Math 108 – Introduction to Formal Mathematics Fall 2014

Instructor: Dr. Corey Shanbrom Email: <u>corey.shanbrom@csus.edu</u> Office: Brighton 144 Office Hours: Monday 2-3:30pm and Thursday 10-11:30am, or by appointment

Prerequisites: Grade of C- or better in Math 31 and Math 35. It is your responsibility to prove to me that you have met this prerequisite by the end of the second week; any student who fails to do so will be dropped.

Text: <u>Book of Proof</u> by Richard Hammack, 2nd ed. This book is required and available free online. Printed copies are cheaply available in the bookstore. I am also recommending <u>A Gentle</u> <u>Introduction to the Art of Mathematics</u> by Joseph Fields. This book is also free online, with printed copies cheaply available on Amazon. I have provided links to downloads as well as pdf files of these books on SacCT.

Grading: Writing assignments 15%, Homework 25%, Midterms 30%, Final 30%. This is an approximation. Letter grades will be determined by a curve at the instructor's discretion. Detailed instructions for writing assignments will be provided later in the semester.

Exams: There will be two midterms, each worth about 15% of your final grade. No notes, books, electronic devices, or bathroom breaks will be permitted during any exam. Exam makeups will be permitted only in the case of a documented emergency. Midterm dates will depend on our progress, but will be announced at least one week before the exam. The final will be comprehensive and held Monday, December 15, 10:15am--12:15pm.

Homework: Problems from the textbook will be assigned every lecture and will be due in class every Friday. Problems assigned on FMW are due the following Friday. Many problems will be assigned – only some will be graded. Exams will include HW problems. Late HW will be accepted at a penalty. Take your homework seriously --you will learn more by struggling with homework problems and reading my feedback than you will by sitting in class.

Resources: I am your primary source for help with the material, but other resources are available, including your classmates. You can and should form study groups; these can meet in the Math Lab in Brighton 118. You should read each other's proofs. Also, other textbooks and websites (eg, Wikipedia, Mathworld, even Youtube) are helpful.

Catalog Description: Logic of mathematical proof, set theory, relations, functions. Examples and applications from set cardinality, algebra, and analysis.

Remarks: If you have a disability and require accommodations, you need to provide disability documentation to SSWD, Lassen Hall 1008, and discuss your needs with me as soon as possible.

Cheating of any type will result in disciplinary action and an automatic fail. This will show up on future background checks, grad school applications, etc. If you are unsure what constitutes cheating, please see Sac State's Academic Honesty Policy; I have provided a link on SacCT.