Mathematics

HCC Northwest College – Katy Campus

MATH 0312: Intermediate Algebra

CRN 11566 – Summer 2014 (2nd 8 Weeks)

Online Instruction | In Person Final Exam

3 hour lecture course + 1 hour lab / 64 hours per session / 8 weeks

Textbook: Intermediate Algebra by Lial, Hornsby, and McGinnis (11th Ed.)

ISBN-13: 9780321715418

MyMathLab Course ID: kaushik47988

First Day of Class: Monday, June 2, 2014

Instructor: Kimber Kaushik

Phone Number: 713-718-5733

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Office Hours: By appointment

Email: kimber.kaushik@hccs.edu, or via MyMathLab or Eagle Online

Course Description: Topics include factoring techniques, radicals, algebraic fractions, complex numbers, graphing linear equations and inequalities, quadratic equations, systems of equations, and an introduction to functions. Emphasis is placed on algebraic techniques, in order to successfully complete Math 1314 College Algebra. A Departmental Final examination must be passed with a score of 60% or more in order to pass this course.

Prerequisites: Acceptable score on placement test or Math 0308 (grade "C" or better)

Course Goal: This is the final course in the developmental mathematics sequence and its purpose is to prepare students for College Algebra.

Course Student Learning Outcomes (SLO):

1. Solve algebraic equations and inequalities involving rational expressions, radicals, quadratics, or linear expressions.

- 2. Examine and interpret the linear and quadratic graphs of equations and inequalities.
- 3. Solve application problems.
- 4. Use and interpret function notation in both algebraic and graphical contexts.

Learning Outcomes: Students will

- 1.1 add, subtract, multiply and divide polynomials
- 1.2 factor polynomials
- 1.3 add, subtract, multiply and divide rational expressions
- 1.4 simplify complex fractions
- 1.5 solve equations involving rational expressions
- 1.6 simplify equations involving rational exponents and simplify radicals
- 1.7 add, subtract, multiply, divide expressions involving radicals, and solve radical equations
- 1.8 add, subtract, multiply and divide complex numbers
- 1.9 solve quadratic equations by factoring, completing the square, and using the quadratic formula and the square root property
- 1.10 solve systems of linear equations in two variables
- 2.1 graph linear equations & linear inequalities in two variables
- 2.2 find the slope of a line & write its equation
- 2.3 graph quadratic functions and inequalities
- 3.1 solve word problems
- 4.1 recognize functional notation & evaluate functions

DE Student Services: The Distance Education Student Handbook contains policies and procedures unique to the DE student. Students should have reviewed the handbook as part of the mandatory orientation. It is the student's responsibility to be familiar with the handbook's contents. The handbook contains valuable information, answers, and resources, such as DE contacts, policies and procedures (how to drop, attendance requirements, etc.), student services (ADA, financial aid, degree planning, etc.), course information, testing procedures, technical support, and academic calendars.

Refer to the DE Student Handbook by visiting this link: <u>DE Student Handbook.</u>

Math Forum Participation: Throughout the semester, you will be expected to contribute to one of the math forums in Eagle Online. These forums create a classroom community by giving you the opportunity to get to know and help one another. Your participation in the forums also strengthens your ability to communicate in math, and helps you understand topics more deeply.

You are required to make at least **two** original contributions to one or more of the math forums. Your Math Forum Participation grade, categorized as a Quiz in MyMathLab's Gradebook, will be updated as you make contributions. You can earn up to **ten** additional points with each additional math forum contribution; these bonus points will be added to your highest test score *at the end of the summer session*. **MyMathLab**: All assignments EXCEPT THE FINAL EXAM AND MATH FORUMS, are accessed via the online program, MyMathLab (available at <u>www.mymathlab.com</u>). To register for MyMathLab, please refer to the handout "How to Register for MyMathLab" in the MyMathLab tab on this course's Eagle Online 2 home page.

