MATH LITERACY COLLEGE STUDENTS

MLCS 0099, SUMMER 2015

University of North Georgia

CRN # 3377; 11:05 PM – 12:30 PM MTWR; Room 320

INSTRUCTOR

Name	Michael Goodroe
Office	311 B
Phone	(706) 310 - 6334
Email	michael.goodroe@ung.edu
Hours	MTWR 01:00 PM – 02:00 PM

Important Dates			
	1.)	Add/Drop	June 1 – 3, 201
	2.)	Withdrawal	June 30, 201
	3.)	Final Exam	July 29, 2015
			@ 11:00 pm – 1:00 pm

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 integrates numeracy, proportional reasoning, algebraic reasoning and understanding of functions. Students will develop conceptual and procedural tools that support the use of the key mathematical concepts in a variety of contexts.

This course prepares students requiring Learning Support (or otherwise advised to refresh their Mathematical Literacy) to take MATH 1001 (Quantitative Skills and Reasoning.)

MLCS 0099 is not intended to prepare students for MATH 1111. Students needing MATH 1111 are advised to enroll in MATH 0097 or MATH 0099 as placement tests indicate.

MLCS 0099 is a four hour course with no pre-requisites. READ 0099 is co-requisite if required by placement.

Additional notes:

MLCS 0099 provides institutional credit only. A letter grade of C or better is required in MLCS 0099 in order for the student to proceed to MATH 1001. Students have three consecutive semesters to successfully complete MLCS 0099 and MATH 1001, at which time the student's Math Learning Support will be satisfied without further exit testing, as long as the student remains in a major not requiring College Algebra.

Should the student change to a major requiring MATH 1111, the student must satisfy the requirements to enter that course (Compass Test) and enter the regular College Algebra sequence at the appropriate place.

COURSE OBJECTIVES

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COURSE OBJECTIVES

NUMERACY GOAL: *Students will develop and apply the concepts of numeracy to investigate and describe quantitative relationships and solve problems in a variety of contexts.*

Students will:

Demonstrate operation sense and communicate verbally and symbolically the effects of common operations on numbers.

Demonstrate competency in using and an understanding of magnitude in the context of place values, fractions, and numbers written in scientific notation.

Use estimation skills, knowing how and when to estimate results, solve problems, detect errors, and check accuracy.

Apply quantitative reasoning to solve problems involving quantities or rates

Demonstrate measurement sense.

Demonstrate an understanding of the mathematical properties and uses of different types of mathematical summaries of data, such as, measures of central tendency, and mathematical models.

Read, interpret, and make decisions based upon data from graphical displays, such as line graphs, bar graphs, scatterplots, and histograms.

PROPORTIONAL REASONING GOAL: *Students will represent proportional relationships and solve problems that require an understanding of ratios, rates, proportions, and scaling.*

Students will:

Recognize proportional relationships from verbal and numeric representations.

Compare proportional relationships represented in different ways.

Apply quantitative reasoning strategies to solve real-world problems with proportional relationships based on an understanding that derived quantities may be described with whole numbers, fractions, or decimals, or in a combinations of these, and that to fully explain these relationships, units must be used.

ALGEBRAIC REASONING GOAL: *Students will reason using the language and structure of algebra to investigate, represent, and solve problems.*

Students will:

Understand various uses of variables to represent quantities or attributes.

Describe the effect that a change in the value of one variable has on the value(s) of other variables in the algebraic relationship.

Construct and use equations or inequalities to represent relationships involving one or more unknown or variable quantities to solve problems.

FUNCTIONS GOAL: *Students will represent relationships between quantities in multiple ways and solve problems that require an understanding of functions.*

Students will:

Translate problems from a variety of contexts into a mathematical representation and vice versa. Representations will include linear, exponential, and an introduction to squaring functions.

Describe the behavior of common types of functions using words, algebraic symbols, graphs, and tables.

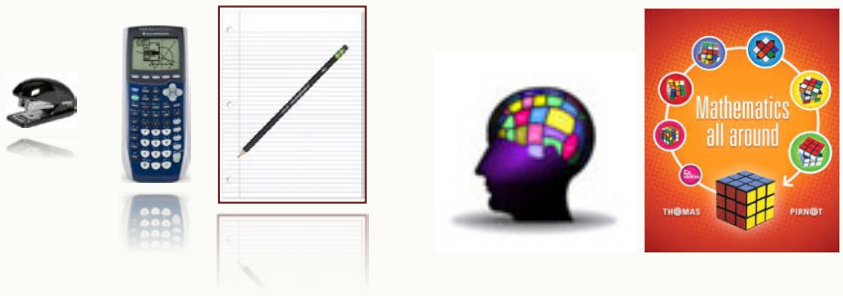
Identify when a linear model or trend is reasonable for given data; when a linear model does not appear to be reasonable, know how to explore the applicability of other models.

