**Instructor**: Burnette Thompson, Jr

**Instructor Contact Information** Email: burnette.thompson@hccs.edu, Office: 713 718-7770

**Office location and hours**: Scarcella Building, Faculty Offices 7 am - 8 am MTW ; 11am - 12pm TTH

**Course Description**Intermediate Algebra: Topics include factoring techniques, radicals, algebraic fractions, complex numbers, graphing linear equations and inequalities, quadratic equations, systems of equations, graphing quadratic 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**

Math 0409: Pass with "C" or better; or equivalent score on the placement exam.

**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 solving 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, quadratic formula and 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

**CALENDAR**

|  |  |  |  |
| --- | --- | --- | --- |
|  | W |  **Pretest and Orientation(*Students must take the Orientation before beginning any work)*** | **WEEK 1** |
|  |  | Chapter 1: Linear Equations, Inequalities and Applications |  |
|  |  | 1.1 Linear Equations in One Variable |  |
|  |  | 1.2 Formulas  | **WEEK 2** |
|  |  | 1.3 Applications of Linear Equations |  |
|  |  | 1.5 Linear Inequalities in One Variable and Worksheet |  |
|  |  | 1.7 Absolute Value Equations and Inequalities and Worksheet |  |
|  |  | Chapter 2: Graphs, Linear Equations and Functions | **WEEK 3** |
|  |  | 2.1 Linear Equations in Two Vairables and Worksheet |  |
|  |  | 2.2 The Slope of a Line and Worksheet |  |
|  |  | 2.3 Writing Equations of Lines and Worksheet |  |
|  |  | 2.4 Linear Inequalities in Two Variables |  |
|  |  | 2.5 Introduction to Functions | **WEEK 4** |
|  |  | 2.6 Functional Notation |  |
|  |  | **EXAM 1 – includes sections 1.1- 2.6** |  |
|  |  | Chapter 3: Systems of Linear Equations | **WEEK 5** |
|  |  | 3.1 Systems of Linear Equations in Two Variables and Worksheet and **HANDOUT** |  |
|  |  | Chapter 4: Exponents, Polynomials and Polynomial Functions |  |
|  |  | 4.1 Integer Exponents and Scientific Notation |  |
|  |  | 4.3 Polynomial Functions |  |
|  |  | 4.4 Multiplying polynomials. |  |
|  |  | 4.5 Dividing polynomials | **WEEK 6** |
|  |  | Chapter 5: Factoring |  |
|  |  | 5.1 Greatest Common Factors; Factoring by Grouping |  |
|  |  | 5.2 Factoring Trinomials and Worksheet |  |
|  |  | 5.3 Special Factoring and Worksheet  |  |
|  |  | 5.4 A General Approach to Factoring | **WEEK 7** |
|  |  | 5.5 Solving Equations by Factoring  |  |
|  |  | **EXAM 2 – (includes sections 4.1 thru 5.5)**  |  |
|  |  | Chapter 6: Rational Expressions and Functions | **WEEK 8** |
|  |  | 6.1 Multiplying & Dividing Rational Expressions and Worksheet |  |
|  |  | 6.2 Adding and Subtracting Rational Expressions and Worksheet |  |
|  |  | 6.3 Complex Fractions | **WEEK 9** |
|  |  | 6.4 Equations with Rational Expressions and Graphs |  |
|  |  | 6.5 Applications of Rational Expressions | **WEEK 10** |
|  |  | Chapter 7: Roots, Radicals, and Root Functions  |  |
|  |  | 7.1 Radical Expressions and Graphs and Worksheet |  |
|  |  | 7.2 Rational Exponents.**EXAM 3 - ( includes sections 6.1 - 7.2 )** | **WEEK 11** |
|  |  | 7.3 Simplifying Radical Expressions |  |
|  |  | 7.4 Adding and Subtracting Radical Expressions and Worksheet | **WEEK 12** |
|  |  | 7.5 Multiplying and Dividing Radical Expressions and Worksheet |  |
|  |  | 7.7 Complex Numbers and Worksheet |  |
|  |  |  |  |
|  |  | **Chapter 8: Quadratic Equations, Inequalities, and Functions** | **WEEK 13** |
|  |  | **8.1 The Square Root Property and Completing the Square** |  |
|  |  | **8.2 The Quadratic Formula** |  |
|  |  | 8.6 More about Parabolas |  |
|  |  | Graphing Quadratic Inequalities | **WEEK 14** |
|  |  | **EXAM 4 - ( includes sections 7.3 - 8.6 )** |  |
|  |  | Go over FINAL EXAM REVIEW | **WEEK 15** |
|  |  |  |  |
|  | Note: T**he Instructor reserves the right to make such changes to the above as may be dictated by various circumstances.** | **Final Exam – NO FINALS WILL BE GIVEN DURING WEEK 15** | **WEEK 16** |

