NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY

COURSE SYLLABUS

College Name: Science and Technology
Department Name: Mathematics and Statistics
Course Name: **Fundamentals of Algebra and Trigonometry I**

COURSE INFORMATION

- Course Number/Section: MATH 101-012 [crn10180]
- Term: Fall 2020
- Semester Credit Hours: 3(3-0)
- Times and Days: Wednesday*, 11:00 am – 1:30 pm
- Class Location: Marteena 118

As deemed by the University, this in an ***on-campus course that will employ a hybrid model of instruction characterized as blended synchronous. In the blended synchronous model, one group of students will attend class in-person, while the remaining students join class virtually. The professor will provide simultaneous delivery of course content and activities to in-person and online groups through web conferencing such as Zoom. The groups (determined by the University) will rotate attending class in-person and joining virtually weekly. For example, Group A will attend in-person week 1, while groups B and C join virtually. On week 2, group B will attend class in-person and groups A and C will join virtually. This rotation will continue through out the semester and is subject to change.*

INSTRUCTOR CONTACT INFORMATION

- Instructor: Mrs. Stacey Zimmerman
- Office Location: 104 Marteena Hall
- Office Phone: 336-285-2072
- Email Address: sczimmer@ncat.edu

STUDENT HOURS

All student hours will be held virtually via Zoom during the Fall 2020 semester. The Zoom links(s) are posted on the Blackboard Announcement page.

- Monday: 9:00 am – 11:00 am, 7:00 pm – 8:30 pm
- Wednesday: 1:30 pm – 2:30 pm, 7:00 pm – 8:30 pm
- Thursday: 2:00 pm – 4:00 pm

NOTE: Students are responsible for reading, understanding, and following the syllabus.

COURSE PREREQUISITES

SAT Math score 440-480 or SAT Math II level score 430-460 or ACT Math score 16-18 or Math Dept Algebra Test 15

COURSE DESCRIPTION

Numbers and their properties, polynomials, rational expressions, rational exponents, radicals, equations, and inequalities in one variable, relations and functions are studied.

STUDENT LEARNING OBJECTIVES/OUTCOMES (SLO)

- Students will apply quantitative and mathematical reasoning skills in examining, evaluating and solving problems involving order of operation, factoring, solving equations, and functions.
  (1) Students will be able to correctly use rules of exponents to conduct exponential operations of multiplication, division, and powers.
  (2) Students will demonstrate the ability to evaluate and simplify operations of radicals.
  (3) Students will be able to add/subtract, multiply and divide polynomials.
  (4) Students will be able to solve polynomial equations and rational equations by factoring.
  (5) Students will be able to evaluate and simplify function values; to simplify difference quotient of functions
- Students will evaluate quantitative information using a variety of methods.
  (1) Students will be able to factor polynomials.
  (2) Students will be able to solve linear and quadratic equations.
  (3) Students will be able to graph basic functions and their transformations.
  (4) Students can perform basic operations on functions.
- Students will manage, analyze, present, and communicate quantitative information in diverse ways
  (1) Students will be able to graph basic functions and their transformations.
  (2) Students will be able to add, subtract, multiply and divide complex numbers.
  (3) Students will be able to solve equations and inequalities involving absolute value.

Assessment of Student Learning:

(1) Students will be assigned homework problems from each section covered throughout the course for them to complete outside of class.
(2) Students will take weekly or bi-weekly quizzes within class.
(3) Students will be asked to work problems on the board, or otherwise share their work with their peers.
(4) At the end of each unit, students will take an exam, and a cumulative final exam will be administered at the end of the course.
(5) A pre-test and post-test consisting of problems which represent the various concepts covered throughout the course will be administered at the beginning and end of the semester, respectively.

General Education Student Learning Goals: Mathematical, Logical, and Analytical Reasoning
For courses emphasizing mathematical/quantitative reasoning:

- Apply quantitative and mathematical reasoning to solve problems in diverse contexts.
- Evaluate quantitative information using a variety of methods.
- Communicate quantitative or mathematical information in multiple formats.