Identify important characteristics of functions in various representations.

Use appropriate terms and units to describe rate of change.

Understand that abstract mathematical models used to characterize real-world scenarios or physical relationships are not always exact and may be subject to error from many sources, including variability.

MATERIALS



Course Website: http://faculty.ung.edu/mgoodroe/index.html

Text: 1.) Mathematics All Around 5th Edition Pearson 2014, Pirnot, Thomas L.

ISBN: 0-321-83699-5

GRADING

Your final grade will be determined as follows:

Exams (3)	45%
Assignments/Quizzes	30%
Final(Cumulative)	25%

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 or come late 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.

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

MAKEUP WORK

No make-up of exams/quizzes/homework assignments will be given. If you miss **one** 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 single 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

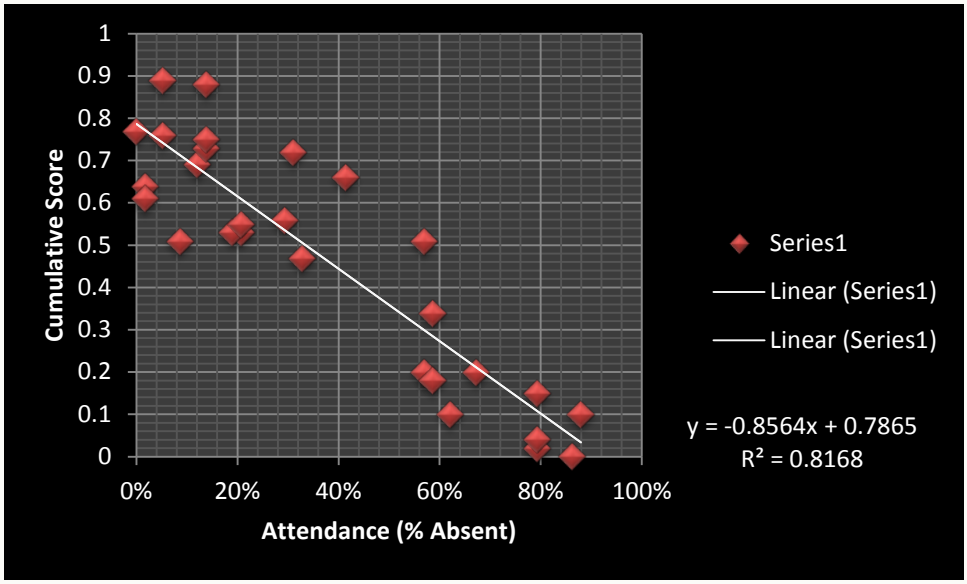
UNG Student Attendance Policy: http://ung.edu/academic-affairs/faculty-handbook/3-faculty-responsibilities/3.7-class-attendance-policies/3.7.1-student-attendance-policy.php

Data 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. Though attendance in this course is not an element of your cumulative score, students who regularly miss class tend to have very low scores. Therefore, I will record your attendance daily.

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.

Please be aware that UNG policy states that a student who has missed 10% or more in a class can/wil be "WITHDRAWN" from class either receiving a grade of "W" or "WF" depending if absences occur before or after the withdraw date! I will be recording attendance everyday

starting on the first day through the last day of classes. Therefore, you can miss 6 days during the semester.



SCHOLASTIC DISHONESTY

See attached link of UNG's Student Conduct Code:

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

DISTRUPTIVE 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** during all classes.
2. Should be put away and not visible during class.

3. Any use of a cell phone, including but not limited to, sending/receiving calls, texting, checking the Internet is not permitted during class, with the exception of Instructor permitted use.

Computers or Tablets:

1. Are not permitted unless prior arrangements are made with your Instructor.

MISCELLANY

USEFUL LINKS

University of North Georgia – Oconee Math Tutor: *Ms. Patricia Short*, **Email:patty.short@ung.edu**; **Phone: 706-310-6298; Room: SRC 572**

http://ung.edu/learning-support/academic-resources.php

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/
UNG-Oconee Math	https://web.ung.edu/media/MathHelp

Class Files – All in-class notes using the Smartboard will be posted daily after each class. Additionally, exam keys will be posted after each exam has been taken.

ACADEMIC SUPPORT

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

SLC hours are: (Math Tutoring)

Monday-Friday 8:00 AM – 9:00 PM

http://www.gsc.edu/academics/labs/oconee/Pages/Math.aspx