QUANTITATIVE SKILLS AND REASONING

MATH 1001, FALL 2019

University of North Georgia

CRN #2724 & 6708 at 10:00 am – 10:50 am MWF, Room 320

INSTRUCTOR

Name	Michael Goodroe, M. Ed.
Office	740
Phone	(706) 310 - 6334
Email	michael.goodroe@ung.edu
Hours	1:00 pm – 2:00 pm MTW & 10:00 am – 10:50 am TR
	Or by appointment

UNG Supplemental Syllabus Links:

http://ung.edu/academic-affairs/policies-and-guidelines/supplemental-syllabus.php

http://ung.edu/academic-affairs/faculty-handbook/3-faculty-responsibilities/3.7-class-attendance-policies/3.7.1-student-attendance-policy.php

COURSE

DESCRIPTION

This course emphasizes quantitative reasoning skills needed for informed citizens to understand the world around them. Topics include <u>set theory</u>, <u>logic</u>, <u>basic probability</u>, <u>data analysis</u>, and <u>modeling from data</u>. Thus, it is an alternative in Area A of the Core Curriculum and **is not intended to supply sufficient algebraic background for students who intend to take College Algebra, Precalculus or the Calculus** for mathematics and/or science majors.

Credit: 3 hours.

COURSE OBJECTIVES

a) **Course Introduction**: (15 %)

- Introduction to Problem Solving and Reasoning: Sections 1.1 and 1.2

b) **Main Requirements**: (80%)

- Sets and Set Operations: Sections 2.1-2.3
- Logic: Sections 3.1-3.4
- Probability: Sections 13.1-13.3
- Data Analysis: Sections 14.1 - 14.5
- Modeling: 7.1-7.4

c) **Optional Topic**: (5 %)

- Math and the Humanities – Graph Theory: Sections 4.1 and 4.2

MATERIALS

- Required Text: Pirnot, *Mathematics All Around*, 6th Ed., Pearson, 2018.
- Scientific Calculator: **TI-30XS** *Multiview* – recommended.
- Computer with access to the Internet and access to computer based Spreadsheet software: **MS Excel** (required).
- **Course Website:** http://faculty.ung.edu/mgoodroe/index.html

GRADING

Your final grade will be determined as follows:

Exams (3)	30%
Quizzes/Assignments/Participation	20%
Attendance	10%
Project	25%
Final	15%

Grade Distributions:

90+	A
80 – 89	B
70 – 79	C
60 – 69	D

59<   F

EXAMS

Students need to be in the classroom and prepared to take the exam five minutes prior to the scheduled class start time. If you will be late, please notify me via email as soon as possible prior to the start of the exam. If you miss the exam without prior notification and re-scheduling, a grade of zero will be recorded (see make -up policy below).

Calculator use: you may use a hand-held calculator for exams. However, you **will not be permitted to use the calculator function on your cell phone or any WiFi connected device**.

If you need to leave the classroom during the exam, please do so quietly and be respectful of other students.

MAKEUP WORK

No make-up of exams/quizzes/homework assignments/Projects will be given. If you miss <u>one</u> of the exams, then your Final Exam score will replace the missed exam. If you take all exams, then the Final Exam score will replace your <u>single</u> lowest score, assuming your final exam score is greater than your lowest exam score.

If you know in advance that you will not be present during an exam, please notify me via email as soon as possible to schedule taking the exam prior to the actual exam date. No exams will be scheduled **after** the actual exam date, only prior.

POLICIES

ATTENDANCE

Studies overwhelmingly support the fact that when students regularly attend their mathematics courses, they are much more likely to succeed! Learning mathematics requires students to engage and actively participate in mathematics. Being absent from class greatly reduces your chances to be involved in your own learning.

