

Course Outline: Math 4/5/7880, Spring 2013

Welcome to Complex Variables! This is a beautiful subject developed over the years in an ongoing collaboration between mathematicians, physicists, and engineers. Despite the unfortunate name complex analysis is far simpler and more elegant than real analysis. As we will see when we turn to applications complex numbers are just as real as any other kind.

Course info will be posted on the UT BlackBoard site. You can find this under My Courses at the UT web portal <https://myut.utoledo.edu/>. Much of the same material can also be found at <http://livetoad.org/>. Please check frequently for announcements, changes, due dates, solutions, scores, and other goodies.

	<i>MLK Day</i>	Mon, 21 Jan
Exam 1: Chapters 1–3		Thu, 7 Feb
	<i>Spring Break</i>	Mon–Fri, 4–8 Mar
Exam 2: Chapters 4–6		Thu, 21 Mar
	<i>Last Day to Withdraw</i>	Fri, 22 Mar
Exam 3: Chapters 7–11		Tue, 30 Apr, 5–7 pm

The core material is chapters 1–8. All students are responsible for this material. We will also cover some of the material in chapters 9–11, which includes some of the important applications. On exam 3 this material will be mandatory for grad students and extra credit for undergrads.

Office hours

I will be in UH 4080c for at least an hour before each class. The phone there is 419 530 2975. At these times you can call or stop by without an appointment. Feel free to ask for appointments at other times if you cannot make it to my regular office hours. My email address is simply paul.hewitt@utoledo.edu, which is often the best way to contact me. If you call me when I am not in my office then you can leave a voice mail message and I will get back to you as soon as I can.

Text and other resources

We will use the book *Complex Variables and Applications*, 8th edition, by James Ward Brown and Ruel V Churchill. This textbook has set the standard for Complex Variables courses for a generation. The recent editions have included some of the many important applications. I hope to cover at least some of these towards the end of the semester,

Quizzes

There will be a short, 5-point quiz every week, based on reading assignments which I will post on the web. Most of the quiz questions will require short written responses, often the statements of definitions and theorems. Your 10 best quiz scores will count towards your final grade.

I will give make-up quizzes only in case of a documented exigency, such as illness or a funeral. If you are sick the day of a quiz then you must call or email that same day if you expect to be able to make up the quiz. Otherwise you must arrange for a make-up quiz ahead of time. If I am not in my office then you can leave a voice mail message. If you fail to show up for an quiz and do not contact me about it until afterwards then you will get a 0 for that quiz.

Assignments

There will be weekly homework assignments. I will post the problems and due dates as the semester progresses. Each problem will earn 0 points if your proof or calculation is mathematically incorrect; 2 points if it is correct, but not well-written; 4 points if it is correct and well-written. Your 10 best homework scores will count towards your final grade.

Some of the assigned problems will be mandatory for grad students but extra credit for undergrads. These will be marked by an asterisk (*).

After I grade your assignments you will have the opportunity to rewrite your solutions to improve the exposition in order to earn the full 4 points. You must turn in your assignments on time in order to be able to rewrite your solutions for extra points.

Thus, your scores will not depend solely on your answer, but on the clarity and accuracy of your explanations. You will not get credit for a solution if you are vague or if you omit important details.

Before you turn in you homework, fold the papers lengthwise and write on the outside

your name, Math 4/5/7880, Spring 2013 assignment number, due date

Plagiarism

I encourage you to work together. Studies show that students who work together consistently out-perform those who do not. However, your own work must be written in your own words. Do not “divide up the labor”. Do not turn in work that is not your own. Copying is cheating. This includes copying from another student or copying from a book or website. If you turn in work that is not your own then you will get a 0 on that exam or assignment. If it happens a second time you will get an F in the course.

Exams

There will be three exams, worth 100 points each. The exam dates are listed on the calendar above. Some of the exam questions will be multiple choice; some will be computational; some will require answers in complete sentences.

I will give make-up exams only in case of a documented exigency, such as illness or a funeral. If you are sick the day of the exam then you must call or email that same day if you expect to be able to make up the exam. Otherwise you must arrange for a make-up exam ahead of time. If I am not in my office then you can leave a voice mail message. If you fail to show up for an exam and do not contact me about it until afterwards then you will get a 0 for that exam.

Grades

Your final grade will be determined from your total points earned, based on the following scale:

- 90% points earns an A
- 80% points earns a B
- 70% points earns a C
- 60% points earns a D

I give grades such as A- and C+ sparingly. Scores and final grades will be posted on the UT BlackBoard page for this class.

Faculty cannot give a withdrawal. If you are still registered after the 10th week you will get a grade in this course, whether or not you have stopped attending.