



## **Math 2412.01N Precalculus**

Course Syllabus: Summer 2, 2026

*"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."*

**Instructor: Dr. Leah Reagan**

**Office:** MS 118 (not in office during summer)

**Phone:** 903-285-5267 (cell)

**Email:** lreagan@ntcc.edu

| Office Hours                                     |
|--------------------------------------------------|
| Online during summer.                            |
| Professor checks email and TEAMS messages daily. |
| Responds quickly.                                |

**This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.**

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

### **Course Description:**

This is a standard first course in functional analysis with algebra, geometry, and geometric interpretations. Topics include graphs, inverse functions, polynomial functions, rational and irrational functions, exponential and logarithmic functions, trigonometric functions, inverse trigonometric functions, Law of Sines, Law of Cosines, and analytic geometry. Additional topics such as vectors, polar coordinates and parametric equations may be included. Four credit hours.

**Prerequisite(s):** Math 1314 with a grade of "C" or better or an appropriate placement score

**Student Learning Outcomes:** Upon successful completion of this course, students will:

2412.1 Demonstrate and apply knowledge of properties of functions.

2412.2 Recognize and apply algebraic and transcendental functions and solve related equations.

2412.3 Apply graphing techniques to algebraic and transcendental functions.

2412.4 Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.

2412.5 Prove trigonometric identities.

2412.6 Solve right and oblique triangles.

## Core Curriculum Purpose and Objectives:

Through the core curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning.

Courses in the foundation area of mathematics focus on quantitative literacy in logic, patterns, and relationships. In addition, these courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

## College Student Learning Outcomes:

### Critical Thinking Skills

CT.1 Students will demonstrate the ability to 1) analyze complex issues, 2) synthesize information, and 3) evaluate the logic, validity, and relevance of data.

### Communication Skills

CS.1 Students will effectively develop, interpret, and express ideas through written communication.

## Empirical and Quantitative Skills

EQS.1 Students will manipulate numerical data or observable facts by organizing and converting relevant information into mathematical or empirical form.

EQS.2 Students will analyze numerical data or observable facts by processing information with correct calculations, explicit notations, and appropriate technology.

EQS.3 Students will draw informed conclusions from numerical data or observable facts that are accurate, complete, and relevant to the investigation.

## Evaluation/Grading Policy:

*The breakdown of the course requirements is as follows:*

| %   | Requirement          |
|-----|----------------------|
| 40% | Homework Assignments |
| 30% | Midterm Exam         |
| 30% | Final Exam           |

*Semester grades will be earned as follows*

| Percentage      | Letter Grade |
|-----------------|--------------|
| 90% and above   | A            |
| 80 %–89%        | B            |
| 70 %–79%        | C            |
| 60%–69 %        | D            |
| 59.9% and below | F            |

*OHM-Lumen Homework:*                      40%    *Online homework on Lumen via Blackboard*  
*Midterm Exam*                                      30%    *Online Exam*  
*Final Exam:*                                        30%    *Online Exam (must be proctored – read below)*

A series of online homework (Lumen OHM) will be worth 40% of your final grade. A Midterm Exam (30%) and Final Exam (30%) will contribute to 60% of the final grade.

Homework via Lumen OHM will be graded when submitted.

**The Final Exam must be proctored. You have 3 choices for proctoring:**

- 1) Take your Final Exam at NTCC’s Testing Center (free). They are open from 8:00-6:00 Monday – Thursday.**
- 2) Take your exam with an approved proctor at another testing center (usually a cost involved).**
- 3) Take your exam at home and use Microsoft TEAMS to record you taking the exam. The TEAMS Proctoring Instructions can be found in Blackboard, as well as the Proctor Form you would need to get approved by me about a week PRIOR to the Final Exam. For TEAMS, students are required to have access to a computer with high-speed internet, a microphone, a webcam, and appropriate system rights to download and install the necessary software. Please note, the college does not provide this equipment.**

**\*\*If the Final Exam is not proctored appropriately, a grade of zero will be given.**

Make-up exams will not be given unless the student has coordinated with the instructor prior to the exam.

Lumen OHM homework will require the use of “Late Passes” if not completed by the scheduled due date. Each student has late-passes that extend the assignment due date for 48 hours. Students may use more than one late pass per assignment that is past due.

