



Math 421, The Theory of Single Variable Calculus

Number of Credits: 3 credits

Course URL: <http://www.math.wisc.edu/~maxim/421S18.html>

Course Designation or Attributes: None

Meeting Time and Location: MoTuWeTh 1:00-2:15 in Van Vleck B113.

Instructional Mode: Face to face

Credit hours: The three credit hours are met by four 75-minute meetings and a minimum of four hours of out of class student work per week for 8 weeks.

INSTRUCTOR:

Laurentiu Maxim, Professor

Office hours and location: Tuesday 2:30-3:30PM, Van Vleck Hall 713

Email: maxim@math.wisc.edu

OFFICIAL COURSE DESCRIPTION

This course covers material in first (and second) semester calculus but it is intended to teach math majors to write and understand proofs in mathematics in general and in calculus in particular. The course is designated as writing intensive course.

Requisites

Math 234.

LEARNING OUTCOMES

Upon completion of this course the student is expected to:

- be able to write and understand rigorous proofs in mathematics in general.
- know and understand the basic definitions and theorems of differential and integral calculus in a single real variable.
- be able to tackle problems in single-variable calculus.

Textbook:

Calculus, 4th edition, by Michael Spivak.

Publisher: Publish or Perish; ISBN: 9780914098911.

GRADING:

The course grade is based on quizzes and 2 midterm exams.

- Quizzes 30%
- Midterm I 35%
- Midterm II 35%

There will be 6 quizzes, 30-minute each. The lowest quiz score will be dropped.

EXAMS

The dates for Midterm I and II are July 12 and August 18. The midterms will be taken during the regular class time. Use of phones, tablets, laptops or calculators will not be allowed during exams. You must bring a valid UW Photo ID to all exams.

If you are eligible for special consideration on exams, please let me know as soon as possible, so that I can ensure that your needs are accommodated. Students holding McBurney visas will take their exams at the Testing Center.

Make-up midterm exams will be considered only if there is a conflict with another university-related event (in which case you need to contact me as soon as possible), or a last-minute medical/family emergency (you need to show proof of such emergency, e.g., doctor's notes).

HOMEWORK & OTHER ASSIGNMENTS

Homework will be assigned weekly, and it will be posted at the url:
<http://www.math.wisc.edu/~maxim/421S18.html>

Homework will not be collected or graded. However, the quizzes in discussion will be based on these assignments, so completing the assignments is essential for learning the class material.

RULES, RIGHTS & RESPONSIBILITIES

- See the Guide's to [Rules, Rights and Responsibilities](#).

ACADEMIC INTEGRITY

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to <https://conduct.students.wisc.edu/academic-integrity/>.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

McBurney Disability Resource Center syllabus statement: "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA." <http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php>

DIVERSITY & INCLUSION

Institutional statement on diversity: "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world." <https://diversity.wisc.edu/>