

Division of College Readiness Developmental Math Department

https://learning.hccs.edu/programs/developmental-mathematics

MATH 0314: Intermediate Algebra | Lecture | #15041

Spring 2019 | 16 Weeks (1-14-2019 to 5-12-2019)
In-Person |Felix Morales Building 201 | TuTh 7 p.m.-8:20 p.m.
3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor: Brian Walker Office Phone: 713-718-7770

Office: Felix Morales Building Rm 124 Office Hours: By Appointment Only HCC Email: brian.walker@hccs.edu Office Location: Southeast College

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear your concerns and just to discuss course topics.

Instructor's Preferred Method of Contact

HCC Email address is preferred method of contact. I will respond to emails within 24 hours Monday through Friday; I will reply to weekend messages on Monday mornings.

You can also contact me through REMIND. Registration information for REMIND is as follows: Text the message mb842dg2 to the number 81010. If you're having trouble with 81010, try texting mb842dg2 to (713) 893-0010. Don't have a mobile phone? Go to rmd.at/h842dg2 on a desktop computer to sign up for email notifications.

What's Exciting About This Course

This course has been designed to guide students to the skills that are necessary to succeed in a College Algebra course, a course which is often the first step into a career in STEM. In this course you will practice the skills and techniques to tackle rigorous algebraic problems and gain the practice and experience to do so comfortably. Also, as one of our co-requisite developmental courses, you may be taking this class in the same semester as College Algebra, getting the time, guidance, and support to help you succeed in your college-level course all in one semester.

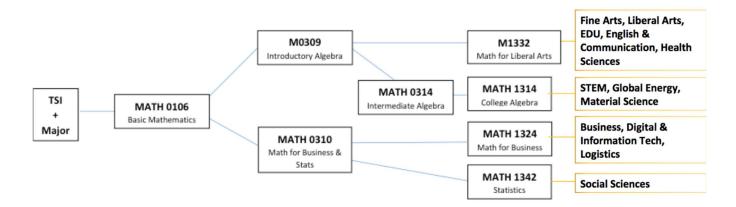
My Personal Welcome

I am very excited and honored to be your professor for this course. I encourage you to work hard and stay current on all your assignments.

Prerequisites and/or Co-Requisites

MATH 0314 requires either that a student has passed MATH 0309 with a "C" or better **OR** TSIA Math Score 336-349 with Intermediate Algebra score 4-15 **OR** an equivalent score on a Placement Exam

MATH 0314 is a co-requisite to MATH 1314. Since MATH 0314 is co-requisite with MATH 1314, withdrawing from MATH 0314 will necessitate withdrawal from MATH 1314 as well. Please carefully read and consider the repeater policy in the HCCS Student Handbook.



Eagle Online Canvas Learning Management System

This section of MATH 0314 has associated with it a course in Eagle Online Canvas
(https://eagleonline.hccs.edu). HCCS Open Lab locations may be used to access the Internet and Eagle Online Canvas. It is recommended that you **USE FIREFOX OR CHROME AS YOUR BROWSER**.

Review Guides, Supplemental Material, etc.

Look in Eagle Online Canvas for information to assist you in the course. https://eagleonline.hccs.edu/login/ldap

Instructional Materials



Textbook Information

The textbook listed below is *required* for this course.

Intermediate Algebra Math 0314 (Custom edition by McGraw Hill Publishing).

ISBN: 978-1-26-08492-40 (textbook and access code) ISBN: 978-1-26-08492-57 (access code with e-book)

Student Purchase Options

- Package ISBN 9781260849240: \$128.60
- ➤ Connect Access Card + Student Workbook ISBN 9781260849257: \$100
- Connect Math Online Access through www.Connectmath.com: \$70

Package Includes Soft Bound textbook for Math 0314, Student Workbook, Connect Math Access Code for Math 0314

Temporary Free Access to E-Book

This course has associated with it a Connect Math course. All Connect Math Assignments are required as a major part of your grade and are essential for you to master the skills required for success. Completing assignments and coursework on a timely basis will assist you in being successful.

