

COURSE SYLLABUS
MATH 425: COMPLEX ANALYSIS
SPRING 2011

Instructor: Richard Siefring

Office: A325 Wells Hall

Tentative office hours: Monday and Wednesday, 2:30pm–4pm, or by appointment

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Lectures: MWF 12:40pm–1:30pm, 2245 EB

Prerequisites: MTH 320

Primary Text: *Complex Analysis*, 3rd edition, by Joseph Bak and Donald J. Newman

Supplementary Text: *Schaum's Outline of Complex Variables*, 2nd edition.

MATERIALS COVERED AND COURSE GOALS

This course is an introduction to the theory of complex-valued functions of a complex variable. We will be covering most of chapters 1–11 of the primary course text, along with selected topics from later chapters.

Goals for the course include:

- To gain competence in the computational aspects of complex analysis.
- To gain an understanding and appreciation of the theoretical foundations of the theory of functions of a complex variable.
- To develop and practice skills involved with constructing, writing, reading, and evaluating mathematical proofs.

HOMEWORK AND QUIZZES

There will be suggested homework problems, written problem sets, and reading assignments.

Suggested homework problems will be posted on the course webpage after each lecture. These assignments will not be collected or graded, but completing them in a timely fashion will be essential for learning the course material. The suggested problems will be selected from those with solutions given in the course texts. Each Friday, some time at the beginning of class will be set aside for answering any questions you may have about these problems. Quizzes (usually announced in advance) based on the suggested homework problems may be given in class periodically.

Written problem sets will be assigned periodically (every 2–3 weeks). These problems sets are to be completed and turned in, and will be graded on a combination of completeness and correctness. In order to get full credit on a given problem being graded for correctness your solution must be clearly written, well organized, and contain all details. While you are permitted, and in fact encouraged, to discuss these homework assignments with your fellow students, you should write your solutions individually. *You should list on your homework assignment any people or sources (other than the course instructor or the textbook) that you consulted in completing the assignment.*

Written assignments that are turned in late will have points deducted for each day past the deadline that the assignment is received. No assignments will be accepted more than 1 week past the deadline. You may turn in one assignment up to two days late without penalty, but you must get permission at least 24 hours in advance of the deadline.

In addition to suggested problems and written homework assignments, reading assignments will be posted regularly on the course webpage. Careful and active reading is an important component of learning the type of mathematics covered in this course.

TESTS AND EXAMS

There will be two in-class midterm exams and a cumulative final exam. The dates of the midterm exams will be announced in class at least two weeks in advance. The final exam will be on Monday, 5/2, 12:45pm–2:45pm in 2245 EB. No make-up exams will be given for missed midterms. You may be excused from a midterm exam only in the event of a documented medical or family emergency. In this case, your score for the missing exam will be determined by your scores on the other exams. Please note that if you will be unable to take the final exam due to illness or some other emergency, university policy requires you to notify the assistant dean of your college immediately.

GRADING

Your final average for the class will be computed from your homework/quiz, test, and exam grades according to the following percentages:

- 30% Homework/quizzes
- 40% Tests
- 30% Final exam.

Your final grade will then be determined using a scale no stricter than following:

4.0: >86%	3.5: >80%	3.0: >74%	2.5: >68%
2.0: >62%	1.5: >56%	1.0: >50%	0.0: <50%.

ACADEMIC RESPONSIBILITY

Suspected cases of cheating or plagiarism will be handled in accordance with the university policies governing academic integrity. For more information, see:

<https://www.msu.edu/unit/ombud/dishonestystud.html>

IMPORTANT DATES

- 1/10: Classes Begin
- 1/14: Last day to add a course online. Last day to change to CR/NC.
- 1/17: Martin Luther King Day (no classes).
- 1/21: Last day to late add a course or change sections within a course.
- 2/03: Last day to drop a course with full tuition refund.
- 3/02: Last day to drop a course without a grade being reported.
- 3/07 – 03/11: Spring Break.
- 4/29: Last day of classes.
- 5/02: Final Exam, 12:45pm–2:45pm, 2245 EB.