TEXTBOOKS AND MATERIALS

MATERIALS:

- ***MyLabMath Access Code*** *(can be purchased at A&T bookstore or online),* **ISBN:** 9780135298800
- **Respondus LockDown Browser** and a **Webcam** (See page 9)

TEXTS:

You may use the e-book within MyLabMath. No additional purchase is required.

Special Note: If you are receiving financial aid, you can go to the following link to request a book voucher
http://www.ncat.edu/divisions/business-and-finance/comptroller/treasurer/bookallow-parkperm/index.html

NCA&T Campus URL for MyLabMath https://www.pearsonmylabandmastering.com/northamerica/

COURSE TOPICS

Module 1: Graphs and Functions
Module 2: Linear Functions, Equations, and Inequalities
Module 3: More on Functions
Module 4: Quadratic Functions and Equations; Inequalities
Module 5: Polynomial Functions

GRADING POLICY

Grading Scale

92% and above	A		70% - 77%	C
90% - 91%	A-		68% - 69%	C-
88% - 89%	B+		66% - 67%	D+
82% - 87%	B		60% - 65%	D
80% - 81%	B-		0% - 59%	F
78% - 79%	C+			

GRADING ALLOCATION

Course grades are based on a weighted grading scale of 100%. The breakdown for the course is as follows:

1. Module Tests *(The lowest test score will be dropped at the end of the semester)* 50%
2. Quizzes 20%
3. MyLabMath Homework 20%
4. Class Participation *(attendance, discussion board posts, etc.)* 10%

Numerical averages will be rounded to the nearest whole number using standard rounding procedures. If the decimal is ≥ 0.5, the average will be rounded up to the nearest whole number. If the decimal is < 0.5, the average will be rounded down to the nearest whole number.

COURSE POLICIES

USE OF BLACKBOARD AS THE LEARNING MANAGEMENT SYSTEM

Blackboard is the primary online instructional and course communications platform. Students can access the course syllabus, assignments, grades, and learner support resources. Students are encouraged to protect their login credentials, complete a Blackboard orientation and log in daily to course. All tests and discussion board posts (if applicable) will be delivered via Blackboard. Homework and quiz will be delivered through the Pearson MyLabMath Learning System.

MAKE-UP WORK

The administration, faculty and staff recognize that there are circumstances and events which require students to miss classes and any required course work which may be performed or due on the day of the absence. Also, they recognize that required course work is needed to give each student an adequate performance evaluation. Therefore, whenever reasonable (and more specifically described below), students should be allowed to make up required work. The following definitions will apply with respect to the make-up of missed course work:

a) Required course work – All work which will be used in the determination of final grades, e.g. examinations, announced quizzes, required papers and essays, required assignments.
b) Instructor – Person responsible for the course and providing instruction and evaluation.
c) Permissible reasons for requesting make up of required work – Sickness; death of relatives (immediate family); participation in approved University related activities; acting in the capacity of a representative of the University (band, choir, sports related travel, etc.); and extraordinary circumstances (court appearance, family emergency, etc.). NOTE: Other reasons for requesting make up of required course work are not acceptable.

d) Documentation – Verification of sickness requires a signed statement of a physician or a duly authorized staff member of the Student Health Center. Verification of death requires a signed statement from the Minister or Funeral Director. Verification of participation in University related activities requires a signed statement from the appropriate University official. Verification of other reasonable circumstances; for example, court appearance, family emergency, etc. requires a signed statement from an appropriate official (e.g., Court Official, parent or guardian, etc.).

The make-up of required course work is as follows:

(1) A student may petition an instructor to make up required course work whenever the student has a permissible reason for requesting make up of required course work.
(2) A Student will be required to present documentation, which certifies absence constituting a permissible reason.
(3) Whenever possible, a student should consult with the instructor prior to an absence which will involve the failure to do required course work. Arrangements for make up should be discussed and agreed upon at this time.
(4) A student must petition for make up of required course work on the first day that they return to class.
(5) If permission is granted to make up required course work, the instructor and the student should agree on an acceptable date for completion of missed required course work.
(6) Failure to comply with the item four (4) may result in denial to make up required course work.