To access the Connect Math course, including temporary free access to the online eBook, go to www.connectmath.com and register using the Connect Math Course ID:

Class Code: 4J6FE-Q6J6X

Two Week Trial Code: 8A05F-AF2AB-D926F-ABD05

Other Instructional Resources

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the HCC Tutoring Services website for services provided.

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at http://library.hccs.edu.

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at http://www.hccs.edu/resources-for/current-students/supplemental-instruction/.

Course Overview

Math 0314: Intermediate Algebra is a developmental math course whose topics include factoring techniques, radicals, algebraic fractions, absolute values, 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 needed 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 the course.

Core Curriculum Objectives (CCOs)

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that

students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

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

Program Student Learning Outcomes (PSLOs)

During courses in the developmental math program students will

- 1. Engage in problem solving strategies, such as organizing information, drawing diagrams, and modeling.
- 2. Use symbolic representations to solve problems. This includes manipulating formulas, solving equations, and graphing lines.
- 3. Learn the foundational mathematical skills that will enable a student to successfully complete a college level math course.

Course Student Learning Outcomes (CSLOs)

Upon completion of MATH 0314, the student will be able to:

- 1. Define, represent, and perform operations on real and complex numbers.
- 2. Recognize, understand, and analyze features of a function.
- 3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
- 4. Identify and solve absolute value, polynomial, radical, linear and rational equations.
- 5. Identify and solve absolute value and linear inequalities.
- 6. Model, interpret and justify mathematical ideas and concepts using multiple representations.
- 7. Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines.

Learning Objectives

Upon completion of MATH 0314, the student will be able to:

- 1. add, subtract, multiply and divide polynomials
- 2. factor polynomials
- 3. multiply and divide rational expressions
- 4. simplify complex fractions
- 5. solve equations involving rational expressions
- 6. simplify expressions involving rational exponents
- 7. solve radical equations
- 8. add, subtract, multiply and divide complex numbers
- 9. solve quadratic equations by factoring, completing the square, quadratic formula and square root property

- 10. solve one-variable linear equations and inequalities
- 11. solve absolute value equations
- 12. solve absolute value inequalities
- 13. graph linear equations in two variables
- 14. find the slope of a line & write its equation
- 15. solve a 2 × 2 linear system of equations by the substitution and addition methods
- 16.graph quadratic functions
- 17. solve word problems
- 18. recognize functional notation & evaluate functions

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Math cannot be learned by merely reading or hearing about it, you must spend the time to practice. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class
- Completing assignments
- Participating in class

There is no short cut for success in this course; it requires time and dedication.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and make up
- Provide the course outline and class calendar which will include a description of any special projects or assignments
- · Arrange to meet with individual students before and after class as required

As a student, it is your responsibility to:

- Attend class
- Participate actively by reviewing course material, practicing the material, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Attain a raw score of at least 60% on the departmental final exam
- Be aware of and comply with academic honesty policies in the <u>HCCS Student Handbook</u>

Assignments, Exams, and Activities

Exams

Although our class time is scheduled for 1 hour and 20 minutes, please be prepared to stay for approximately 2 hours or more for exams. This will include mid-term and final examinations.

Midterm and Final Exams

All students will be required to take a cumulative departmental midterm exam consisting of 25 multiple choice questions and a cumulative departmental final exam consisting of 33 multiple-choice questions. Students must provide their own Scantron forms. You must get at least 60% (20 of 33) of the items correct on the final to pass the course (departmental decision).

Grading Formula

Exams 60% of your grade

Assignments 15% of your grade (Connect Math and other assignments)

Final Exam 25% of your grade

At the end of the semester, your overall grade will be computed as follows: Class Grade=.6*(Exams Average)+.15*(Assignments)+.25(Final Exam Grade)

Grade	Percent	
Α	90% +	
В	80% - 89%	
С	70% - 79%	
F/IP	0% - 69%	

Note: Any student that has failed this course for the first time is eligible to receive an IP. Any subsequent failures will receive an F.

