STEM Division

Math 1314-43402-3 Credit
College Algebra-Online

Spring 2015 Syllabus

UMTWRTS (INET)

<table>
<thead>
<tr>
<th>INSTRUCTOR:</th>
<th>Sharon Johnson</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICE:</td>
<td>C-330</td>
</tr>
<tr>
<td>TELEPHONE:</td>
<td>972-860-7127</td>
</tr>
<tr>
<td>EMAIL:</td>
<td><a href="mailto:SharonJohnson@dcccd.edu">SharonJohnson@dcccd.edu</a></td>
</tr>
</tbody>
</table>

| EMAIL POLICY: | I will respond to emails that appropriately addressed (course and section number in the subject line and your full name as a signature) within 24 hours of receipt. Emails received during the holidays will not be answered until classes report back to campus. |

<table>
<thead>
<tr>
<th>OFFICE HOURS:</th>
<th>OFFICE HOURS*: MW: 11:15 am – 12:15 pm, T: 1:00 pm – 2:00 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Math Spot: C-201-Thursdays: 1:00pm-2:00pm</td>
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<tr>
<td></td>
<td>Friday: 11:00 am -12:00 pm</td>
</tr>
</tbody>
</table>

*Appointments require a formal email request at least 24 hours in advance.

INSTRUCTOR CONTACT INFORMATION
My preferred method of contact is EMAIL. Please keep in mind that it is against the law (FERPA) for me to discuss grades with you via phone or email. See me in person if you need to discuss your personal academic progress or grades in this course. All Email will be replied to within 24 hours.

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:
- Microsoft Windows 7 and 8 users should use one of the following browsers with MyMathLab courses-- Chrome, Firefox or Internet Explorer 10 and 9. For other system requirements go to [http://www.pearsonmylabandmastering.com/northamerica/system-requirements/](http://www.pearsonmylabandmastering.com/northamerica/system-requirements/)
- **Course ID: johnson58587**

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 RATIONALE

A: 90-100%; B: 80-89%; C: 70-79%; F: below 70%

GRADING POLICY - Online

Your grade will be determined as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework &amp; Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Module Tests</td>
<td>20%</td>
</tr>
<tr>
<td>Proctored Exams</td>
<td>60%</td>
</tr>
</tbody>
</table>

The MidTerm and Final Exam are administered on campus at the EFC Testing Center (or other testing facility arranged in advance). There is NO fee for testing at ANY of the DCCCD campuses. Facilities outside of DCCCD usually require a fee for proctoring “correspondence tests”. Contact information (email address and phone number) is required for facilities outside of DCCCD. DCCCD Testing Center locations and hours in addition to information on nominating an individual to serve as proctor can be found at http://online.dcccd.edu/proctor.html.

DROP DATE

Last date to drop with a grade of “W” is 4/16/2015

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 4/16/2015. 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.

COURSE INTRODUCTION

You have enrolled in an online Computerized Modular Mathematics (CMM) class. In CMM, you will work through individualized computer-based modules with the support and guidance of an instructor and a tutor. In addition to online instruction, individual assistance and full group instruction are available. You can always work ahead however, deadlines will be enforced. Don’t fall behind.

ATTENDANCE

Classroom attendance is not required for this course; however, students are required to remain actively engaged with course curriculum. Please note that you are required to take two proctored exams on campus. Exams will be administered at the Eastfield College Testing Center or the designated Testing
INSTRUCTIONAL COMPONENTS
This course is divided into modules. The components of each module are described below.

Step 1: Video – Video lecture introduces each section of module
- Must be accessed before each homework assignment
- Grade omitted from course average
- Can be accessed after due date

Step 2: Homework – Consists of problems from each section
- Problem can be repeated until mastered – select “Similar Exercise” after each 3rd incorrect attempt
- All “Help” buttons available
- Can be accessed after due date
- Late problems penalized 10%
- Must be in “Homework,” not “Review” mode to save progress
- Problems saved individually
- 80% mastery required to proceed to next topic

Step 3: Quiz – Consists of problems that summarize multiple sections
- Problem can be repeated until mastered – select “Similar Exercise” after each 3rd incorrect attempt
- “Help” buttons not available
- Can be accessed after due date
- Late problems penalized 10%
- Must be in “Homework,” not “Review” mode to save progress
- Problems saved individually
- 80% mastery required to proceed to next topic

Step 3: Test Review (optional) – Helps prepare students for module test
- Must be accessed before proceeding to module test
- Score omitted from student grades
- Can be accessed after due date

Step 5: Test – Assesses student understanding of module
- Reviewed by student only immediately after submission
- Late submission not allowed

Step 6: Test Remediation (if necessary) – Practice skills not mastered
- Contains only problems not mastered in module test
- Each problem not mastered creates 2 similar remediation problems
- Score omitted from student grades
- 80% mastery required to access 2nd test attempt