**Instructional Methods**

This is a computer-assisted math class which meets twice a week. Homework assignments will be submitted online using the MyMathLab program. Students will be expected to read the textbook, submit assignments by the due dates, study for

exams, participate in classroom activities, and attend class. In this course, you will be involved in discussions with your

classmates and your instructor. As you will want to contribute to these discussions, you will need to come to class prepared

 to discuss, analyze, and evaluate information from your text and notes.

**Student Assignments**

* **Homework** : Homework should be done weekly
* **Make-up policy:** There will be **no make-up exams** under any circumstances.
* **Final Exam:** A comprehensive departmental final exam constructed by the mathematics department will be given. A Final Exam Review will be posted online prior to the final exam. You should work on the final exam review so as to better prepare you for the final exam. **Only students who are withdrawn from the course before the official withdrawal date will be eligible for a grade of “W.”**

**Final Exam Policy in Developmental Mathematics:**

The following policy was adopted by Houston Community College regarding the system-wide Final Examinations in developmental mathematics courses:

I**f a student scores less than a 60% on the Final Exam, then the student receives an IP or F in the course. If a student scores at least a 60% on the Final Exam, then the grades will be averaged in accordance with the grade calculation formula as stated on the student syllabus; i.e., the student earns an A, B, C, IP, or F in the course.**

**Assessments**

**Your final grade will be calculated as follows:**

 **( The sum of the 3 highest exams + MML homework grade + final exam + final exam ) /6= Your final average**

**Grading Scale**

90 - 100 = A
80 - 89 = B
70 - 79 = C
00 - 69 = IP or F (or less than 60% in the final exam)

**Note: The instructor cannot assign a grade of D or W.**

**International Students**

Receiving a W in a course may affect the status of your student Visa. Once a W is given for the course, it will not be changed to an F because of the visa consideration. Please contact the International Student Office at 713-718-8520 if you have any questions about your visa status and other transfer issues.

**HCC Policy Statement - ADA**

Services to Students with Disabilities

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at his or her respective college at the beginning of each semester. Faculty members are authorized to provide only the accommodations requested by the Disability Support Services Office. Persons needing accommodations due to a documented disability should contact the ADA counselor for their college as soon as possible. For questions, please contact Dr. E. J. Sit at (713) 718-7503. To visit the ADA Web site, please visit www.hccs.edu then click Future students, scroll down the page and click on the words Disability Information.

**Co-Requisite Policy**

Houston Community College enforces developmental prerequisites and co-requisites of college-level courses. When a student enrolls in a college-level course that has developmental course co-requisites, he/she must also co-enroll in the developmental co-requisite course. If the student withdraws or is withdrawn for non-attendance from the co-requisite developmental course(s), the student must also be withdrawn from the college-level course. Override capability of this policy is reserved for developmental chairs and deans only.

**HCC Policy Statement: Academic Honesty**

Note: As with all developmental mathematics courses at HCC, **the use of a calculator during an exam is prohibited** and will be considered cheating.

