University of North Texas at Dallas FALL 2014 SYLLABUS D: 091 COLLEGE ALGEBRA 3 Hrs

MATH 1100 D: 091

Division of Liberal Arts and Life Sciences

Code: arya67981

Department of Mathematics and Information Sciences

| Instructor Name: | Vinod Arya |
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Office Hours: MW 9:00 -10:00 am; MW11:30 – 1:00 pm; and TR 12:00 pm -3:00 pm (by appointment) Virtual Office Hours: *None*

Classroom Location: DAL1-136 Class Meeting Days & Times: MW 10:00 am – 11:20 am

Course Catalog Quadratic equations; systems involving quadratics; variation, ratio and proportion; progressions; **Description:** the binomial theorem; inequalities; complex numbers; theory of equations; determinants; partial fractions; exponentials and logarithms. Prerequisite(s): two years of high school algebra and one year of geometry, and consent of department. A grade of C or better in MATH 1100 is required when MATH 1100 is a prerequisite for other mathematics courses.

Co-requisites: None

Required Text: MyMathLab software.

Recommended Text and References:

Access to Learning Resources: UNT Dallas Library: phone: (972) 780-3625; web: <u>http://www.unt.edu/unt-dallas/library.htm</u> UNT Dallas Bookstore: phone: (972) 780-3652; e-mail:

1012mgr@fheg.follett.com

Course Goals or Overview:

The goal of this course is to prepare students to be able to take other higher level mathematics classes.

Learning Objectives/Outcomes: At the end of this course, the student will be able to:

- 1 Represent functions in different ways
- 2 Demonstrate the ability to graph polynomial, rational, exponential and logarithmic functions
- 3 Demonstrate the ability to model various applications using algebraic and transcendental functions
- 4 Solve systems of equations using determinants and Cramer's Rule
- 5 Identify linear and nonlinear equations and solve them using appropriate methods 6 Use partial fractions

Tentative Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by announcement in class and/or email.

| SECTIONS | TIMELINE (WEEK) |
|------------------------|-----------------|
| Module I, Test I | I |
| Module II, Test II | II |
| Module III, Test III | III |
| Module IV, Test IV | IV |
| Module V, Test V | V |
| Module VI, Test VI | VI |
| Module VII, Test VII | VII |
| Module VIII, Test VIII | VIII |
| Module IX, Test IX | IX |
| Module X, Test X | X |
| Module XI, Test XI | Xi |
| Module XII, Test XII | Xii |
| Module XIII, Test XIII | XIII |
| Module XIV, Test XIV | XIV |
| Review | XV |

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Grading Matrix:

| Instrument | Value (points or percentages) | Total |
|------------|-------------------------------|-------|
| Attendance | 10% | 10% |
| Homework | 20% | 20% |
| 14 Tests | @ 5% each | 70% |
| Total: | | 100% |

Grade Determination:

A = 90% or better B = 80 - 89 % C = 70 - 79 % D = 60 - 69 % F = less than 60%

Important Instructions/Rules for the course -

Read and follow carefully:

- 1. The course is based on the **"self-paced study" (Emporium/flipping-the-class)** model and allows you to complete the requirements of the course at your own pace of study in a prescribed reasonable time.
- 2. This course is a pre-requisite for other higher level courses. For example, to take Math 1350D or Math 1650D, you must have completed this course with a grade of C or better.
- 3. The course follows a modular structure and comprises a total of 14 modules. Each module consists of selflearning material (videos explaining the concepts and examples) and homework problems to practice and strengthen the concepts and solution techniques. Finally, each module includes a test to assess how well you have learnt the concept and material.
- 4. All videos required for the course are available on the Blackboard site for your course, and the homework problems and the tests are placed on MyMathLab website (<u>www.mymathlab.com</u>). You will be required to pay the necessary fee and register for MyMathLab software at this website. You will require an access code from your instructor to get connected to the class.
- 5. Please note carefully that the study plan, consisting of videos, home works, and tests, follows a strict sequential pattern and requirement. You will not be allowed to jump over any homework and test. For example, to attempt and complete a homework/test, you must have completed and scored at least 70% in the homework/test preceding it.
- 6. You are expected to complete all fourteen modules in a semester's time. However, in special circumstances and with the instructor's approval, extra-time during the ensuing semester may be allowed to complete these fourteen modules. To be able to qualify for this extra-time, you must have successfully completed at least eight modules at the end of the current semester. (The success in a homework or test means scoring at least 70% grade points in it). Instructor's decision, whether to allow extra time to complete the course. shall be final.
- 7. You are also required to successfully complete at least four modules (including the tests) by mid-semester. Students not successfully fulfilling this requirement will be administratively dropped from the class.
- 8. You are strongly encouraged and challenged to complete all 14 modules and the associated tests in your shortest possible time. Once you successfully complete the modules and tests, your attendance for the class may be waived. You can use this saved time to your benefit and perform better in other classes.
- 9. You are required to attend all your classes (labs) and Supplemental Instruction sessions. Students with more than two combined absences will be administratively dropped from the class. Only in emergency situations can you be allowed to be absent from a lab or supplemental instruction session.

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. For more information, you may visit the Office of Disability Accommodation/Student Development Office, Suite 115 or call Laura Smith at 972-780- 3632.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Assignment Policy:

No late homework assignments will be accepted. A missed home-assignment is worth zero. No makeup tests and quizzes will be given, except for documented emergencies.

Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at http://www.unt.edu/unt-

<u>dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of</u> <u>% 20Academic Integrity.pdf</u> for complete provisions of this code.

In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website <u>www.unt.edu/dallas</u>. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life (see Student's Rights, Responsibilities & Conduct) as the instructor deems appropriate.

Other Policies:

Use of cell Phones in the class is prohibited. No Food and Drink is allowed in the class. An Incomplete Grade "I" will be awarded only in exceptional circumstances and per university rules (see catalog). Students are responsible for meeting all university deadlines (registration, fee payment, prerequisite verification, drop deadlines etc.). See university catalog and/or schedule of classes for policies and dates.