EXTRA CREDIT

Extra credit points are built into the Module Test. There will be not additional extra credit.

LATE WORK

All assignments must be submitted before the deadline to receive full credit. Assignments (homework and quiz) not completed before the due date will receive point deductions for every day the assignment is late. Tests and discussion board posts (if applicable) have an extended window for submission cannot be completed after the due date. Missed tests and discussion board posts will receive a grade of 0 (zero). If an ***emergency situation occurs***, you will only be allowed to a make-up test or other assignment accompanied with an official, written excuse (e.g. a note from the emergency room or a funeral program.) If you miss a test or other assignment due to a funeral, university policy requires that it be the funeral of an ***immediate relative*** to allow one to makeup assignments. Notes from your parents will NOT be accepted to make-up a test. You must make-up the assignment within one week of the scheduled due date. Exceptions to this rule will be analyzed on a case-by-case basis. After that time, you will not be allowed to make-up the assignment, and a score of zero (0) will be recorded for your its grade.

CLASS PARTICIPATION/ATTENDANCE

Students are expected to attend class and participate on a regular basis in order to successfully achieve course learning outcomes and meet federal financial aid requirements (34 CFR 668.22). Class attendance in online courses is defined as active participation in academically-related course activities. Active participation may consist of course interactions with the content, classmates, and/or the instructor. Examples of academically-related course activities include, but are not limited to:

- Completing and submitting assignments, quizzes, exams, and other activities within Blackboard or through Blackboard (3rd-party products).
- Participating in course-related synchronous online chats, discussions, or meeting platforms such as Zoom or Blackboard Collaborate in which participation is tracked.

CLASSROOM CITIZENSHIP

Courtesy, civility and respect must be the hallmark of your interactions.

COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT

North Carolina A&T State University is committed to following the requirements of the Americans with Disabilities Act Amendments Act (ADAAA) and Section 504 of the Rehabilitation Act.
If you need an academic accommodation based on the impact of a disability, you must initiate the request with the Office of Accessibility Resources (OARS) and provide documentation in accordance with the Documentation Guidelines at N.C. A&T. Once documentation is received, it will be reviewed. Once approved, you must attend a comprehensive meeting to receive appropriate and reasonable accommodations. If you are

a student registered with OARS, you must complete the Accommodation Request Form to have accommodations sent to faculty.
OARS is located in Murphy Hall, Suite 01. We can be reached at 336-334-7765, or by email at accessibilityresources@ncat.edu. Additional information and forms can be found on the web at https://www.ncat.edu/provost/academic-affairs/accessibility-resources/index.php.
Please note: Accommodations are not retroactive and begin once the Disability Verification Form is provided to faculty.

TITLE IX
North Carolina A&T State University is committed to providing a safe learning environment for all students—free of all forms of discrimination and harassment. Sexual misconduct and relationship violence in any form are inconsistent with the university's mission and core values, violate university policies, and may also violate federal and state law. Faculty members are considered "Responsible Employees" and are required to report incidents of sexual misconduct and relationship violence to the Title IX Coordinator. If you or someone you know has been impacted by sexual harassment, sexual assault, dating or domestic violence, or stalking, please visit the Title IX website to access information about university support and resources. If you would like to speak with someone confidentially, please contact the Counseling Services 336-334-7727 or the Student Health Center 336-334-7880.

TECHNICAL SUPPORT
If you experience any problems with your A&T account, you may call Client Technology Services (formerly Aggie Tech Support and Help Desk) at 336-334-7195, or visit https://hub.ncat.edu/administration/its/dept/ats/index.php.

