MATH 4362: Elementary Number Theory
Section 01, TT 9:30, MA 012.

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:	"Fundamentals of Number Theory" by William J. LeVeque.

Course outline/Important Dates: We will cover Chapters 1-5 of the text, omitting some occasional sections. In addition, we will cover some topics not in the text, including large prime generation, RSA and Diffie-Hellman cryptography.

Exam 1	Thursday 10/9
Last day to drop a course	Monday, 10/27
Last day of classes	Wednesday, 12/3
Final Exam	Wednesday 12/10, 7:30–10:00am.

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,...). 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.

Expected Learning Outcomes Students will learn how to think and reason abstractly in the context of number theory, derive basic concepts, and learn how to write correct and clear mathematical arguments in this context. Concepts and skills to be mastered by the students include but are not limited to the following: divisibility, the Euclidean Algorithm, the Fundamental Theorem of Arithmetic, congruences, the Chinese Remainder Theorem, theorems of Fermat, Wilson and Euler, and quadratic reciprocity.

Assessment of learning outcomes The expected learning outcomes for the course will be assessed through scheduled exams, homework assignments, and in-class presentations. 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%
Final Exam:	20%
In-class presentations:	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.