Syllabus: MATH 4326 - 01 – Analysis II – Spring 2012

Requirements: C or better in either MATH 4325 or MATH 3380

Instructor: W. Ted Mahavier; Office: Lucas 200E; 409.880.2290; ted.mahavier@lamar.edu

Office Hours: MWF 8-10 & 1:30-2:30; TR 8-11, 2-3; by appt; or anytime I’m in my office.

Course Materials: All materials will be provided by instructor.

Text: Materials provided by instructor, www.mathnerds.org/ted, click “analysis”

Course Subject Outline: integration theory, measure theory, basic set theory, successive approximations and solutions to differential equations, sequences, subsequences, Cauchy sequences, series, point-wise and uniform convergence, uniform continuity

Student Learning Outcomes: The two primary objectives for students in this course are (1) to master the material listed in the Course Subject Outline and (2) to continue to develop and mature develop their ability to prove theorems. Students will continue to hone their mathematical writing skills, their ability to follow the proofs of other students, their abilities to question the work of other students, and their ability to communicate mathematics orally.

Attendance Policy: You are responsible for everything that goes on in class regardless of the reason for an absence. I reserve the right to drop any student for three unexcused absences.

Course Goals and Objectives: To actively involve the students in the process of learning the mathematics provided while developing their appreciation of the subject. Building on Math 3380 (4325), students will continue to learn proof techniques and principles of analysis. Make proper connections with the study of continuity, derivative, and integral that were begun in Math 2413 and Math 2414. Extend their understanding of the integration theory, measure theory, basic set theory, successive approximations and solutions to differential equations, sequences, subsequences, Cauchy sequences, series, pointwise and uniform convergence, uniform continuity

Grading: Your grade will be completely determined by your presentations in the class.

Honesty policy: Any behavior outlined in http://www.lamar.edu/academic-policies-s will receive a grade of “F” on the paper, test and possibly in the course.

Students With Disabilities: I’ll help in any way that I can! Please see http://dept.lamar.edu/sfswd/ to learn more about the services Lamar offers.

Exam Date and Time: 11:00-1:30, Monday, May 14th.

Drop dates: Final date to drop without penalty: See www.lamar.edu, view Academic Calendar

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Make-ups: Make-ups are given during the last week of classes. Contact me and set up a date for makeups.

Note: I reserve the right to vary from this syllabus and probably will.