## MATH 1314 8HBDC - College Algebra Online

Course Syllabus: Spring 2024

NORTHEAST TEXAS
COMMUNITY COLLEGE
"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

## Instructor: Karen Russell

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| Office <br> Hours | Monday | Tuesday | Wednesday | Thursday | Friday | Online |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Online $4-5$ p.m. | Online $4-5$ p.m. | Online $4-5$ p.m. | Online $4-5$ p.m. | Online $4-5$ p.m. | $4-5$ p.m. |

## 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: In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Three hours credit.

Prerequisite(s): 1) TSI Not Complete - Multiple Measures Placement with Corequisite Model or 2) TSI Complete Status

## Student Learning Outcomes:

1314.1 Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
1314.2 Recognize and apply polynomial, rational, radical, exponential, and logarithmic functions and solve related equations.
1314.3 Apply graphing techniques.
1314.4 Evaluate all roots of higher degree polynomial and rational functions.
1314.5 Recognize, solve and apply systems of linear equations using matrices.

## 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.

## Program 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:

| Exam 1 | $10 \%$ |
| :--- | :--- |
| Exam 2 (Proctored) | $15 \%$ |
| Exam 3 | $10 \%$ |
| Exam 4 (Proctored) | $15 \%$ |
| Homework Assignments | $20 \%$ |
| Quizzes | $10 \%$ |
| Final Exam (Proctored) | $\underline{20 \%}$ |
| TOTAL | $100 \%$ |

"A" - 90\%
"B" - 80\%
"C" - 70\%
"D" - 60\%
"F" - Below 60\%

## Assignments:

- All concept mastery assignments, homework assignments, and quizzes will be found on MyMathLab (MML), which is accessed through Blackboard.
- Due dates for all assignments and quizzes can be found on the calendar at the top of the MML course home page. You will need to scroll through the calendar to see all due dates. As a general rule, though, most homework and quiz assignments for Math 1314 will be due on Sundays at 11:59 p.m.
- Homework problems have multiple attempts allowed. You may re-work the problem multiple times to learn the concept and try to get the problem correct. However, be aware that the computer may generate a new problem for each attempt.
- Quiz assignments have a limit of three attempts.
- The highest grade earned for each concept mastery, homework assignment, or quiz will be posted for the assignment's final grade.
- There are no make-up assignments or quizzes. All assignments and quizzes must be submitted by the deadline.
- Any assignment or quiz not submitted will receive a grade of zero.


## Exams:

- All exams are online on MML, Please note: some of our exams must be proctored as dictated by departmental policy. Each exam will be available on MML at scheduled times. Please check Blackboard and your MML calendar for the dates. Some exams must be proctored by your school faculty member.
- Due dates for all exams can be found on the calendar at the top of the MML course home page. Tentative due dates can also be found on Blackboard. You will need to scroll through the MML calendar to see all due dates.
- Only one attempt per question is allowed on exams.
- One make-up exam may be allowed if requested for one of the following exams: Exam 1, Exam 2, or Exam 3 during the semester if you miss it or would like to try again. However, a makeup exam must be proctored. There is no make-up for Exam 4 or the Final Exam.
- Any exam not submitted will receive a grade of zero.
- The second exam, fourth exam, and comprehensive final exam must be proctored by your school faculty member.

Required Instructional Materials: In an effort to save students money, your course materials are delivered through Inclusive Access. You have already paid for your course materials with your tuition and fees. Below is the required course material:

Publisher: Blitzer ISBN Number: 0-321-19991-X Pearson/Digital Text w/MyMathLab
To access your course materials, click on the Register for MyMathLab link within the Start Here folder on Blackboard.

Optional Instructional Materials: Blitzer; College Algebra, $8^{\text {th }}$ Edition
Printed textbook with MyMathLab access code
ISBN Number-978-0-13-446987-4 (Loose-leaf print upgrade)
Minimum Technology Requirements: Graphing Calculator is required. TI-84 Plus is preferred, but other models may be approved by the instructor.

## Required Computer Literacy Skills:

1) Communicate via NTCC email;
2) Saving and reloading saved files;
3) Navigate Blackboard to access posted materials and MyMathLab assignments

Course Structure and Overview: This is a 16-week online course where students are required to access graded activities on MyMathLab via the Blackboard Learning Management System. A typical week involves viewing instructional videos, reading course textbook, completing online homework, and participating in discussion forums involving mathematical and statistical principles and the algorithms needed to apply these principles. Students are expected to meet all due dates for assignments in Pearson MyMathLab accessed through Blackboard. To be successful, it is very important for students to keep up with course materials and assignments.

Communications: Response to emails will normally be within 24 hours during the week and 48 hours on the weekend. Students are expected to abide by Netiquette rules when communicating online. See this link for details: www. https://coursedesign.colostate.edu/obj/corerulesnet.html.

