Math 3146/5046 ⋄ Introduction to Complex Variables ⋄ Spring 2017
Syllabus

INSTRUCTOR INFORMATION:

Instructor: Dr. Angelynn Alvarez
Office: MONT 305
Office Hours: MWF 11:05am-12:05pm, or by appointment
Email: angelynn.alvarez@uconn.edu
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COURSE INFORMATION:

Course: MATH 3146/5046 - Introduction to Complex Variables
Section#: 001
Time & Place: MWF 10:10am - 11:00am, MONT 421
Course Webpage: www.aalvarez.math.uconn.edu/math3146-5046_001_spring17/

Course Topics: Complex plane, Riemann sphere, polar coordinates and Euler's formula, complex differentiable functions and Cauchy-Riemann equations, harmonic conjugates, conformal maps. Elementary functions: exp, sin, cos, log, Log, powers. Integration along simple curves, simply connected domains, Cauchy-Goursat theorem, Cauchy integral formula. Power series and the disk of convergence, Taylor and Laurent series, classification of singularities. Cauchy's residue theorem and its use in evaluating real-valued integrals.

Prerequisites: MATH 2110 and 2410, or MATH 2420 or MATH 2144. MATH 5046 is not open to students who have passed MATH 3146.

Course Materials (Required): *Complex Variables and Applications*, 9th edition, by J.W. Brown and R.V. Churchill, **ISBN** 9780073383170

Grading: The grade distribution is as follows:

Homework	10 highest scores × 10 points each = 100 points
Exam 1	100 points
Exam 2	100 points
Final Exam	200 points
Total	500 points

Your final letter grade will be determined using the following table:

(Your Score)/500	Letter Grade		(Your Score) /500	Letter Grade
463-500	A		388-397	C+
448-462	A-		363-387	C
438-447	B+		348-362	C-
413-437	B		300-347	D
398-412	B-		Below 300	F

Homework: Homework in the form of problem sets will be assigned and posted on the course webpage. There will be **13** assignments this semester, and each will be due at the *beginning of class* on the due date (usually on Wednesdays). **NO LATE HOMEWORK WILL BE ACCEPTED.**

- Use plain, white sheets of paper or notebook paper.
- Write legibly and show all work.
  Credit WILL NOT be given if supporting work is NOT provided.
- Write your FULL NAME and NET ID on the first page.
- **Staple** your homework pages together.

*Three of your lowest homework scores will be dropped at the end of the semester.

Exams: There will be **2** exams and a comprensive Final Exam in this class. Exams 1 and 2 will be **50** minutes long. There are no make-ups or re-takes, and there are no early Final Exams. The exam dates are:

Exam 1 - Wednesday 3/1	**Exam 2** - Wednesday 4/12	**Final Exam** - TBA

*Half of your Final Exam score replaces your lowest score out of Exams 1 and 2 (if it helps maximize your grade).

The Use of HuskyCT: Your homework and exam grades will be posted on HuskyCT after they are graded.

Extra Credit: Towards the end of the semester, an optional project/assigment will be available to complete and submit for extra credit. This project/assignment will be worth a total of **20** points. This will give you the a chance to earn extra points to maximize your score. The details of this project will be discussed throughout the semester.

3146 vs 5046: All students will be treated the same, regardless of their seniority. When very challenging problems are to be solved by students, then it will usually be for extra credit only. For simplicity, this course will be usually referred to as "Math 3146" only.

Textbook Reading: It is highly encouraged and recommended that you read the section(s) in the textbook that are discussed in class. Do not read the computation examples only; also focus on definitions, theorems, and important concepts in each section.

The Course Webpage: Please visit the course webpage (linked on page 1 of this syllabus) for the calendar, homework, selected homework solutions, exam reviews, announcements, and other important information.

Use of Electronic Devices: Cellphones must be on silent mode or switched off during lecture. *The use of graphing calculators (any model) are permitted on all exams.* Even though calculators are allowed, you must *show all work* in order to receive any credit on the problem.

Accommodations for Students with Disabilities: If you think or know that you have a disability that needs special accommodation, please see the instructor at the beginning of the semester so that the proper steps can be taken.

Academic Dishonesty: Academic Dishonesty will not be tolerated and will be dealt with appropriately.

Important Dates: For a list of important university dates regarding adding/dropping clases, please visit: http://registrar.uconn.edu/academic-calendar/spring-2017/

Modifications: The instructor reserves the right to make modifications to the syllabus during the semester as necessary. You are responsible for any modifications announced in class class and/or on the instructor's website.