College Algebra (MATH 1314-2B1)

CREDIT

3 Semester Credit Hours (3 hours lecture)

MODE OF INSTRUCTION

Online

PREREQUISITE/CO-REQUISITE:

- A score of 950 or above on the TSI-Assessment placement test or a "C" or better in TMTH 0375 and
- Complete the Online Orientation and answer yes to 7+ questions on the Online Learner Self-Assessment: http://www.lit.edu/depts/DistanceEd/OnlineOrientation/OOStep2.aspx http://www.lit.edu/depts/DistanceEd/OnlineOrientation/OOStep2.aspx

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. *This course is time-bound and structured*.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to

- 1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
- 2. Recognize and apply polynomial, rational, radical, exponential, and logarithmic functions and solve related equations.
- 3. Apply graphing techniques.
- 4. Evaluate all roots of higher degree polynomial and rational functions.
- 5. Recognize, solve, and apply systems of linear equations using matrices.

Core Objectives

- 1. Critical Thinking Skills: To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- 2. Communication Skills: To include effective development, interpretation and expression of ideas through written, oral, and visual communication.
- 3. Empirical and Quantitative Skills: To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

INSTRUCTOR CONTACT INFORMATION

| Instructor: | Widad Abedelwahab |
|-------------|-----------------------|
| Email: | whabedelwahab@lit.edu |

Office Phone: 409-241-7873



Office Location:Building TA5 and Room 106Office Hours:Virtual office hours by appointment. During the semester I will be
creating virtual meetings (optional). I will send message through blackboard.

1. We will be communicating with announcements and messages through Blackboard.

2. Do NOT use your personal e-mail to contact me. I will not respond to any personal e-mail.

3. I will check my messages Monday through Friday (not on weekends).

4. I will try to respond to you within 24 hours but please do not leave things for the last minute!

5. You must log in to black to check for new messages, announcements, and work on the assignments.

6. I will be asking you to respond to messages with "I understand"

REQUIRED TEXTBOOK AND MATERIALS

- 1. MyMathLab Standalone Access Code
 - b. May be purchased at a local bookstore:

ISBN 9780136483151---- 18 Weeks ISBN 9780135189849---- 24 Months

2. A basic scientific calculator: *please check with your individual instructor as to the specific type of calculator required.*

ATTENDANCE POLICY

You should be able to log in to blackboard at least 4 hours a week to check for announcements and go to MyMathLab to work on the assignments.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the <u>Academic Calendar</u>. If you stop working on the assignments and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week.

Course Requirements

- 1. The student must purchase all of the required course materials.
- 2. The student will be expected to have access to the Internet and a computer with webcam and microphone.
- 3. Blackboard logon and access to course a minimum of four times per week.
- 4. Additional course requirements on blackboard.
- 5. Students should read all the information under the home page and class information tab on blackboard before starting on the first week assignments.

COURSE CALENDAR

| Week | торіс | ASSIGNMENTS |
|------------|---|-----------------------------|
| WEEK | TOPIC | (Due on this Date) |
| Week 1 | The first week assignments listed on the | The due dates on blackboard |
| | assignments calendar under the home | under the assignments |
| | page and class information. | calendar and on MyMathLab |
| | Step # 1: Getting started activities | Read all the information |
| | Step #2: Let's Review | under Step1 and 2 on |
| | | blackboard |
| Week | Chapter 1: Equations and Inequalities | Read the information under |
| 2 and 3 | Section 1.1 – 1.7 | Step #3 on blackboard then |
| | Test #1 (Chapter 1) | go to MyMathLab and work |
| | | on the assignments |
| Week 4 | Chapter 2: Graphs | Read the information under |
| | Sections 2.1 – 2.3 | Step #4 on blackboard then |
| | Test #2 (Chapter 2) | go to MyMathLab and work |
| | | on the assignments |
| Week | Chapter 3: Functions and Their Graphs | Read the information under |
| 5 and 6 | Sections 3.1 3.5 | Step #5 on blackboard then |
| | Test #3(Chapter 30) | go to MyMathLab and work |
| | | on the assignments |
| Week | Chapter 4: Linear and Quadratic Functions | Read the information under |
| 8 and 9 | Sections 4.1 – 4.4 | Step #6 on blackboard then |
| | Test #4(Chapter 4) | go to MyMathLab and work |
| | | on the assignments |
| Week | Chapter 5: Polynomial and Rational | Read the information under |
| 10 and 11 | Functions | Step #7 on blackboard then |
| | Sections 5.1, 5.4 – 5.7 | go to MyMathLab and work |
| | Test #5(Chapter 5) | on the assignments |
| Week | Chapter 6: Exponential and Logarithmic | Read the information under |
| 12, 13 and | Functions | Step #8 on blackboard then |
| 14 | Sections 6.1 – 6.7 | go to MyMathLab and work |
| | | on the assignments |
| Week 15 | Chapter 8: Systems of Equations | Read the information under |
| | Test #6 (Chapter 6) | Step #9 on blackboard then |
| | | go to MyMathLab and work |
| | | on the assignments |
| | All the due dates on blackboard under the | |
| | assignments calendar and on MML. | |
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COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Online Exams 60% Course Assignments (Including Core Assessment 20%) 40%

(Chapter tests will be taken on MyMathLab using Respondus Lockdown Browser) More information on blackboard under testing information tab and MyMathLab information tabs.

GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

LIT does not use +/- grading scales

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email

<u>specialpopulations@lit.edu</u>. You may also visit the online resource at <u>Special Populations -</u> <u>Lamar Institute of Technology (lit.edu</u>).

Al Statement

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI / ChatGPT in their courses.

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at <u>www.lit.edu</u>. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES information

Read all the information under the home page on blackboard.

Follow the instructions.

If you have any questions or you need help you can call me on my office phone number listed on the syllabus.

We communicate using the office phone number, announcements, emails (Please use LIT email. I do not respond to personal emails)