STUDENT HANDBOOK
https://www.ncat.edu/campus-life/student-affairs/departments/dean-of-students/student-handbook.php
STUDENT TRAVEL PROCEDURES AND STUDENT TRAVEL ACTIVITY WAIVER
https://hub.ncat.edu/administration/student-affairs/staff-resources/studen_activity_travel_waiver.pdf

OTHER POLICIES *(e.g., Copyright Guidelines, Confidentiality, etc.)*
STUDENT HANDBOOK
https://www.ncat.edu/campus-life/student-affairs/departments/dean-of-students/student-handbook.php
Graduate Catalog
SEXUAL MISCONDUCT POLICY
https://www.ncat.edu/legal/title-ix/sexual-harassment-and-misconduct-policies/index.php
FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)
https://www.ncat.edu/registrar/ferpa.php

STUDENT COMPLAINT PROCEDURES
https://www.ncat.edu/current-students/student-complaint-form.php

STUDENT CONDUCT AND DISCIPLINE
North Carolina A&T State University has rules and regulations that govern student conduct and discipline meant to ensure the orderly and efficient conduct of the educational enterprise. It is the responsibility of each student to be knowledgeable about these rules and regulations.

Please consult the following about specific policies such as academic dishonesty, cell phones, change of grade, disability services, disruptive behavior, general class attendance, grade appeal, incomplete grades, make up work, student grievance procedures, withdrawal, etc.:

Undergraduate Bulletin https://www.ncat.edu/provost/academic-affairs/bulletins/index.php
Graduate Catalog https://www.ncat.edu/tgc/graduate-catalog/index.php
Student Handbook
https://www.ncat.edu/campus-life/student-affairs/departments/dean-of-students/student-handbook.php

ACADEMIC DISHONESTY POLICY

Academic dishonesty includes but is not limited to the following:

1. Cheating or knowingly assisting another student in committing an act of cheating or other academic dishonesty;
2. Plagiarism (unauthorized use of another's words or ideas as one's own), which includes but is not limited to submitting exams, theses, reports, drawings, laboratory notes or other materials as one's own work when such work has been prepared by or copied from another person;
3. Unauthorized possession of exams or reserved library materials; destroying or hiding source, library or laboratory materials or experiments or any other similar actions;
4. Unauthorized changing of grades, or marking on an exam or in an instructor's grade book or such change of any grade record;
5. Aiding or abetting in the infraction of any of the provisions anticipated under the general standards of student conduct;
6. Hacking into a computer and gaining access to a test or answer key prior to the test being given. A&T reserves the right to search the emails and computers of any student suspected of such computer hacking if a police report of the suspected hacking was submitted prior to the search; and
7. Assisting another student in violating any of the above rules.

A student who has committed an act of academic dishonesty has failed to meet a basic requirement of satisfactory academic performance. Thus, academic dishonesty is not only a basis for disciplinary action but may also affect the evaluation of a student's level of performance. Any student who commits an act of academic dishonesty is subject to disciplinary action.

In instances where a student has clearly been identified as having committed an act of academic dishonesty, an instructor may take appropriate disciplinary action, including a loss of credit for an assignment, exam or project; or awarding a grade of "F" for the course, **subject to review and endorsement by the chairperson and dean**.

ASSIGNMENTS AND ACADEMIC CALENDAR

EXTENSIONS to the deadlines WILL NOT be given. Plan Accordingly

Month	Day	Assignments **MLM – MyLabMath *Bb – Blackboard *DBP – Discussion Board Post*
Week 1: Module 1		
August	19	☐ Course Introduction ☐ **Section 1.1 Introduction to Graphing**
Assignments **Due Date 08/24**		☐ Read Syllabus (in its entirety) ☐ Download Load Lockdown Browser (see Syllabus) ☐ Set up MyLabMath (MLM) Account, link through Blackboard (Bb) ☐ Complete **Bb Practice Test** (Ensures Respondus/Webcam Setup) 08/24 *Last day to Add/Drop/Switch Course 08/25/2020 by 11:59pm*
Week 2: Module 1		
August	26	☐ **Sections 1.1 & 1.2** ☐ Introduction to Graphing, Functions and Graphs
Assignments **Due Date 08/31**		☐ Complete **Bb Diagnostic I Test** (opens 08/30 - closes 09/01, 11:59) ☐ Online MLM Homework on 1.1 due before 11:59pm 08/31 ☐ Online MLM Homework on 1.2 due before 11:59pm 08/31

