STEM Division

MATH 1314-43361, 3 Credit Hours
College Algebra
Spring Semester, 2015

Classes are on B-Days, Period 1.
Classes meet from 8:20 p.m. - 9:50 a.m.
Room 120, Bishop Lynch High School

Instructor:
Jeff Morrow

Contact Information:
Office: Bishop Lynch High School Office: Room 120
Office Hours: 7:45-8:10 am, 3:40-4:00 pm weekdays
Phone: Bishop Lynch HS: 214-324-3607x363
Email Address: jeff.morrow@bishoplynch.org ; jdm4468@dcccd.edu

Course Description:
This course is an in-depth study and applications of polynomial, rational, radical, exponential, logarithmic, absolute value and piecewise-defined functions, and systems of equations using matrices. Also covered are the graphing calculator, non-linear inequalities, sequences and series, circles, the Binomial Theorem and a review of the classification of the real number system. (3 or 4 LEC) This course is the prerequisite for MATH 1316. This course is cross-listed as Math 1414. The student may register for either Math 1314 or Math 1414, but may receive credit for only one of the two. (3 Lec.)

Student Learning Outcomes:
Upon successful completion of this course, students will:
1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply knowledge of polynomial, rational, radical, exponential, logarithmic, absolute value and piecewise-defined functions.
   - Solve polynomial (including equations reducible to quadratic), rational, radical, exponential (including same base and different bases), logarithmic and absolute value equations related to these functions.
   - Solve polynomial, rational and absolute value inequalities.
3. Use graphing techniques, including, but not limited to, the use of a graphing calculator:
   increasing/decreasing/constant intervals, symmetry, even/odd functions, transformations (including translations, reflections, stretching and shrinking), completing the square, and finding relative maxima and minima graphically.
   - Recognize and be able to graph the basic equation of a circle.
4. Use the different theorems of polynomials (including the Rational Zeros Theorem) to evaluate all roots of higher degree polynomial and rational functions.
5. Recognize and solve systems of linear equations and their applications using matrices.
6. Demonstrate an understanding of sequences and series, including finding nth term & partial sums for arithmetic and geometric sequences.
7. Use the Binomial Theorem to expand binomials.
8. Recognize the different classifications within the real and complex number systems.

Core Objectives:
MATH 1314 develops the following Core Objectives:

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

Core Objective Development Statements: MATH 1314 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to solve and analyze applications of various functions and systems of equation.

Prerequisites:
Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0310.

Textbook and Other Course Materials:
- Pearson’s Math XL - Microsoft Windows 7 and 8 users should use one of the following browsers with Math XL courses—Chrome, Firefox or Internet Explorer 10 and 9. Click here for other system requirements.

As of Spring 2010, a graphing calculator is required for all College Algebra Courses. You may choose your own graphing calculator model; however, TI 83 or TI 84 version is preferred. Graphing Calculators may not be allowed during some examinations.

Grading Policy: Quarter 3- 40%, Quarter 4- 40%, Final Exam- 20%

Grading Rationale: 90—100 A, 80—89 B, 70—79 C

Final Examination:
A comprehensive, departmental final examination, which will represent at least 20% of the class grade, will be administered in all College Algebra classes.

Policy on Missed Tests and Assignments: Students are expected to contact instructor ASAP to make up tests and assignments missing due to excused absence from class.

Attendance Policy:
You are expected to regularly attend all classes in which you are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs.

If a student is unable to complete a course (or courses) in which he/she is registered, it is the responsibility of the student to withdraw from the course by the appropriate date. (The date is published in the academic calendar each year and in each semester’s class schedule). If a student does not withdraw, he/she will receive a performance grade, usually a grade of “F”.

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Religious Holidays:
Absences for observance of a religious holy day are excused. Notification of the absence must be given to the instructor in writing at least two weeks prior to the date of the holy day. A student whose absence is excused to observe a religious holy day is allowed to contract with the instructor to take a make-up examination or complete an assignment within a mutually agreed upon time after the absence.