Any missed work will be made up at the discretion of the instructor. It is the student’s responsibility to contact the instructor.

### **Required Instructional Materials:**

Inclusive Access Course: A discounted textbook fee was added to your student account to cover the cost of the

required access code. Inclusive Access Content: 978-1-64087-078-9. You have access to a free digital textbook on openstax.org. If you would like a printed textbook, these are available for purchase.

**Publisher:** Lumen   **ISBN Number:** 978-1-64087-078-9

**Optional Instructional Materials:** Print Textbook Precalculus by OpenStax

Hardcover: ISBN-10: 1-938168-34-8   ISBN-13: 978-1-938168-34-5

Paperback: ISBN-13: 978-1-50669-812-0

### Optional Instructional Materials:

Print copy of the textbook is highly recommended. Research indicates that students learn more and retain it longer from hard copy text.

### Minimum Technology Requirements:

Scientific Calculator required. TI-83 or TI-84 is preferred.

NOTE: Both of the versions of the Online Calculators are available for individual purchase by students through our TI Store. A single license for the TI-84 Online Calculator is \$20 per year. The online calculator solutions come with full math functionality. For a full list of specifications and a comparison chart, please click on the link below.

- [TI-84 Plus CE ONLINE Calculator](#) - \$20.00 per year for an individual license

The link to the TI Store where students can purchase their individual licenses is found below:

### [TI STORE](#)

Below are some technical requirements for using Blackboard that will help your experience in this course.

You will see the NTCC Tech Support email address and phone number below. Please contact them if you run into any technical problems during the semester. Please let your instructor know you are having difficulties as well.

If you need further NTCC technical support services, please contact Austin Baker or Mary Lou Pemberton at:

abaker@ntcc.edu or 903-434-8279; mpemberton@ntcc.edu or 903-434-8270

Blackboard will work on both a Mac and a PC. (Chrome Books are known to have issues with Blackboard.) It is best to access Blackboard through Fire-Fox or Chrome as your web browser. If you have trouble with any of the activities working properly, you might change your web browser as your first solution. The Default Browser in Windows 10 is Edge. This browser does not do well with Blackboard! If you go to Windows Accessories, you will find Internet Explorer still on your computer but is not your default browser. If you have any difficulties navigating with Edge, close it and go to Internet Explorer.

To use TEAMS, you must have access to a computer with high-speed internet, a microphone, a Webcam, and appropriate systems rights to download any necessary software. Please note, the college does not provide this equipment.

You can download Blackboard Student for your smart phone from the Play store or the App store.

More information is available for Technology Requirements and Support under the [Student Resources – Technical Support Tab in Blackboard](#).

### **Required Computer Literacy Skills:**

As an online student, you will have a much different "classroom" experience than a traditional student. In order to ensure that you are fully prepared for your online course, following is a list of expectations and requirements: Students in an on-line program should be comfortable with and possess the following skill sets:

1. Self-discipline
2. Problem solving skills
3. Critical thinking skills
4. Enjoy communication in the written word

As part of your online experience, you can expect to utilize a variety of technology mediums as part of your curriculum:

1. Communicate via email including sending attachments.
2. Navigate the World Wide Web using a Web browser such as Internet Explorer.
3. Use office applications such as Microsoft Office (or similar) to create documents.
4. Be willing to learn how to communicate using a discussion board and upload assignments to a classroom Web site.
5. Be comfortable uploading and downloading saved files.
6. Have easy access to the Internet.
7. Navigate Blackboard, including using the email component within Blackboard. Instructions and tutorials for this are provided in your course.

For more information or technical assistance on using the Learning Management System, please refer to the Home Page, Orientation Module, in the important technical requirement, information and support folder in Blackboard.

### **Course Structure and Overview:**

This is a 10-week online summer course where students are required to access graded activities on the Blackboard Learning Management System. Students are required to complete online homework, as well as other assignments. It is very important for students to keep up with course materials and assignments. Students are expected to watch instructional videos, read course textbooks, and complete online assignments located in the Learning Management System, Blackboard, by due dates.

### **Communications:**

Emails and TEAMS messages will be responded to within 24 hours. If you do not receive a response within 24 hours, then the email or TEAMS message was not received. Students are expected to abide by Netiquette rules when communicating online. See this link for details: [Netiquette Rules](#).

