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Mike Jury Department of Mathematics College of Liberal Arts and Sciences

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Publications

Courses Spring 2023

Analysis II (MAA6617) Spring 2023

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Analysis II (MAA6617) Spring 2023

Time and Location

Full course information, day-to-day updates, a weekly schedule lecture topics, and a list of homework assignments will be maintained in Canvas.

Description and Goals

This course is a continuation of MAA6616. The second semester consists of an introduction to functional analysis, including Banach spaces, Hilbert spaces, and the theory of linear operators. Other topics that may be included (depending on time and interest) are harmonic analysis and the Fourier transform, the theory of distributions, the spectral theorem, and an introduction to Banach algebras.

Text: There is no required text for this course. A complete set of lecture notes will be posted on the course Canvas page as the course progresses.

Some standard texts that treat the material covered in this course are:

Real Analysis: Modern Techniques and Their Applications by Gerald B. Folland Real and Complex Analysis by Walter Rudin Real Analysis by H. L. Royden Real Analysis: Measure Theory, Integration, and Hilbert Spaces by Eli Stein and Rami Sharkachi

Some additional references for the second part of the course (on functional analysis) are:

Functional Analysis by Peter D. Lax

A Course in Functional Analysis by John B. Conway

Lecture Notes

Lecture notes will be posted in the course Canvas page.

Grades

Grading will be based on class participation, homework, and exams. There will be a midterm and possibly a final exam, depending on interest. Full grading information will be available in the Canvas page.

Grading will be in accord with the UF policy stated at

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

Academic Honesty

The course will be conducted in accordance with the University honor code and academic honesty policy, which can be found in the student guide

Accommodation for students with disabilities.

"Students with disabilities requesting accommodations should first register with the Disability Resource Center(352-392-8565), https://www.dso.ufl.edu/drc/

by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester."

Online Evaluations.

"Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu

. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/." **Contact information for the Counseling and Wellness Center.**

392-1575 http://www.counseling.ufl.edu/

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