which you read before coming to that class session; second, you will ask me *questions* about homework problems you have completed. Due to time constraints, some homework questions will have to be answered outside of class (during office hours, for instance).

## Exam Policies

1. **Exams cannot be made up for any reason.** If you miss an exam, you will receive an “F” for the course. All three exams will be administered in our regular classroom.

2. While the first two exams are not intended to be comprehensive, the third (and final) exam will have a “comprehensive” component to it (50% of the test at least). A 10% penalty will be given to any student showing up more than 10 minutes late for an exam. A 30% penalty will be given to any student missing an exam period by more than an hour. (This is to ensure students do not “hang back” and study longer than their classmates.)

## Grading

There are 300 total points possible (100 per exam). Assuming you have incurred no attendance and/or late homework penalties, your grade will be determined solely according to the percentage of points you earn on the tests.

|            |            |            |            |
|------------|------------|------------|------------|
| ≥ 92.0% A  | ≥ 89.0% A– | ≥ 86.0% B+ | ≥ 82.0% B  |
| ≥ 79.0% B– | ≥ 75.0% C+ | ≥ 70.0% C  | ≥ 67.0% C– |
| ≥ 64.0% D+ | ≥ 60.0% D  | < 60.0% F  |            |

## Disability Resource Center

If you are a student with a documented physical or mental impairment that will substantially limit a major life activity, please contact the Disability Resource Center on the main campus. The Center Coordinator and staff will assist you in evaluating your eligibility for services. If you are deemed eligible, reasonable accommodations that are appropriate for your disability will be assigned. If you have any questions concerning this process, please contact the Center at (435) 652–7516 or go to the Student Services Center (located next to the Testing Center).

## Website Resources

|                |   |
|----------------|---|
| Library        | <a href="http://library.dixie.edu/">http://library.dixie.edu/</a>   |
| Writing Center | <a href="http://new.dixie.edu/english/dsc_writing_center.php">http://new.dixie.edu/english/dsc_writing_center.php</a> |
| Testing Center | <a href="http://new.dixie.edu/testing/">http://new.dixie.edu/testing/</a>   |
| Tutoring       | <a href="http://dsc.dixie.edu/tutoring/index.htm">http://dsc.dixie.edu/tutoring/index.htm</a>                         |

## Communication Policy

Important class and college information, including syllabus changes, will be sent to either the preferred email account you submitted to Dixie State College when you began school here or to your “Dmail” account. This information includes your DSC bill, financial aid and scholarship notices, notification of dropped classes, reminders of important dates and events, and other information critical to your success in this class and at DSC in general. You will be held responsible for any emailed information sent to you by me or by DSC, so please check your email account often. When trying to get in contact with me, the best option is to call my office phone and leave a message. If you are not comfortable with that option, please email me.

## My Philosophy

Analysis is my favorite branch of mathematics. Why do I love analysis? One reason is because although I can succeed as a college mathematics teacher without knowing everything there is to know about mathematics, I **cannot** get by without a mature understanding of the real number line—and analyzing functions from  $\square$  to  $\square$  is precisely what we do in this course. Therefore, based on my own experience, I am confident that learning this material will make a **vital** difference in your ability to teach mathematics or to apply mathematics in your chosen career. Learning about mathematics should be **fun!** If we’re not having fun while we learn, we’re not really learning! 😊

## Lecture Schedule

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| <u>DATE</u> | <u>LECTURE</u>                | <u>QUESTIONS</u> | <u>DATE</u> | <u>LECTURE</u>      | <u>QUESTIONS</u> |
|-------------|-------------------------------|------------------|-------------|---------------------|------------------|
| 1/11        | 1.1 & Intro                   |                  | 3/8 to      |                     |                  |
| 1/13        | 1.2 & 1.3                     | 1.1              | 3/12        | <b>Spring Break</b> |                  |
| 1/18        | <b>Martin Luther King Day</b> |                  | 3/15        | 3.4                 | 3.3              |
| 1/20        | 1.4 & 1.5                     | 1.2 & 1.3        | 3/17        | 4.1                 | 3.4              |
| 1/25        | 2.1                           | 1.4 & 1.5        | 3/22        | 4.2                 | 4.1              |
| 1/27        | 2.2                           | 2.1              | 3/24        | 4.3                 | 4.2              |
| 2/1*        | 2.3 & 2.4                     | 2.2              | 3/29        | 4.4                 | 4.3              |
| 2/3         | 2.5                           | 2.3 & 2.4        | 3/31        | “Catch up”          | 4.4              |
| 2/8         | 2.6                           | 2.5              | 4/5         | Review              |                  |
| 2/10        | “Catch up”                    | 2.6              | 4/7         | <b>Exam 2</b>       |                  |
| 2/15        | <b>Presidents Day</b>         |                  | 4/12        | 5.1                 |                  |
| 2/17        | –Review–                      |                  | 4/14        | 5.2                 | 5.1              |
| 2/22        | <b>Exam 1</b>                 |                  | 4/19        | 5.3                 | 5.2              |
| 2/24        | 3.1                           |                  | 4/21        | 5.4                 | 5.3              |
| 3/1         | 3.2                           | 3.1              | 4/26        | “Catch up”          | 5.4              |
| 3/3*        | 3.3                           | 3.2              | 4/28        | Review              |                  |

**Exam 3** will be at 5:00 pm  
on Monday, May 3<sup>rd</sup>.

\* The last day you may drop the class without a “W” appearing on your transcript is Tuesday, February 2<sup>nd</sup>. The last day you may drop the class is Friday, March 5<sup>th</sup>. Other important dates on the academic calendar for this semester can be found online at <http://new.dixie.edu/reg/?page=calendar&sid=201020>.