

# SUPPORT FOR COLLEGE ALGEBRA

MATH 0999, FALL 2017

# University of North Georgia

CRN # 3702; 11:00 a.m. - 11:60 a.m. MWF, Room 320

# **INSTRUCTOR**



Michael Goodroe Name

Office 740

(706) 310 - 6334 Phone

**Email** michael.goodroe@ung.edu

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

Office Hours T,F 8:00 a.m. - 8:50 p.m. &

M,T,W 1:00 p.m. - 2:00 p.m.

1.) Add/Drop August 25

> 2.) Withdrawal October 13

3.) Final Exam Package December 6

Math Jam Fridays 12:00 p.m. - 2:00 4.)

p.m. rm#320

## **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**

A course designed to allow students to simultaneously satisfy their LS requirements and take Math 1111, an Area A math course. The course will cover the Beginning or Intermediate Algebra topics needed for the student to be successful in College Algebra. The course allows the instructor to assist the students with any deficiencies they may have while attempting the College Algebra topics. The material covered in MATH 0999 is meant to provide background information or just-in-time remediation of the topics covered in MATH 1111. Topics to be covered include: polynomial, rational, and radical expressions and equations, quadratic functions and their graphs, and systems of equations.

Credit: 3 hours.

Course Pre-requisites: Admission requirements will be determined on a semester to semester basis. Admission is dependent upon the student's MPI score. Completion of MATH 0989, Foundations of College Algebra, with a grade of "C" or higher is required if the student initially places in Foundations of College Algebra.

Course Co-requisite: MATH 1111 College Algebra

Additional Policies Pertaining to Learning Support:

- Students who withdraw or are withdrawn from MATH 0999 may not remain enrolled in MATH 1111 and vice versa.
- Students who withdraw from MATH 0999 and MATH 1111 courses will not, however, be required to withdraw from other collegiate courses not directly related to the Learning Support requirement. While there is no limit on the number of attempts that

students may have in MATH 0999, students with LS requirements who have not completed Area A of core by the time they earn 30 hours of credit are restricted to taking *only* LS coursework until the LS requirement is completed. Therefore, withdrawals and non-passing grades affect completion of Area A. (see the table below)

- You must have an A, B, or C to pass MATH 0999.
- Students who pass MATH 0999 but do not successfully complete MATH 1111 must repeat both MATH 0999 and MATH 1111. (see the table below)
- Students will exit Learning Support upon successful completion (defined as a grade that satisfies the Area A requirements for that course at that institution) of MATH 1111. Their Learning Support requirements remain until they have successfully completed MATH 1111. This means that students with this Learning Support requirement must register for MATH 0999 and MATH 1111 every semester until they successfully complete MATH 1111.
- Visit <a href="http://ung.edu/learning-support/policies.php">http://ung.edu/learning-support/policies.php</a> for a more comprehensive list of USG and UNG Learning Support policies.

	Pass MATH 0999	Fail MATH 0999
Pass MATH 1111	Exit Learning Support	Exit Learning Support but receive failing grade for MATH 0999
Fail MATH 1111	Remain in LS; repeat MATH 0999 and MATH 1111	Remain in LS; repeat MATH 0999 and MATH 1111

## Changing Pathways from STEM to Non-STEM:

If a student has passed	They may take
MATH 0989	MATH 0997 + MATH 1001
MATH 0999 only	MATH 0997 + MATH 1001
MATH 0999 + MATH 1111	

• If no progress has been made in the STEM pathway, then the student's MPI score will be used to place the student in the Non-STEM pathway. Attempts (grades of WF, D, F or U) in MATH 0989 count toward the total of two attempts allowed in Foundations-level LS math. Grades of A, B, C, or W in MATH 0989 do not count toward the two attempts permitted in Foundations-level LS math.

#### COURSE OBJECTIVES

## After completion of the course the student will be able to:

- a. Apply Introductory Algebra concepts
- b. Solve Linear Inequalities
- c. Find and Graph Equations of Lines, Understand and Apply Knowledge of Functions
- d. Algebraically Solve Systems of Linear Equations
- e. Simplify and Solve Rational Expressions and Equations
- f. Solve Radical Equation and Apply Properties of Complex Numbers
- g. Algebraically Solve Quadratic Equations and Graph/Translate Quadratic Functions

### Additionally, Students will be able to:

- Apply the order of operations
- Perform operations on fractions
- Use exponential notation, apply rules of exponents and negative exponents
- Solve linear equations
- Solve linear inequalities
- Perform operations on polynomials
- Factor polynomials
- Perform basic operations on radical expressions
- Solve quadratic equations using variety of methods including the quadratic formula
- Perform basic operations on rational expressions
- Simplify complex fractions
- Solve radical equations
- Solve rational equations
- Solve and classify systems of linear equations
- Apply function concepts and notation
- Graph a linear function
- Write an equation of a line given variety of conditions
- Solve and classify systems of linear equations

#### **MATERIALS**



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

**Text**: 1.) eTextbook - College of the Sequoias - Intermediate Algebra (Main) https://www.cos.edu/Faculty/jonb/Pages/Math-230-Intermediate-Algebra.aspx

- 2.) eTextbook College of the Redwoods Intermediate Algebra (Supplemental) <a href="http://msenux2.redwoods.edu/IntAlgText/">http://msenux2.redwoods.edu/IntAlgText/</a>
- 3.) eTextbook College Algebra **(Main Text for Math 1111 by Dr. Kidane)** <a href="http://www.stitz-zeager.com/szca07042013.pdf">http://www.stitz-zeager.com/szca07042013.pdf</a>
- 4.) Desmos Graphing Site (**Log on and Create an Account for FREE**) <a href="https://www.desmos.com">https://www.desmos.com</a>

# **GRADING**

Your final grade will be determined as follows:

Assignments/Quizzes	60%
Attendance	10%
Final (Cumulative)	30%

## **Grade Distributions:**

90+	А
80 - 89	В
70 - 79	С
60 - 69	D



## **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.

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 Wi-Fi device.

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.

## **POLICIES**

#### **ATTENDANCE**

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

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/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 0999 you will also be withdrawn for Math 1111 (College Algebra)! I will be recording attendance everyday starting on the first day through the last day of classes. Therefore, you can miss 5 class sessions during the semester.

#### SCHOLASTIC DISHONESTY



 $\underline{\text{http://ung.edu/academic-affairs/policies-and-guidelines/supplemental-syllabus.phpb}}$ 



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**

UNG Resources: <a href="http://ung.edu/learning-support/academic-resources.php">http://ung.edu/learning-support/academic-resources.php</a>

\*\*Professor Julie Harland:

https://sites.google.com/site/harlandclub/Home/math/algebra

\*\*<mark>Kuta Software</mark>: <u>http://www.kutasoftware.com/freemain.html</u>

\* KHAN Academy: <a href="http://www.khanacademy.org/">http://www.khanacademy.org/</a>

Pearson's Intermath:

http://interactmath.com/ChapterContents.aspx

MathTV YouTube Channel: http://www.youtube.com/user/MathTV

Purplemath: <a href="http://www.purplemath.com/">http://www.purplemath.com/</a>

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

#### ACADEMIC SUPPORT

You are strongly encouraged to go to the SRC or Math Jam Fridays, 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.

Monday-Thursday 8:00 AM - 5:00 PM

Friday 8:00 AM – 3:00 PM

http://ung.edu/tutoring-services/oconee-campus-services.php

Same as Office Hours