The college's official means of communication is via your campus email address. I will use your campus email address, TEAMS, and Blackboard messages to communicate with you (MAINLY TEAMS). Make sure you keep your campus email cleaned out and below the limit so you can receive important messages.

### **Institutional/Course Policy:**

No late work will be accepted without prior approval by the instructor. It is the student's responsibility to check Blackboard and TEAMS for important information/announcements regarding the course. Students should be working on course material via Blackboard every day. Do not wait until the last minute to complete and submit

assignments in case of technology issues.

### **Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements:**

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

### **Statement Regarding the Use of Artificial Intelligence (AI) Technology:**

Employees and students shall be permitted to explore artificial intelligence (AI) and implement its use in and out of the classroom in accordance with policy and administrative regulations. The use of AI shall only be as a support tool to enhance student outcomes or as necessary to engage in research and shall never take the place of faculty, staff, and student decision-making. Any use of AI must comply with law, policy, and administrative regulations relating to student and employee privacy and data security. A student shall only use AI tools with faculty permission and shall be expected to produce original work and properly credit sources, including AI tools used in creating the work.

Example:

APA (7th edition)

OpenAI. (2026). ChatGPT (March 25 version) [Large language model]. <https://chat.openai.com/>

MLA (9th edition)

OpenAI. ChatGPT. 25 Mar. 2026, <https://chat.openai.com/>.

Employees or students who use AI tools to deceptively harm, bully, or harass others shall be disciplined in accordance with policy. [See DH, DIA series, FFD series, FFE, FLB, and the FM series] AI Use by Employees and Students. Northeast Texas Community College 225500 TECHNOLOGY RESOURCES CRB ARTIFICIAL INTELLIGENCE (LOCAL) DATE ISSUED: 12/8/2025 1 of 1 UPDATE 50 CRB(LOCAL)-AJC Adopted: 12/16/2025

### **NTCC Academic Honesty/Ethics Statement:**

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

### **ADA Statement:**

It is the policy of NTCC to provide reasonable accommodation for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodation as required to afford equal educational opportunity. It is the student's responsibility to request accommodation. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations

page on the NTCC website.

### Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

### Tentative Course Schedule (subject to change):

| <u>Weeks</u> | <u>Topics</u>                                                                                                                  | <u>Assignments</u>                                                                                                                                                                               | <u>All due by midnight</u>                                                                |
|--------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| WEEK 1       | Complete ALL STEPS in the "First Day Instructions" to-do list in Blackboard<br><br>Module 7: Trigonometric Functions of Angles | Complete the "Syllabus Acknowledgement Agreement" found in the "Start Course Here" folder in Blackboard.<br><br>Read textbook & watch videos in Blackboard. Complete assigned Module 7 Homework. | Syllabus Ack due 7/14<br><br>7.1 due 7/14<br>7.2 due 7/16<br>7.3 due 7/18<br>7.4 due 7/20 |
| WEEK 2       | Module 8: Periodic Functions                                                                                                   | Read textbook & watch videos. Complete assigned online Module 8 Homework.                                                                                                                        | 8.1 due 7/22<br>8.3 due 7/24                                                              |
| WEEK 3       | Module 9: Trigonometric Identities and Equations                                                                               | Read textbook & watch videos. Complete assigned online Module 9 Homework.                                                                                                                        | 9.1 due 7/26<br>9.2 due 7/28<br>9.3 due 7/30<br>9.4 due 8/2<br>9.5 due 8/4                |
| WEEK 4       | Module 10: Further Applications of Trigonometry                                                                                | Read textbook & watch videos. Complete assigned online Module 10 Homework.                                                                                                                       | 10.1 due 8/6<br>10.2 due 8/8                                                              |
| WEEK 5       | <b>REVIEW FOR FINAL EXAM (homework grade)</b>                                                                                  | <b>Make sure that ALL prior homework is caught up AND complete the FINAL REVIEW.</b>                                                                                                             | 8/12                                                                                      |
| WEEK 5       | <b>FINAL EXAM</b>                                                                                                              | <b>FINAL EXAM- opens at 8:00 a.m. 8/12 and closes at midnight on 8/13</b>                                                                                                                        | 8/13                                                                                      |