

Central Washington University

Course title and number:

Math 101-001, -003

Course offered: Winter 2016

Credits: 5 credit hours

Instructor contact information: Dr. Frank Underdown Jr.; Cell# 509-989-5533 (please, no call after 9:00 pm); email:Contact me through Canvas

Course time & place: MoTuWeThFr

Math 101-001: 08:00 – 08:50am, Bouillon Hall 144

Math 101-003: 10:00 – 10:50am, Bouillon Hall 102

Note(s):

- 1) I will upload additional course materials to Canvas
- 2) You will also be able to communicate with me via Canvas.

Office: Black Hall room 225-34

Office hours: 12:00 – 1:00pm Mon - Fri

Textbook: Using & Understanding Mathematics: A Quantitative Reasoning Approach, 6th ed, by Bennett & Briggs

Course Content: Chapters 2 to 8

Equipment: Scientific calculator and computer

CATALOG DESCRIPTION: Selected topics from the historical development and applications of mathematics together with their relationship to the development of our present society.

PREREQUISITE: either at least 500 on the SAT, 19 on the ACT, a Compass test score of either 50-Pre-Algebra, 26-Algebra, 31-College Algebra, or 31-Trigonometry, or completed MATH 100B or a higher level math class.

Purpose of course:

This is a transition course. The purpose of this course is to prepare you to develop the formal thinking that is needed to master higher level math courses.

Measurable Goals:

- 1) Able to perform the proper order of operations in a mathematical calculation.
- 2) Able to use scientific notation to display very large and small numbers.
- 3) Able to use scientific notation in calculations: addition, subtraction, multiplication and division.
- 4) Able to calculate simple & compound interest; calculate credit card finances charges and payments.
- 5) Able to perform Modular arithmetic and apply it to cryptography. Applications include ISBNs, UPCs, Credit Card numbers and other uses.

Outline of Course:

This is the intended schedule for the class. My plan is to cover a chapter per week. However, it is not unusual to be a day or so behind or ahead of this proposed schedule, but we will cover the material in this order.

Week 1: Introduction; orders of operation; review basic math; and Scientific Notation part I (large 7 small numbers)

Week 2: Scientific notation part II (addition, subtraction, multiplication and division); personal finance (simple interest); **Quiz 1**

Week 3: Personal Finance/compound interest & credit cards (finance charges)

Week 4: Personal finance/credit cards (calculating payment amounts); Intro to Cryptography & modular arithmetic; **Quiz 2**

Week 5: Cryptography cont.

Week 6: Intro Function & Modeling, Linear functions (Linear Growth & Decay); **Quiz 3**

Week 7: Exponential functions (Growth & Decay) parts I and II.

Week 8: Intro to Statistics & Probability; Statistics & Probability part II; **Quiz 3**

Week 9: Probability Part III and IV.

Week 10: **Quiz 5**; Finish final project; presentation on Research project (final exam)

Final Exam: Research Project in Cryptography. Yo will work in groups on this project. Power-point slide are due the week before finals week. Proposals are due the second week on class.

Important Dates:

January 5, Classes Begin

January 18, Martian Luther King Day, no classes

March 11, Classes End

March 14-17, Final Exam week

March 22, Grades due

ASSESSMENT METHODS AND GRADING SCALE

Your grade will be based on the following(it is a weighted average):

Homework 25%

Quizzes 50%

Final exam (project) 25%

The grading scale follows:

94-100/A/4.0	80-83/B-/2.7	67-69/D+/1.3
90-93/A-/3.7	77-79/C+/2.3	64-66/D/1.0
87-89/B+/3.3	74-76/C/2.0	60-63/D-/0.7
84-86/B/3.0	70-73/C-/1.7	below 60/F/0

Attendance policy: Attendance is mandatory. Three or more unexcused absences will result in you failing the course. You will be responsible to do your homework and take exams on time.

Only if you have a pre-approved absence, or documented family/medical emergency will you be allowed to make up the work.

ACADEMIC HONESTY

As members of the Central Washington University learning community, students are not to engage in any form of academic dishonesty. Forms of academic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, grade tampering, and misuse of computers and other electronic technology. Students who engage in academic dishonesty may receive an academic penalty or a disciplinary penalty or both. The disciplinary consequences of engaging in any form of academic dishonesty include reprimand, probation, suspension, and dismissal. A student who knowingly helps or attempts to help another individual to violate the University's policy on academic honesty also may be subject to academic as well as disciplinary penalties.

Quizzes/ EXAMS:

1) Work QUIZZES by yourself. Do NOT collaborate on quizzes. Any students who collaborate on the exam will receive a zero on the exam.

2) The Final Exam is a research project. You will work in groups on your project. Your final exam will be your presentation of your project during finals week.

STUDENTS REQUIRING SPECIAL ACCOMMODATION

Central Washington University provides reasonable accommodations to students with disabilities. Students who need course accommodations because of a disability, have emergency medical information, or need special arrangements in case the building must be evacuated, should notify their instructors as soon as possible.