Syllabus for MAA 4402 Complex Variable, Course Number 81958, Fall 2023

Book: M. Beck, G. Marchesi, D. Pixton, L. Sabalka *A First Course in Complex Analysis* (freely available at http://math.sfsu.edu/beck/complex.html)

Description of the course

This is a well balanced introduction to the basic theory of complex valued functions of one complex variable. The emphasis is put on describing the properties of holomorphic functions in domains and on functions with isolated singularities (locally meromorphic functions). Among the topics to cover are the following: complex analytic functions, the Cuachy-Riemann equations, the Cauchy-Goursat theorem, the Cauchy integral formula, Taylor and Laurent series residues and applications to real analysis, Argument Principle and Rouche's Theorem, linear fractional transformations.

Assessment of the students' progress in class:

The overall grade will be based on two Midterms and on a Final Exam. The Midterms will have weight 30% each, the Final Exam has a weight 40%.

Academic Misconduct Statement

Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly to demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook.

Academic Misconduct includes: **Cheating** – The unauthorized use of books, notes, aids, electronic sources; or assistance from another person with respect to examinations, course assignments, field service reports, class recitations; or the unauthorized possession of examination papers or course materials, whether originally authorized or not. **Plagiarism** – The use and appropriation of another's work without any indication of the source and the representation of such work as the student's own. Any student who fails to give credit for ideas, expressions or materials taken from another source, including internet sources, is responsible for plagiarism.

To learn more about the academic integrity policies and procedures visit <u>integrity.fiu.edu (Links to an</u> external site.)

Accessibility and Accommodation

The Disability Resource Center collaborates with students, faculty, staff, and community members to create diverse learning environments that are usable, equitable, inclusive and sustainable. The DRC provides FIU students with disabilities the necessary support to successfully complete their education and participate in activities available to all students. If you have a diagnosed disability and plan to utilize academic accommodations, please contact the Center at 305-348-3532 or visit them at the Graham Center GC 190.

For additional assistance please contact FIU's <u>Disability Resource Center</u>

Important remark: The Instructor reserves the right to make any changes he considers academically advisable. Any such changes will be announced in advanced in class or by posting them to the e-mail accounts of the students. The students are responsible to be aware of the changes announced this way.