MATH 234A: FALL 2018 GRADUATE COMPLEX ANALYSIS

Lectures:

Tuesdays, 4-5:15pm, in Room 133, Yosemite Hall Thursdays, 4-5:15pm, in Room 109, Brighton Hall

Instructor:

Michael VanValkenburgh Room 140, Brighton Hall mjv@csus.edu webpages.csus.edu/~mjv (916) 278-7075

Tentative Office Hours:

Mondays 11am-noon, Tuesdays 12-1pm, and Wednesdays&Thursdays 2-3pm. Also by appointment.

Required Text: Theodore W. Gamelin, Complex Analysis.

Optional Recommended Text: Lars V. Ahlfors, Complex Analysis.

Topics Covered: Complex numbers, elementary complex functions, analytic functions, complex line integrals, power series, laurent series, residue calculus, hyperbolic geometry, harmonic functions, conformal mapping.

See the class webpage for a detailed lecture schedule.

Prerequisites: Math 130B; Math 105B or Math 134 is recommended.

Grading Policy:

25% Homework

15% Hour Exam 1

15% Hour Exam 2

15% Hour Exam 3

30% Cumulative Final Exam

Drop Policy: Please see https://www.csus.edu/math/documents/policies/drop.pdf

Homework and Reading Assignments:

You are expected to read the relevant sections of the book, as listed on the class webpage.

You may do "preliminary work" with others (for example, you may give each other hints), but you are expected to write the detailed solutions on your own. If you get help from some source (including, but not limited to, a person or a website), you must clearly cite that source in your homework. Please do not share complete written solutions.

Exams:

- Exam 1: Tuesday, September 18
- Exam 2: Tuesday, October 16
- Exam 3: Thursday, November 8
- Final Exam: Thursday, December 13, 3-5pm

Exam Protocol:

- You will need pencils/pens and erasers, nothing more. Keep all devices capable of communication turned off and out of sight. Calculators are not permitted.
- Solutions to each exam will be posted promptly after the administration of the exam. You are encouraged to look at the solutions while the exam is still fresh in your mind.
- The final exam will be cumulative, but extra emphasis will be given to material covered after the third exam.
- Do not make arrangements to leave campus prior to the final exam.

Accommodations:

If you require accommodations, please let me know early in the semester so that your learning needs may be appropriately met.

Absences:

You are held responsible for all work missed during absences. Late homework and make-up exams will only be allowed under rare circumstances, and, moreover, only with my explicit written consent.