Week 3: Module 1		
September	02	☐ **Module 1 Test Review**
Assignments **Due Date 09/07***		☐ Online MLM Module1 Final due by 11:59pm 09/07 ☐ Complete Bb **Module 1 Test** (opens 09/06 - closes 09/08, 11:59) ○ Supporting Test Work (must be submitted within 10 minutes of test submission)
Week 4: Module 2		
September	09	☐ **Section 1.3 & 1.4** ☐ Linear Functions and Slope, Equations of Lines
Assignments **Due Date 09/14***		☐ Online MLM Homework on 1.3 due before 11:59 pm 09/14 ☐ Online MLM Homework on 1.4 due before 11:59 pm 09/14 ☐ MLM Module 2 Quiz due before 11:59pm 09/15
Week 5: Module 2		
September	16	☐ **Section 1.5 & 1.6** ☐ Linear Functions, Linear Inequalities
Assignments **Due Date 09/21**		☐ Online MLM Homework on 1.5 due before 11:59 pm 09/21 ☐ Online MLM Homework on 1.6 due before 11:59 pm 09/21
Week 6: Module 2		
September	23	☐ **Module 2 Test Review**
Assignments **Due Date 09/28***		☐ Online MLM Module 2 Final due before 11:59pm 09/28 ☐ Complete Bb **Module 2 Test** (opens 09/27 - closes 09/29, 11:59) ○ Supporting Test Work (must be submitted within 10 minutes of test submission)
Week 7: Module 3		
September	30	☐ **Section 2.1, 2.2, & 2.3** ☐ Increasing, Decreasing, Piecewise Functions; Algebra of Functions; Composition of Functions
Assignments **Due Date 10/05**		☐ Online MLM Homework on 2.1 due before 11:59pm 10/05 ☐ Online MLM Homework on 2.2 due before 11:59pm 10/05 ☐ Online MLM Homework on 2.3 due before 11:59pm 10/05
Week 8: Module 3		
October	07	☐ **Section 2.4 & 2.5** ☐ Symmetry, Transformations
Assignments **Due Date 10/12**		☐ Online MLM Module 3 Quiz by 11:59pm 10/12 ☐ Online MLM Homework on 2.4 due before 11:59pm 10/12 ☐ Online MLM Homework on 2.5 due before 11:59pm 10/12
Week 9: Module 3		
October	14	☐ **Module 3 Test Review**
Assignments **Due Date 10/19***		☐ Online MLM Module 3 Final Quiz by 11:59pm 10/19 ☐ Complete Bb **Module 3 Test** (opens 10/18 - closes 10/20, 11:59) ○ Supporting Test Work (must be submitted within 10 minutes of test submission)

Week 10: Module 4		
October	21	☐ **Section 3.1, 3.2, & 3.3** ☐ Complex Numbers; Quadratic Equations & Functions; Analyzing Graphs of Quadratics
Assignments **Due Date 10/26***		☐ Online MLM Homework on 3.1 due before 11:59pm 10/26 ☐ Online MLM Homework on 3.2 due before 11:59pm 10/26 ☐ Online MLM Homework on 3.3 due before 11:59pm 10/26 *Last Day to Withdraw from a Course Without a Grade Evaluation 10/26/2020*
Week 11: Module 4		
October	28	☐ **Section 3.4 & 3.5** ☐ Rational & Radical Equations; Absolute Value Equations & Inequalities
Assignments **Due Date 11/02**		☐ Online MLM Module 4 Quiz due before 11:59pm 11/02 ☐ Online MLM Homework on 3.4 due before 11:59pm 11/02 ☐ Online MLM Homework on 3.5 due before 11:59pm 11/02
Week 12: Module 4		
November	04	☐ **Module 4 Test Review** *Last Day to Withdraw from the University Without a Grade Evaluation 11/04/2020*
Assignments **Due Date 11/09**		☐ Online MLM Module 4 Final due before 11:59pm 11/09 ☐ Complete **Bb Module 4 Test** (opens 11/08 - closes 11/10, 11:59) ○ Supporting Test Work (must be submitted within 10 minutes of test submission)
Week 13: Module 5		
November	11	☐ **Section 4.1 4.2, & 4.3** ☐ Polynomial Functions & Models; Graphing Polynomials; Polynomial Division, Remainder and Factor Theorem
Assignments **Due Date 11/16**		☐ Online MLM Homework on 4.1 due before 11:59pm 11/16 ☐ Online MLM Homework on 4.2 due before 11:59pm 11/16 ☐ Online MLM Homework on 4.3 due before 11:59pm 11/16
Week 14: Module 5		
November	18	☐ **Module 5 Test Review, Final Exam Review**
Assignments *Note earlier due dates* **Due Date 11/20***		☐ Online MLM Module 5 Final Quiz by 11:59pm 11/20 ☐ Complete Bb **Module 5 Test** (opens 11/20 - closes 11/22, 11:59) ○ Supporting Test Work (must be submitted within 10 minutes of test submission)
Week 15: Final Week		
Assignments **Due Date 11/24**		☐ Online MLM Diagnostic Quiz II 11:59 pm 11/23 ☐ **Bb Final Exam (Diagnostic II)** (opens 11/23 – closes 11/24, 11:59pm)