The college's official means of communication is via your campus email address. Your instructor will use your campus email, Blackboard, and MyMathLab to communicate with you outside of class. Make sure you keep your campus email cleaned out and below the limit so you can receive important messages.

Students are expected to check in to the class daily on Blackboard and MyMathLab to find the assignments and communications from the instructor. Students are also expected to check their email daily in case there is a communication from the instructor that needs a timely response.

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 MyMathLab for important information/announcements regarding the course. Students should be working on course material via Blackboard/MyMathLab every week. 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 coursespecific 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.

## 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 accommodations 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 accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. 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 Timeline (*notes* 1. Instructor reserves the right to make adjustments to this timeline at any point in the semester and 2. If this timeline differs from the MyMathLab calendar, MML will be the official date):

Course Schedule: (Subject to Change)

| Weeks | Topics | Assignments | $\frac{\text { Due Dates }}{\text { (Due by }}$ <br> $11: 59 \mathrm{pm}$ <br> CST <br> unless <br> otherwise <br> noted) |
| :--- | :--- | :--- | :--- |
| Week 1 |  | Ch. 1: <br> Equations and <br> Inequalities <br> Sections 1.1 and 1.2 | Sections 1.4 and 1.5A <br> Mastery, Homework, and <br> Quiz |
| Week 2 | MML Concept Mastery, <br> Homework, and Quiz | $1 / 28 / 24$ |  |
| Wections 1.5B and 1.6A | MML Concept Mastery, <br> Homework, and Quiz | $2 / 4 / 24$ |  |
| Week 4 | Sections 1.6B and 1.7 | MML Concept Mastery, <br> Homework, and Quiz | $2 / 11 / 24$ |
| Week 5 | Sections 1.1, 1.2, 1.4, <br> $1.5, ~ 1.6, ~ 1.7 ~$ | Ch. 1 Review, Graphing <br> Problems, Various Equation <br> Problems | $2 / 18 / 24$ |
| Week 6 | ShathLab Orientation <br>  <br> Graphs <br> Sections 2.1, 2.2 | Ch. 1 Test <br> MML Concept Mastery, | $2 / 25 / 24$ |
| Week 7 | Sections 2.3, 2.4, 2.5 | MML Concept Mastery, <br> Homework, and Quiz | $3 / 3 / 24$ |


|  | Spring Break |  | $3 / 11-$ <br> $3 / 15 / 24$ |
| :--- | :--- | :--- | :--- |
| Week 8 | Sections 2.6, 2.7, 2.8 | MML Concept Mastery, <br> Homework, and Quiz | $3 / 10 / 24$ |


| Week 9 | $2.1-2.8$ | Ch. 2 Review and Properties of Functions Problems | 3/24/24 |
| :---: | :---: | :---: | :---: |
| Week 10 | Ch. 3: Polynomial and Rational Functions Sections 3.1, 3.2, 3.3 | Ch. 2 Test (Proctored) <br> MML Concept Mastery, Homework, and Quiz | $\begin{aligned} & 3 / 25- \\ & 3 / 26 / 24 \\ & 3 / 31 / 24 \end{aligned}$ |
| Week 11 | Sections 3.4, 3.5 and Ch. 3 Review | MML Concept Mastery, Homework, and Quiz | 4/7/24 |
| Week 12 | Ch. 5: Systems of Equations \& Inequalities Sections 5.1, 5.2 <br>  <br> Determinants <br> Sections 6.1, 6.3 | Ch. 3 Test <br> MML Concept Mastery, Homework, and Quiz <br> MML Concept Mastery, Homework, and Quiz | $\begin{aligned} & 4 / 8 / 24 \\ & 4 / 14 / 24 \\ & 4 / 14 / 24 \end{aligned}$ |
|  | Last Day to Withdraw with a Grade of "W" |  | 4/18/24 |
| Week 13 | Ch. 4: Exponential \& Logarithmic Functions Sections 4.1, 4.2 | MML Concept Mastery, Homework, and Quiz | 4/21/24 |
| Week 14 | Ch. 4 Sections 4.1, 4.2 <br> Ch. 5 Sections 5.1, 5.2 <br> Ch. 6 Sections 6.1, 6.3 | Ch. 4-6 Review | 4/28/24 |
|  |  | Ch. 4-6 Test (Proctored) | $\begin{aligned} & 4 / 29- \\ & 4 / 30 / 24 \end{aligned}$ |
| Week 15 | Roots of Polynomial <br> Functions <br> Systems by Matrices Cumulative Final Exam Review | Roots of Polynomial Functions Problems, Systems by Matrices Problems Final Exam Review | $\begin{aligned} & 5 / 5 / 24 \\ & 5 / 5 / 24 \\ & 5 / 5 / 24 \end{aligned}$ |
|  | Cumulative Final Exam | Final Exam (Proctored) | 5/6/24 |
| NTCC Graduation |  |  | 5/11/24 |