When registering for MyMathLab, be sure to provide an email address that you frequently check; I will sometimes use this address to contact you about the online assignments in the course. Please take care to record your new username and password; you will need these throughout the course in order to access your MyMathLab account.

To work on course assignments, go to www.mymathlab.com, click the "Sign In" button, enter your Username and Password, and click "Sign In" again. Next, click the course, MATH 0312 -- CRN 11566.

You are welcome to use computers at any HCC campus library or math lab. If you choose to use your own computer, please run the Browser Check before starting assignments. To do so, click the "Browser Check" link on the MyMathLab Dashboard. If you have administrator rights, you can then install the components that enable you to watch videos and complete course assignments.

Textbook: An electronic version of the textbook, *Intermediate Algebra* (11th Edition by Margaret L. Lial, John Hornsby and Terry McGinnis. Addison Wesley: Boston 2012), comes with your MyMathLab subscription. You can access the eText by clicking the "Chapter Contents" tab in MyMathLab.

If you want a hard copy of the textbook, you can purchase it at any HCC campus bookstore or online through many book ordering websites. If you buy the book on campus, it will come packaged with an access code for MyMathLab. Please note that if you purchase the textbook elsewhere, it may not come packaged with MyMathLab; in this case, you would have to pay separately for a MyMathLab subscription.

Calculator Use: I strongly urge you to do all assignments without a calculator since calculators are not allowed on the final exam.

Preliminaries Assignment: The Preliminaries assignment instructs you how to input answers in MyMathLab, and it must be completed with a grade of 100% before you can access other MyMathLab assignments. The Preliminaries assignment is posted in the "Homework" section of MyMathLab.

Section Video Lectures: Before you begin the homework assignment for a textbook section, view the Video Lecture for that section. Viewing Section Video Lectures provides an overview of the section's material and gives you a context for the section's homework problems.

While you view Section Video Lectures, be sure to work the examples along with the lecturer. You can pause or rewind the video at any time. Note that you may not use a calculator during this course, so please ignore any references to calculator use in the Videos. Section Video Lectures are posted in the "Homework" section of MyMathLab.

Section Homework: There are homework assignments for each textbook section covered in class. Show your work neatly in a notebook as you complete each assignment. If you answer a homework question incorrectly, MyMathLab lets you know immediately and allows you to correct your response for full credit. If you miss a homework question three times, you can try again for full credit by pressing the "Similar Exercise" button and trying again. Homework assignments are posted in the "Homework" section of MyMathLab.

Chapter Summaries: Before you begin a Unit Test Review, study the Chapter Summary for each chapter in the unit. Use these summaries to write study cards with important formulas, definitions and problem-solving techniques. You can access the Chapter Summaries by clicking the "Chapter Contents" tab in MyMathLab.

Unit Test Reviews: Before you take a Unit Test, complete the associated Unit Test Review. *You must score at least 80% on the Review in order to take the corresponding Unit Test*. Each Review is worth **two** homework grades. Do not use a calculator since you won't be able to use a calculator on the final exam. Unit Test Reviews are posted in the "Homework" section of MyMathLab.

Unit Practice Tests: Unit Practice Tests are timed, two-hour tests containing randomized selections of twenty questions similar to questions on the associated Unit Test Review. You can take the Unit Practice Test as many times as you like; each test will be different. Do not use a calculator during testing since you won't be able to use a calculator on the final exam.

Unit Practice Test grades will not affect your course grade, but I highly recommend that you take each one at least once. The purpose of the Unit Practice Tests is to simulate the test-taking experience so you can improve your performance on the actual Unit Test. Unit Practice Tests are posted in the "Quizzes and Tests" section of MyMathLab.

