MATH 3310: Introduction to Proof
Section 02, TT 11:00, MA 115.

Course Information:

Instructor:	Chris Monico
Email:	`c.monico@ttu.edu`
Office:	MA-252
Office Hours:	M,T,Th 1:00-3:00,, or by appointment.
Required Text:	"Chapter Zero" by Carol Schumacher, Second Edition.

Course outline/Important Dates: The notion of *proof* is fundamental to mathematics; this is precisely what distinguishes mathematics from science (science is based on the scientific method, whereas mathematics is based on proof). Reading and writing proofs is an acquired skill, and the intent of this course is to give the student practice with both.

We will cover up to and including Chapter 5 of the text. Time permitting, we will try also to cover Chapter 6 and both appendices.

Exam 1	Tuesday, 10/7
Last day to drop a course	Monday, 10/27
Exam 2	Thursday, 11/13
Last day of classes	Wednesday, 12/3
Final Exam	Monday 12/8, 7:30–10:00 am.

Attendance: Class attendance is *mandatory*. It is assumed that you will attend, so I will not waste your time by taking attendance. However, keep in mind that it will be decidedly difficult for you to pass this course if you do not attend. If you arrive late to class, enter quietly. If you miss a class, it is your responsibility to find out what you missed (assignments, notes,...); either ask a fellow student or come by my office to find out. If you are absent for an exam, you will be permitted to make it up *if and only if* you are absent for one of the following reasons:

- You are out of town performing duties on behalf of the university (i.e., athletics). Advance notification is required.

- Religious holiday (see below).

- **Severe** illness, documented by a physician.

- Death in the family.

- Other extenuating circumstances, at the instructor's discretion (I am *not* very generous with this).

Expected Learning Outcomes Students will

- construct direct proofs,

- construct proofs by mathematical induction,

- construct proofs by contradiction,

- use the pigeonhole principle,

- carry out case analysis.

Assessment of learning outcomes The expected learning outcomes for the course will be assessed through scheduled exams and homework assignments. Homework will be assigned regularly (probably every class meeting) and collected weekly. Your final grade in this course will be determined by the components and grading scale below.

Grade components

Homework:	40%
Exam 1:	20%
Exam 2:	20%
Final Exam:	20%

Grade Scale

90–100%	A
80–89%	B
65–79%	C
55–64%	D
0–54%	F

ADA Accommodation: Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from AccessTECH. No requirement exists that accommodations be made prior to completion of this approved university procedure.

Religious Holy Day Observance (OP 34.19)

1. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20.

2. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

3. A student who is excused under Section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.