UNG Student Attendance Policy: http://ung.edu/academic-affairs/faculty-handbook/3-faculty-responsibilities/3.7-class-attendance-policies/3.7.1-student-attendance-policy.php
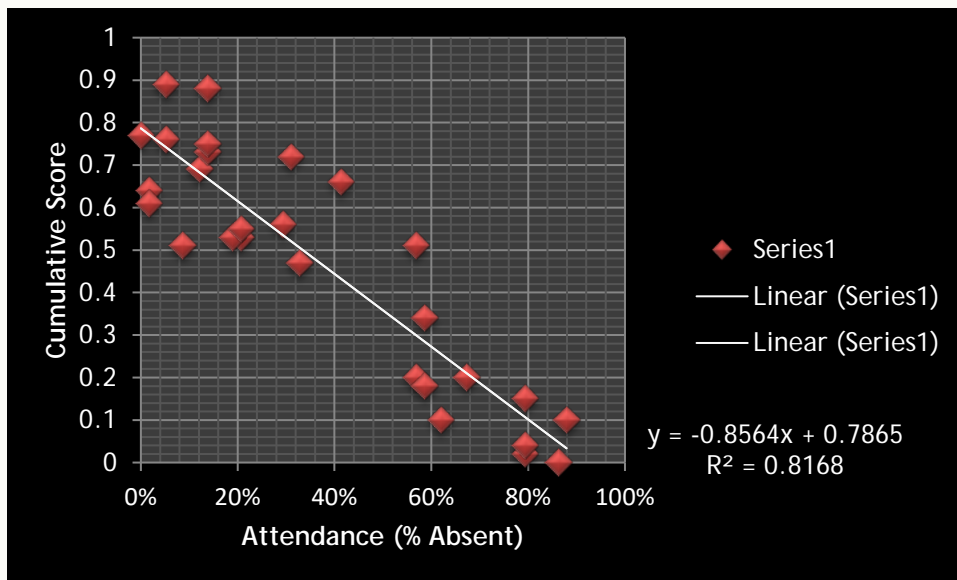
Please be aware that UNG policy states that a student who has missed 10% or more in a class can/will be "WITHDRAWN" from class either receiving a grade of "W" or "WF" depending if absences occur before or after the withdraw date! Additionally, if you are withdrawn from Math 1001 you will also be withdrawn for Math 0997! I will be recording attendance everyday starting on the first day through the last day of classes. Therefore, you can miss 5 days during the semester.

Breakdown of Attendance (Participation) score:

0% - 2%   100

3% - 5%	90
6% - 8%	80
9% -10%	70
11% - 14%	60
15%+	0

Below is a linear graph from a recent class, which relates the percent of student absences with student's cumulative scores. All my classes have a similar graph! As you can see, as the percent of absences increases to the right on the horizontal axis, cumulative scores decrease on the vertical axis. Conversely, the less a student is absent, say between 0% and 20%, student scores increase. I encourage you to make a personal commitment to attend class regularly and to be proactive in your own education.

SCHOLASTIC DISHONESTY

See attached link of UNG's Student Conduct Code:

http://ung.edu/academic-affairs/policies-and-guidelines/supplemental-syllabus.phpb

DISRUPTIVE BEHAVIOR

Students who exhibit behaviors which are considered to obstruct or disrupt a class or its learning activities will be considered under the Board of Regents Policy on Disruptive Behavior. **Behaviors which will be considered to be inappropriate in our classroom include sleeping, eating, coming in late/leaving early, interrupting others, talking out of turn, cell phone use of any kind, inappropriate behavior during group work, verbal or nonverbal behavior that is disrespectful of other students or the teacher.** Students who exhibit disruptive behavior will be given a verbal warning for the first infraction. If the behavior continues, the student will be asked to leave the classroom. Prior to returning to our classroom, the student will need to make an appointment to see me during office hours. Any further infractions would be referred to the Disciplinary Committee of the College.

Cell phones:

1.   Should be **turned off** (or in **silent mode**) and out of sight during all classes.

MISCELLANY

USEFUL LINKS

KHAN Academy	http://www.khanacademy.org/
Pearson's Intermath	http://interactmath.com/ChapterContents.aspx
MathTV YouTube Channel	http://www.youtube.com/user/MathTV
Purplemath	http://www.purplemath.com/

ACADEMIC SUPPORT

You are strongly encouraged to go to the SRC or LS Math Lab, study in groups, and see me for help outside of class. All of these are free! Students who get help outside of class are typically much more successful than those that do not.

SRC hours are: (Math Tutoring)

- ❖ Monday-Thursday 8:00 am – 5:00 pm
- ❖ Friday   8:00 am – 3:00 pm