Unit Tests: There are three timed, two-hour Unit Tests, each consisting of twenty questions. You can take a Unit Test only once, and you must complete it in one sitting. *Press the "Submit" button only when you are ready for the Unit Test to be graded.*

The Unit One Test covers Chapter 2 (except Sections 2.4 and 2.6), Chapter 3 and Section 4.1. The Unit Two Test covers Chapter 5 (except Section 5.2) and Chapter 6. The Unit Three Test covers Chapter 7 (except Section 7.6), Chapter 8 (except Section 8.6), and Sections 9.2 and 9.5. Unit Tests are posted in the "Quizzes & Tests" section of MyMathLab.

Be sure to study for each Unit Test before you begin it; you will not have time during the test to look up similar problems. Do not use a calculator during testing since you won't be able to use a calculator on the final exam. Show your work neatly in your notebook during test taking.

As soon as you take a Unit Test, you should review your results. During this review, you will be able to access the standard MyMathLab tutorial features. If you wish to review your test later, you can access it in the "Gradebook" section of MyMathLab.

I'll replace your lowest Unit Test grade with your final exam grade, if that is to your advantage.

Unit Test Revisions: After you review your Unit Test results, complete the Unit Test Revisions *that are not already marked with a green check.* I'll add **two points** to your test grade **for each correct revision** that corresponds to an incorrect test question. Unit Test Revisions are available as soon as you take the Unit Test. Unit Test Revisions are posted in the "Homework" section of MyMathLab.

Final Exam Reviews: The online, interactive Final Exam Review is available in the "Homework" section of MyMathLab; it is required and counts as **three** homework grades.

Additional Final Exam Reviews are available for download and printing in the "Preparing for the Final Exam" topic on the Eagle Online home page for this course; answers are listed at the end of each document. These Reviews are optional and not graded.

Practice Final Exam: The Practice Final Exam is timed, lasts three hours, and consists of a random selection of 33 questions similar to questions in the interactive Final Exam Review. You can retake the Practice Final Exam as many times as you like.

Each Practice Final Exam will contain a different selection of problems. The Practice Final Exam grades will not affect your course grade, but I highly recommend that you take the Exam at least once. The purpose of the Practice Final Exam is to simulate the test-taking experience so you can improve your performance on the actual Final Exam. The Practice Final Exam is posted in the "Quizzes and Tests" section of MyMathLab.

Study Plan: You can practice more problems by visiting the "Study Plan" section of MyMathLab. Study Plan results do not affect your course grade.

Online Assignment Availability and Due Dates: You can see when assignments will first become available in MyMathLab, and when they are due, by checking the Eagle Online Calendar or the MyMathLab Dashboard. Assignment due dates are also posted in MyMathLab alongside the assignments in the "Homework" and "Quizzes & Tests" sections.

Due dates for homework assignments are *not firm*; you can continue to work on these assignments after their due dates without penalty. However, I highly recommend that you finish homework assignments by their due dates so you will be well-prepared for the Unit Tests. Be sure to complete and/or correct all homework assignments by the end of the semester to improve your homework average and to prepare for the final exam.

Due dates for Unit Tests and Unit Test Revisions, on the other hand, are *firm*; if you need more time to complete one of these assignments, email me and explain why.

Mastering the Material: Record your work in a math notebook. Be neat and highlight tricky problems. Writing your work in an organized manner helps you think clearly and gives you a record of your thought. You can then review the material as you study for tests and the final exam. To receive partial credit on the final exam, you must show your work neatly; therefore, keeping a math notebook gives you good practice.

While you work on homework, review, and revision problems, and while you review tests, you can obtain tutorial help by clicking the "Help Me Solve This," "View an Example," or "Ask My Instructor" buttons. Some questions are also paired with a helpful video or animation. Finally, you can access additional questions for each section in the "Study Plan" section of MyMathLab.

You cannot use a calculator during the final exam, so please do not use one during any online course assignment.

To prepare for tests, study the Chapter Summaries and make study cards with important formulas, definitions and problem-solving techniques. Next, complete the Unit Test Review. Then, memorize the information on your study cards so you can take the test without referring to any notes. When you have mastered the material, take the Unit Practice Test at least once. You should now be ready to take the Unit Test.

