

MATH 762: Complex Analysis II

Course Syllabus for the Spring 2021

Instructor: Dr. Flavia Colonna

E-mail: fcolonna@gmu.edu

Office Hours: By appointment using Zoom.

Prerequisite: Math 661 (Complex Analysis I) or permission of instructor.

Course Textbooks:

1. John B. Conway, *Functions of One Complex Variable I*, 2nd ed., Springer-Verlag, NY, 1978.
2. Donald Marshall, *Complex Analysis*, Cambridge University Press, Cambridge, UK, 2019.

Main Topics: The maximum modulus theorem, spaces of analytic and meromorphic functions, the Riemann mapping theorem, infinite products and factorization of analytic functions, normal families, harmonic functions and the Dirichlet problem.

Course Format: I plan to post on Blackboard (BB) my lectures in written format and hold a live video connection through Zoom. Please, make sure to follow the recommendations below.

- Check frequently your email and any announcements posted on Blackboard. You will be held responsible for any missed assignment, even in case of announced rescheduling.
- Make a short list of questions you wish me to address.

Homework: There will be five homework assignments. Good writing complete with details is required. **Typed work is expected.**

Presentations: Each student will prepare an **oral presentation using slides** on a course topic and be prepared to answer questions on that topic.

Final Exam: It will be posted on BB on the last day of classes. The due date is **Thursday May 6 at 4:30 pm. The exam must be uploaded on BB and your GMU photo I.D. must be included.**

Grading: The homework, the oral presentation, and the final constitute respectively 40%, 30%, and 30% of the final grade.

Have a great semester!