Step 7: 2nd Test Attempt (if necessary) – Retest module concepts
- Reviewed by student only immediately following submission
- Lower Score (1st or 2nd attempt) omitted following 2nd attempt

Step 8: Test Remediation II (if necessary) – Practice skills not mastered
• Homework assignment containing only problems not mastered in 2nd module test attempt
• Each problem not mastered creates 2 similar remediation problems
• Score omitted from student grades
• 90% mastery required to access 3rd test attempt

Step 9: 3rd Test Attempt (if necessary) – Final test attempt permitted
• Reviewed by student only immediately following submission
• Lowest test attempt scores are omitted

PROCTORED EXAMS

After you have mastered the first 2 modules, you will be prepared to take your midterm exam. This course concludes with a comprehensive final exam.

Proctored Exam Policies:

• Bring scantron (may be supplied by testing center), pencil and eraser
• 33 multiple choice items
• Written exam, not computer based
• Must be completed independently by scheduled final exam time
• Administered in testing center
• No remediation option
• One attempt

MINI LECTURES

CMM on campus classes can provide extra support. You are invited to attend these class sessions any time you feel that this would be beneficial to you. Please note that the instructor must grant you permission to attend this class. If your presence becomes disruptive, you may be asked to leave.

Each instructor will conduct a 20 minute mini-lecture over the current topic. These brief lessons will reinforce concepts covered in video lectures and homework problems. This also provides a valuable opportunity to work with your classmates and explore different approaches to topics. To fully benefit from these sessions, bring questions about problems or concepts that you have found difficult.

INDEPENDENT PRACTICE

The majority of each class period is reserved for student classwork. During this time you can work on module assignments at your own pace. If you need assistance, use the CMM coaster to indicate that you need help. An instructor or tutor will go to your workstation to help you as soon as possible.

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.

**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.

**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 at: [http://www.dcccd.edu/thirdcourseattempt/](http://www.dcccd.edu/thirdcourseattempt/)

**STUDENTS WITH LEARNING, MENTAL OR 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 efcds@dcccd.edu.

**STUDENT E-MAIL**
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 going to [http://www.dcccd.edu/netmail/home.html](http://www.dcccd.edu/netmail/home.html). The account is free.

**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**

Web site address: [http://www1.dcccd.edu/cat0506/ss/code.cfm](http://www1.dcccd.edu/cat0506/ss/code.cfm)

**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:

a) Copying from another student’s test paper

b) Using test materials not authorized by the person administering the test.

c) All forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.

d) Collaborating with or seeking aid from another student during a test without permission from the test administrator.

e) Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.

f) The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.

gh) Substituting for another student, or permitting another student to substitute for one’s self, to take a test.

h) 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 final**
grade of “0” on that particular assignment or test if you are guilty of cheating on assignments, tests, or plagiarism. In addition, the offense may be escalated to the dean with extreme consequences. 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
Visit http://video.dcccd.edu/rtv/D0/emergency_dcccd.wmv

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 KEOM-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 web page www.eastfieldcollege.com for the Inclement Weather announcement under News/Features.

FAMILY EDUCATIONAL RIGHTS 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 (http://www.eastfieldcollege.edu/as/Mathspot/index.asp) 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.

STRATEGIES TO BE SUCCESSFUL

1. Attend every class.
2. Ask questions.
3. Read each chapter.
4. Show all work.
5. Check your answers.
6. Make note of problems for which you have questions.
7. Review class notes.
8. STUDY FOR TESTS.
9. To successfully complete this course you must be diligent. Make sure you set aside a period of time each day that you can work on the material, and do not fall behind the schedule attached to this syllabus. Work ALL the assigned homework problems as a minimum, and more if you feel you have not quite mastered the material. If you have a problem, contact me immediately so that you don't fall behind. The key to success in this course is doing your work every day.

RIGHT TO MODIFY

Your instructor and the STEM Division reserve the right to modify this syllabus as needed at any time throughout the semester.

Course Coverage:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1, 1.5-1.7, 2.1-2.2, 2.5-2.8</td>
<td>Real number system, Equations, Relations and Functions; Circles</td>
</tr>
<tr>
<td>3.1-3.6</td>
<td>Polynomial and Rational functions; Theory of Functions</td>
</tr>
<tr>
<td>4.1-4.5</td>
<td>Exponential, Logarithmic and Special functions</td>
</tr>
<tr>
<td>6.3-6.5, 8.1-8.3, 8.5</td>
<td>Progressions, The Binomial Theorem, Matrices, Determinants, mathematical reasoning skills, Sequences, Series and Applications</td>
</tr>
</tbody>
</table>

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 emailed to the class and also updated in Ecampus.

Revised: 08/19/2014