Free in-person tutoring is available at many HCC campuses. Another option is to use HCC's free Online Tutoring Services, available at <u>www.hccs.askonline.net</u>. Use your student ID or HCC e-mail address to create an account. Instructions, including a 5-minute video, are provided to make you familiar with the capabilities of this service.

Final Exam Preparation: First, reread the Chapter Summaries, and study the cards you've made for each chapter. Next, complete the online, interactive Final Exam Review in MyMathLab. If you have time, download, print and work through the paper Final Exam Reviews available in Eagle Online.

Next, take the Practice Final Exam in MyMathLab at least once. Your goal should be to complete a Practice Final Exam within three hours, without referring to any notes. Show your work neatly in your notebook during test taking.

Finally, be sure to get a good night's sleep the night before the final exam. Review your study cards the night before and the morning of the final exam, and eat a meal with protein before exam time.

Final Exam: The final exam is a paper and pencil exam which must be taken in person at a designated testing center in Houston at the end of the summer session. Here are the testing center locations and times for each testing date:

- Friday, July 25, 2014
 - HCC Central College, Central Campus, Fine Arts Building, 3517 Austin Street (begin your test between 4 and 7 pm)
- Saturday, July 26, 2014

- HCC Northwest College, Katy Campus, 1550 Fox Lake Drive (begin your test between 10 am and 1 pm)
- Sunday, July 27, 2014
 - HCC Southeast College, Eastside Campus, Felix Morales Building, 6815 Rustic (begin your test between 10 am and 1 pm)

If you live outside the Houston area, you need to arrange for proctored testing near you; for more information, see the Handbook.

MATERIALS NEEDED FOR TAKING THE FINAL EXAM:

Sharpened #2 pencils

Eraser (Hi-Polymer erasers by Pentel are recommended)

Picture ID

Course information: MATH 0312, CRN 11566, Professor Kimber Kaushik

When you arrive at a testing center, you must show your ID and provide the course information listed above. You'll be given a test booklet and a scantron form. Be sure to request scratch paper as well.

The final exam is a paper and pencil test, has 33 multiple-choice questions, lasts two hours, and covers all material from class. The exam is CLOSED BOOK, AND NO NOTES OR CALCULATORS ARE ALLOWED.

All answers must be marked on the provided scantron form. To receive partial credit, *show your work neatly on the provided scratch paper, and number each problem.*

Please note that you must score at least 60% on the final exam in order to earn a C or higher in the course. If you score less than 60% on the exam, I'll carefully examine your work and assign partial credit when earned.

Evaluation: Grades on all course assignments, including the paper final exam, will be found in the "Gradebook" section of MyMathLab. You can also view your running course average by clicking the "Show Overall Score" button in the Gradebook.

Your course average will be calculated as follows:

10%: math forum participation; 15%: homework average; 45%: test average; 30%: the departmental final exam

If you score 60% or more on the final exam, your course grade is based on your course average as follows:

A: 90 – 100%, B: 80 – 89%, C: 70 – 79%, D: 60 – 69%, F: less than 60%

If you score between 50 and 60% on the final exam, your course grade is based on your course average as follows:

D: 60% or more, F: less than 60%

If you score less than 50% on the final exam, your course grade will be an F.

Please note that you must earn a grade of C or higher in order to take College Algebra (MATH 1314).

Dropping/Course Withdrawal: If you wish to drop the course without a grade, you must do so by *Monday, June 9, 2014*. If you do not log in to this course's Eagle Online shell or register for MyMathLab by June 9, you will automatically be dropped from the course. After June 9, you can withdraw yourself until *Monday, July 7, 2014, at 4:30 pm*. I may also administratively withdraw you if you are inactive in the course after June 9, but I will first attempt to contact you.

Please read the section "Policies and Procedures" in the <u>DE Student Handbook</u> for more details.

EGLS 3 -- Evaluation for Greater Learning Student Survey System: At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the semester, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. Go to www.hccs.edu/egls3 for more information.