Obtaining Final Course Grades Using eConnect:
Final grade reports are no longer mailed. Convenient access is available online. Use your student identification number when you log into eConnect, an online system developed by the DCCCD to provide you with timely information regarding your college record. Your grades will also be printed on your Students Advising Report, which is available in the Admissions Office.

Drop Date:
Last date to drop with a grade of “W” is **4/27/2015**.

Drop Policy:
To drop a class or withdraw from the college, students must follow the prescribed procedure. **It is the student’s responsibility to drop or withdraw**. Failure to do so will result in receiving a performance grade, usually grade of “F”. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a “W” (Withdraw) in each class dropped. The deadline for receiving a “W” is indicated on the academic calendar and the current class schedule. If you are unable to complete this course, you must withdraw from it by **4/27/2015**. For more information, contact the Admissions/Registrar’s Office at 972-860-7167 (Room C 119.)

**STOP BEFORE YOU DROP**
Six Drop Rule: For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career, unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges.

Financial Aid:
If you are receiving Financial Aid grants or loans, you must begin attendance in all classes to be certified as attending class. In a Distance Learning Class, you must show participation in the class prior to the certification date by either e-mailing your instructor or logging on to eCampus. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds. Failure to contact the instructor will result in your name being submitted to the Financial Aid Office as a “non-attendee”. Student who fail to attend or participate after the drop date are also subject to this policy.

Repeating This Course:
Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 Semester. See Third Attempt to Enroll in a Course rules on the DCCCD website.

Students With Learning, Mental and Physical Disabilities:
Students requesting accommodation due to the presence of a disability must identify themselves in a timely fashion and demonstrate/document the need for accommodations through the Disability Services
Office (DSO). For information regarding the rights and responsibilities of students with disabilities, contact DSO at (972) 860-8348 voice/TDD or email efcdso@dcccd.edu.

Student Email:
Legal privacy issues prevent your instructor from discussing your work or your grades on commercial e-mail accounts. If you wish to send your papers as attachments to an e-mail (and the instructor permits it), or if you have a question about your grade, you must open a student e-mail account. You may set up your account by clicking on this link. The account is free.

Printing on Campus:
Printing in the Computer Lab (L-108), Library, and Learning Assistance Center will cost 5 cents a page. Students must bring a $1.00, $5.00, $10.00, or $20.00 bill to the lab to create an account. Accounts must be created before attempting to print. No change is made in the lab. Once the money is in the bill acceptor, it cannot be retrieved. Cash refunds are not possible. Accounts stay active as long as the account has value.

Standard of Conduct/Classroom Etiquette:
No food, drinks or tobacco products are allowed in Eastfield College classrooms. No food is allowed in class, but a water bottle with a top is allowed. Students must silence cell phones during class, and texting and talking on the phone during class are prohibited. Laptops (if the privilege is not abused and students are on task) may be allowed during a lecture, but during practice and tests you may be asked to put them away.

Children on Campus:
The institution strives to protect an environment most conducive to teaching and learning for all enrolled students. Children who are taking part in organized scheduled activities or who are enrolled in specific classes are welcomed. Minor children, however, should not be brought to the institution unless closely supervised by their parent. Minor children should not be brought into classrooms, laboratories or other facilities of the college. This practice is disruptive to the learning process. In the case of an emergency where the student-parent has no alternative but to bring the child to campus, classroom faculty or the administrative heads of other units have full discretion as to whether a child may be allowed to quietly stay in the location. These individuals may require that children be removed by the student-parent from the setting if, in their opinion, the presence of the child is deemed to be disruptive to the learning process. For reasons of security and child welfare the institution will not permit unattended children to be left anywhere on the premises. Parents who have problems with childcare should visit the Counseling and/or Advisement Center to receive referrals to childcare services in the area.

CODE OF STUDENT CONDUCT: The Code of Student Conduct can be reviewed by clicking on this link.

Responsibility
Each student shall be charged with notice and knowledge of the contents and provisions of the District’s policies, procedures, and regulations concerning student conduct. All students shall obey the law, show respect for property constituted authority, and observe correct standards of conduct. In addition to activities prohibited by law, the following types of behavior shall be prohibited.

Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by college policies. Scholastic dishonesty shall include, but not limited to, cheating on a test, plagiarism, and collusion.

“Cheating on a test” shall include:

- Copying from another student’s test paper
- Using test materials not authorized by the person administering the test.
- All forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.
o Collaborating with or seeking aid from another student during a test without permission from the test administrator.
o Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.
o The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
o Substituting for another student, or permitting another student to substitute for one’s self, to take a test.
o Bribing another person to obtain an unadministered test or information about an unadministered test.

"Plagiarism" shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another’s work and the unacknowledged submission or incorporation of it in one’s own written work.

“Collusion” shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements.

Students should be aware of disciplinary actions for all forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion. Your College Catalog and the DCCCD Catalog contain the entire Student Code of Conduct. In this course, you will receive a grade of “0” on that particular assignment or test if you are guilty of cheating on assignments, tests, or plagiarism. Please do not put yourself in a situation that would result in such action. Academic dishonesty is a serious offense in college.

Campus Police:
In addition to providing general law enforcement on campus, the campus police respond to all emergencies. In any emergency situation, you can get immediate help by any of the following methods:
- call 911 on any campus extension
- use any red phone in the hallways, or any "blue light" call box in the parking lots
- call 972-860-4290 from any off campus extension

Sexual Harassment:
Eastfield College has a zero tolerance policy on sexual harassment. All students shall report complaints of sexual harassment informally to the college Human Resources Director or formally to the Vice Chancellor of Educational Affairs.

DCCCD Emergency Operation Procedures: Click on this link for further information.

Emergency & Inclement Weather Procedures:
In case of emergency (which may include power or air conditioning outages, fires, etc.) or inclement weather conditions, Eastfield students should listen to KEM-FM Radio Station (88.5) as the primary media source. In partnership with the Mesquite Independent School District, Eastfield College Administration will notify KEOM immediately after a decision is made to cancel classes on any given day of inclement weather or for emergency purposes. Students may also monitor other local radio and television stations. The earliest an announcement may be broadcast on KEOM Radio is 6 a.m. Students may also refer to the Eastfield College website for the Inclement Weather announcement under News/Features.

Family Educational Right and Privacy Act of 1974 (FERPA):
In compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), the College may release information classified as “directory information” to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone numbers, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports, (7) dates of attendance, (8) educational institution most recently attended, and (9) other similar information, including major field of student and degrees and awards received. Students may protect their directory information at any time during the academic year. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged. No transcript or academic record is released without written consent from the student, except as specified by law.
ADDITIONAL RESOURCES
The Math Spot provides tutoring in Mathematics and Developmental Mathematics. Students are encouraged to take advantage of this service for additional help in their course work. The Math Spot is located in room C-201, and the phone number is 972-860-7062. Visit the link above for more information on tutors, hours of operation and policies.

Course Coverage:

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<thead>
<tr>
<th>Sections</th>
<th>Topics</th>
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<tbody>
<tr>
<td>P1, 1.1 - 1.7</td>
<td>Real Number System, Equations and Inequalities</td>
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<tr>
<td>2.1 – 2.8</td>
<td>Functions and Graphs</td>
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<td>3.1-3.7</td>
<td>Polynomial and Rational Functions</td>
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<td>4.1-4.5</td>
<td>Exponential and Logarithmic Functions</td>
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<td>5.1 – 5.6</td>
<td>Systems of Equations and Inequalities</td>
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<td>6.1 – 6.5</td>
<td>Matrices and Determinants</td>
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<td>7.1 – 7.3</td>
<td>Conic Sections</td>
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<td>8.1 – 8.3, 8.5 – 8.7</td>
<td>Sequences and Series, Binomial Theorem, Probability</td>
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Syllabus Revision:
The guideline in this syllabus may be changed, deleted, or amended any time by the instructor. The attached course outline is intended as an aid in helping you know your responsibilities for the semester. It is possible that some changes in the course outline or class policies will be made during the semester. Any changes that are made to the class policies or course outline will be announced in class.

Revised: 08/01/2014