MATH 501-01: Introduction to Analysis I, Spring 2018
SYLLABUS

Lecture 12:00–12:50 Monday, Wednesday and Friday, NS 130.

Professor Lee Larson, Natural Sciences 323, 852-6826, lee.larson@Louisville.edu.

Office Hours 10:00–10:50, MWF. Feel free to ask about appointments for other times.

Web There is a Web page for this course at math.louisville.edu/ lee/18Spring501. It contains late announcements, corrections, homework assignments and homework solutions.

Text Several texts will be used for this course. They are all available for free download.

The most important source is my lecture notes. They are very detailed and available to download as PDF files at math.louisville.edu/∼lee/ira/. The course will follow the order of material in my lecture notes. These notes are updated quite often, so you should check back every few weeks to grab the most current files.

A good supplement is *Elementary Real Analysis* by Thomson, Bruckner and Bruckner, Prentice-Hall, 2nd ed., © 2008, ISBN 143484367X. This book may be downloaded in PDF (Acrobat Reader) format from math.louisville.edu/∼lee/18Spring501/TBB.pdf. Luddites can purchase a paper-bound edition from Amazon.

A more elementary text is *Introduction to Real Analysis* by William F. Trench, ISBN 0-13-045786-8. The author's download address is ramanujan.math.trinity.edu/wtrench/misc/index.shtml. It was formerly published by Pearson, and used copies are still available around the Web, for those who want a bound pulp copy.

Plan This course will contain much of the material from the first seven chapters of the lecture notes This is difficult material, so students should be prepared to spend several hours working outside of class for every class period.

Homework Homework problems will be assigned nearly every lecture. They will usually be due at the beginning of the class period one week later. Each problem will be worth 10 points, although I reserve the right to very rarely give as many as 5 extra points for an especially clever or original solution. In addition, more challenging extra credit problems will occasionally be assigned. The extra credit problems are optional for students taking this course for undergraduate credit and mandatory for those taking it to earn graduate credit.

Please submit each problem solution on a separate sheet of paper to make my grading easier. Also, make the problem number prominent. (By "problem number" I mean the number the problem was assigned in class and not the number of the problem in the text, if any.) Solutions to the homework problems will be posted on the class Web page soon after the problems are due.

Students are encouraged to work in groups on the homework, but when the time comes to compose your solution, you should do it yourself. If n identical solutions are submitted by a group of students, each of those students will earn $\lfloor p/n \rfloor$ points, where p is the score for the solution.

Anyone submitting a solution copied from another source will earn zero points.

Grading Your grade will be based upon the total points earned from the homework problems. A "curve" based upon these points will be determined after everything has been graded. The final curve will be no stricter than a standard 90-80-70-60 scale. If a student is taking the course for undergraduate credit, the extra credit points will be added on after the curve is determined, so the extra credit can raise and not lower the final grade. A separate curve for graduate students will include the extra credit.

At any time during the semester you may ask me how you're doing and I'll make an approximation of your current letter grade.

The scores for the homework will appear on Blackboard shortly after the problems are graded. You should check your Blackboard grades once in a while to make sure my records agree with yours.

Disabled Students The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact the Disability Resource Center (852-6938).

Clery Act Notification Sexual misconduct (including sexual harassment, sexual assault, and any other nonconsensual behavior of a sexual nature) and sex discrimination violate University policies. Students experiencing such behavior may obtain confidential support from the PEACC Program (852-2663), Counseling Center (852-6585), and Campus Health Services (852-6479). To report sexual misconduct or sex discrimination, contact the Dean of Students (852-5787) or University of Louisville Police (852-6111).

Disclosure to University faculty or instructors of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on campus, in a University-sponsored program, or involving a campus visitor or

University student or employee (whether current or former) is not confidential under Title IX. Faculty and instructors must forward such reports, including names and circumstances, to the University's Title IX officer.

For more information, see the Sexual Misconduct Resource Guide on the Web: louisville.edu/hr/employeerelations/sexual-misconduct-brochure.

Changes I reserve the right to make changes in this syllabus when necessary to meet learning objectives, to compensate for missed classes, or similar reasons. Changes to the syllabus will be noted on the class Web page.