**** These descriptions and timelines are subject to change at the discretion of the instructor.***

MyLabMath Access

Link to the MyLabMath (MLM) site through Blackboard. If the site requests a course id, the link has not been successful. First, log out of Blackboard and try again. If it still does not work, you will need to log into Blackboard using another browser and/or device and link through Blackboard.

Respondus LockDown Browser and a **Webcam**

This course **REQUIRES** the use of LockDown Browser and a webcam for all online tests. The webcam can be built into your computer or can be the type that plugs in with a USB cable. Watch this short video to get a basic understanding of LockDown Browser and the webcam feature. A student Quick Start Guide (PDF) is also available. Then download and install LockDown Browser from this link: http://www.respondus.com/lockdown/download.php?id=922833142. This must be done immediately.

To ensure LockDown Browser and the webcam are set up properly, do the following:

- Start LockDown Browser, log into Blackboard, and select this course
- Locate and select the **Help Center** button on the LockDown Browser toolbar.
- Run the **Webcam Check** and, if necessary, resolve any issues.
- Run the **System & Network Check**. If a problem is indicated, see if a solution is provided in the Knowledge Base. Troubleshooting information can also be emailed to our institution's help desk.
- Exit the Help Center
- Exit LockDown Browser.

When taking an online exam that requires LockDown Browser and a webcam, remember the following guidelines:

- Ensure you are in a location where you WILL NOT be interrupted
- Dress appropriately; **you will be RECORDED during the exam**
- Turn off all other devices (e.g. tablets, phones, second computers)
- Clear your desk of all external materials not permitted; You may have clean paper, writing tools, a non-graphing calculator, and your notes.
- Remain at your computer for the duration of the test. Moving out of the view of the camera will result in a grade of zero for the test.
- If the computer or networking environment is different than what was tested above, repeat the Webcam and System checks prior to starting the test
- To produce a good webcam video, do the following:
    - Avoid wearing baseball caps or hats with brims
    - Ensure your computer is on a firm surface (a desk or table) — not on your lap, a bed, or other surface that might move
    - If using a built-in webcam, avoid tilting the screen after the webcam setup is complete
    - Take the exam in a well-lit room and avoid backlighting, such as sitting with your back to a window
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted.
- Students are encouraged to use wired connections, not wireless. All programs must be closed on your computer when using lockdown browser before beginning the test.

At the beginning of each test, you will be required to scan your work area and show your student or government issued.

Community Standards

Every student, employee and visitor to the North Carolina A&T campus is expected to adhere to the university guidelines regarding coronavirus/COVID-19. These standards include the three W's:

- Wear a cloth covering or mask over your nose and mouth
- Wash your hands for at least 20 seconds and/or use hand sanitizer
- Wait 6 feet apart when in line for services or food