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. “Scholastic dishonesty”: includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

* Copying from another students’ test paper;
* Using materials not authorized by the person giving the test;
* Collaborating with another student during a test without authorization;
* Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test not yet administered;
* Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another’s work and the unacknowledged incorporation of that work in one’s own written work offered for credit.
Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

**HCC Policy Statements**

*Class Attendance - It is important that you come to class!*Attending class regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Simply put, going to class greatly increases your ability to succeed. You are expected to be on time at the beginning of each class period. For complete information regarding Houston Community College’s policies on attendance, please refer to the Student Handbook. You are responsible for materials covered during your absences. Class attendance is checked daily. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences.

If you are not attending class, you are not learning the information. As the information that is discussed in class is important for your career, **students may be dropped from a course after accumulating absences in excess of six (6) hours of instruction (equivalent to 4 absences)**. The six hours of class time would include any total classes missed or for excessive tardiness or leaving class early (3 tardies/left class early is equivalent to 1 absence). Role will be taken at the beginning and end of class. Students are expected to remain in class until the instructor dismisses the class. A tardy consists of arriving to class more than 5 minutes after class has started and **leaving early** consists of leaving more than 10 minutes before the end of class.

If you exceed four absences before the withdraw deadline (April 3, 2017), **YOU** **ARE AT RISK OF RECEIVING ONE OF THE FOLLOWING GRADES: W, F, OR FX.**

If you exceed four absences before the withdraw deadline, **YOU** **ARE AT RISK OF RECEIVING ONE OF THE FOLLOWING GRADES: W, F, OR FX.**

**After the drop date, students who have excessive absences will no longer be allowed to drop.  .**

You may decide NOT to come to class for whatever reason. As an adult making the decision not to attend, you do not have to notify the instructor prior to missing a class. However, if this happens too many times, you may suddenly find that you have “lost” the class.
Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, you are responsible for all material missed. It is a good idea to find a friend or a buddy in class who would be willing to share class notes or discussion or be able to hand in your work if you unavoidably miss a class.

**HCC Course Withdrawal Policy**If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before, you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor *may* “alert” you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a “W” on your transcript. \*\*Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. ***Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.***  If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

**Repeat Course Fee**The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

**Classroom Behavior**Food/Children Policy

 Absolutely no food or drinks are allowed in the classroom. If you bring food or drinks to class you will be asked to dispose of it. HCCS policy forbids children in classrooms and lab facilities.

Cell Phone Policy

 All cell phones must be muted or turned off during class. Cell phone activity during class time is deemed to be disruptive to the academic process. Cell phones are not to be on student desks nor on students’ laps during class time. Cell phone usage, of any kind, is expressly prohibited during class. Text messaging is strictly prohibited during class time. Students who violate this cell phone policy will be told to leave class for the day and marked absent for the remainder of the class period.

Laptops

 Laptops are not allowed in the classroom.

**Use of Camera and/or Recording Devices**As a student active in the learning community of this course, it is your responsibility to be respectful of the learning atmosphere in your classroom. To show respect of your fellow students and instructor, you will turn off your phone and other electronic devices, and will not use these devices in the classroom unless you receive permission from the instructor.

Use of recording devices, including camera phones and tape recorders, is prohibited in classrooms, laboratories, faculty offices, and other locations where instruction, tutoring, or testing occurs. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable accommodations

**Personal Communication Device Policy:**

All personal communication devices (any device with communication capabilities including but not limited to cell phones, blackberries, pagers, cameras, palmtop computers, lap tops, PDA's, radios, headsets, portable fax machines, recorders, organizers, databanks, and electronic dictionaries or translators) must be muted or turned off during class. Such activity during class time is deemed to be disruptive to the academic process. Personal communication devices are to not be on the student desk during examinations. Usage of such devices during exams is expressly prohibited during examinations and will be considered cheating (see academic honesty section above).

