MATH 3160: APPLIED COMPLEX VARIABLES, SPRING 2020

- Meeting: Tuesday and Thursday, 12:25pm-01:45pm, Marriott Library 1130.
- Instructor: Stefan Patrikis, office JWB 309.
- E-mail: patrikis at math.utah.edu
- Office hours: Tuesday after class (1:45-3:00)
- Course Text: Brown and Churchill, *Complex Variables and Applications*. The official course text is the 9th edition, but you should feel free to get a *much* less expensive 8th edition: the text is essentially the same, and homework problems will not refer to section and problem numbers in the text (although they will often be drawn from the text).
- Course Description: This course is an introduction to the study of functions of one complex variable, with topics including analytic functions, complex integration, the Cauchy integral theorem, Taylor and Laurent series, residues, contour integrals, and the Cauchy residue theorem with applications to computing integrals of real functions.
- Prerequisites: "C" or better in MATH 2250 OR (MATH 2270 AND MATH 2280)
- **Requirement Designation:** Please consult with your departmental adviser to confirm how this fits into your program requirements.
- Coursework, Grading, and Expectations:
 - General expectations: You will attend class regularly and regularly read the relevant sections of our textbook to complement the in-class treatment. Please ask questions in class when something does not make sense!
 - Problem sets: There will be regular homework assignments. Please submit a hard-copy in-class the day the homework is due (see below for the late policy). You are welcome to work together on these assignments, but you should write-up the solutions yourself and list on the top of your paper any collaborators. Please strive to make your solutions as neat and legible as possible: pen is often easier to read than pencil, and certainly do not erase and then write over text. The homework is worth 30% of the total grade.
 - Midterms: There will be two midterms, on 2/13 and 3/31, together worth 30% of the total grade.
 - Quizzes: There will be some brief (15 minute) quizzes along the way to the midterms, on 1/16, 1/23, 2/4, 3/3, 3/19, together worth 15% of the total grade. The first quiz on 1/16 will just be to check your basic understanding of how to work with complex numbers.
 - Final Exam: The date is determined by the registrar for our course block: Friday, April 24, 2020, 10:30am-12:30pm, in our usual classroom. The exam is worth 25% of the total grade.
- Late or missed assignment policy: Late assignments will not be accepted unless necessitated by severe illness or personal emergency; in either of those cases, contact me as soon as possible. If you have to miss a class in which an assignment is due, you must drop the assignment off at my office (slipping it under the door is fine) or in my math department mailbox (JWB common room) by the beginning of that class.
- **Disclaimer:** Details of the syllabus are subject to change; I will notify you in advance in class and via email of any changes in assignments or due dates.
- **ADA Statement:** The Americans with Disabilities Act requires that reasonable accommodations be provided for students with physical, sensory, cognitive, systemic, learning, and psychiatric disabilities. Please contact me at the *beginning* of the term to discuss any such accommodation for the course.
- Campus Safety: The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS

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- (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit https://safeu.utah.edu.
- **Personal names/pronouns:** The University of Utah provides class rosters to instructors with each student's legal name as well as "preferred first name" (if previously entered by you in the Student Profile section of your CIS account, which managed can be managed at any time). Please let me know if your preferred first name or pronoun is not as indicated in CIS.
- Addressing Sexual Misconduct: Addressing Sexual Misconduct. Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veterans status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action,135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, SSB 328, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677 (COPS).