**Student Course Reinstatement Policy:**

Students have a responsibility to arrange payment for their classes when they register, either through cash, credit card, financial aid, or the installment plan. Faculty members have a responsibility to check their class rolls regularly, especially during the early weeks of a term, and reconcile the official class roll to ensure that no one is attending class whose name does not appear on it. Students who are dropped from their courses for nonpayment of tuition and fees who request reinstatement after the official date of record (OE Date) can be reinstated by making payment in full and paying an additional \$75 per course reinstatement fee. A student requesting reinstatement should present the registrar with a completed **Enrollment Authorization Form** with the signature of the instructor, department chair, or dean who should verify that the student has been attending class regularly. Students who are reinstated are responsible for all course policies and procedures, including attendance requirements.

**Resources:**

Tutoring: Free tutoring is available at the Eastside campus in the Tutoring Assistance Center, room 210, Angela Morales Bldg. Additional help is also available through http://m.se.hccs.edu/index.php and through Student Support Services.

Students can get free assistance, 24 hours a day, 7 days a week, in Math, English and other subjects, at [www.hccs.askonline.net](http://www.hccs.askonline.net) . Typically, posted questions are answered by an HCC tutor or faculty within 24 hours (usually under 6 hours).

You may also find free tutoring at various HCCS campuses by going to Find-A-Tutor at <http://imc06.hccs.edu/alltutoring/FMPro?-db=alltutoring.fp5&-lay=info&-format=search.htm&-view>.

There are also several online math resources that you can find with an internet search. Some sample websites include:

<http://sophia.hccs.edu/~douglas.bump/math> [www.khanacademy.org](http://www.khanacademy.org)

Open Lab Hours: Students are welcome to stop by the Open Lab, located in room 210, to work on homework assignments outside of class. Please call (713) 718-7263 to find out the Open Lab hours for the semester.

**Administration contact information**

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| **College - Level Math Courses** |
| Chair of Math | Jaime Hernandez | SW Campus | 713-718-2477 | Stafford, Scarcella, N108 |
|  - Secretary |  | SW Campus | 713-718-7770 | Stafford, Scarcella, N108 |
| Math Assoc. Chair | Clem Vance | CE Campus | 713-718-6644 | San Jacinto Building, Rm 369 |
| Math Assoc. Chair | Ernest Lowery | NW Campus | 713-718-5512 | Katy Campus Building, Rm 112 |
| Math Assoc. Chair | Mahmoud Basharat | NE Campus | 713-718-2438 | Codwell Hall Rm 105 |
|  |  |  |  |  |
| **Developmental Math Courses** |
| Chair of Dev. Math | Susan Fife | SE Campus | 713-718-7241 | Felix Morales Building, Rm 124 |
|  - Secretary | Carmen Vasquez | SE Campus | 713-718-7056 | Felix Morales Building, Rm 124 |
| Dev. Math Assoc. Chair | Marisol Montemayor | SE Campus | 713-718-7153 | Felix Morales Building, Rm 124 |
| Dev. Math Assoc. Chair | Jack Hatton | NE Campus | 713-718-2434 | Northline Building, Room 321 |

For issues related to your class, please first contact your instructor.

If you need to contact departmental administration, then contact the appropriate Associate Chair.

If further administrative contact is necessary, then contact the appropriate Department Chair.

TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, 20 U.S.C. A§ 1681 ET. SEQ.

Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students’ rights with regard to sex/gender discrimination. Information regarding these rights are on the HCC website under Students-Anti-discrimination. Students who are pregnant and require accommodations should contact any of the ADA Counselors for assistance.

It is important that every student understands and conforms to respectful behavior while at HCC. Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations.

Log in to: [www.edurisksolutions.org](http://www.edurisksolutions.org" \t "_blank) . Sign in using your HCC student e-mail account, then go to the button at the top right that says **Login** and enter your student number.