HCC Grading Scale can be found on this site under Academic Information: http://www.hccs.edu/resources-for/current-students/student-handbook/

Course Calendar

Week	Dates	Topic/What's due			
	Jan 15	Syllabus			
	Jan 17	1.1 Linear Equations in One Variable			
1		1.2 Applications of Linear Equations in One Variable			
		(applications involving mixtures and applications involving			
		distance rate and time only)			
	Jan 22	1.4 Linear Inequalities in One Variable (omit applications of			
2	Jan 24	inequalities)			
		1.5 Compound Inequalities (omit applications of compound			
		inequalities)			

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		1.6 Absolute Value Equations				
		1.7 Absolute Value Inequalities				
	Jan 29	2.1 Linear Equations in Two Variables				
	Jan 31	2.2 Slope of a Line and Rate of Change (omit parallel and				
		perpendicular lines, omit applications and interpretation of				
3		slope)				
		2.3 Equations of a Line (omit parallel and perpendicular lines)				
		2.6 Introduction to Functions				
		Test Review				
	Feb 5	Exam 1 Ch1.1-2.6 (All Homework for Chapters 1 and 2				
	Feb 7	Due Feb 5)				
4		4.1 Properties of Integer Exponents and Scientific Notation				
4		(omit scientific notation)				
		4.2 Addition and Subtraction of Polynomials and Polynomial				
		Functions				
	Feb 12	4.3 Multiplication of Polynomials (omit translations involving a				
	Feb 14	polynomial, omit applications involving a product of				
5		polynomials)				
		4.4 Division of Polynomials (omit synthetic division)				
		4.5 Greatest Common Factor and Factoring by Grouping				
	Feb 19	4.6 Factoring Trinomials (omit factoring trinomials by trial				
	Feb 21	and error method)				
6		4.7 Factoring Binomials (omit factoring binomials of the type				
		x^6+y^6) (Note: There is a factor summary section after the				
		practice exercises and a corresponding Connect assignment)				
	Feb 26	4.8 Solving Equations by Using the Zero Product Rule (omit				
	Feb 28	applications of quadratic equations, omit applications of				
7		quadratic functions)				
,		5.1 Rational Expressions and Rational Functions (omit graphs				
		of rational functions, include finding the domain)				
		Test Review				
8	Mar 5	Exam 2 Midterm (Content TBA)				
	Mar 7	5.2 Multiplication and Division of Rational Expressions				
9	Mar 19	5.3 Additions and Subtraction of Rational Expressions				
	Mar 21	5.4 Complex Fractions				
	Mar 28	5.5 Solving Rational Equations				
10	Mar 28	5.6 Applications of Rational Equations and Proportions				
10		(applications of rational equations only, omit first 3 parts)				
		LAST DAY TO WITHDRAW 4/1/2019				
	Apr 2	3.2 Systems of Linear Equations by the Substitution Method				
11	Apr 4	3.3 Systems of Linear Equations by the Addition Method				
		Test Review				
	Apr 9	Exam 3 Ch5.1-3.3 (All Homework for Chapters 4, 5, and				
	Apr 11	3 Due Apr 9)				
12		6.1 Definition of the nth Root (omit radical functions)				
		6.2 Rational Exponents (omit applications involving rational				
		exponents)				
1.0	Apr 16	6.7 Solving Radical Equations (omit applications of radical				
13	Apr 18	equations and functions)				
1	1	6.8 Complex Numbers				

		7.1 Square Root Property and Completing the Square (omit		
		literal equations)		
1.4	Apr 23	7.2 Quadratic Formula		
14	Apr 25	7.4 Graphs of Quadratic Functions		
	Apr 30	Exam 4 Ch5.2-6.1		
15	May 2	Final Exam Review (All Homework for Chapters 6 & 7 Due		
	,	May 8 th NO EXCEPTIONS)		
16	May 9	Final Exam 7:30pm-9:30pm		

Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Instructor's Practices and Procedures

Missed Assignments

You may be able to make - up ONE missed exam during the semester depending on the circumstances PROVIDED you contact me regarding the make-up within two days PRIOR of the missed exam. I will only allow you to make up an exam in the event of unforeseen circumstances and/or emergency situations. Please read the tentative course outline and make yourself available for all exam dates. Also, I do not drop any grades! You are expected to complete all of your assignments. Any assignments not completed in Connect Math prior to due dates will result in a zero.

Academic Integrity

Please read more about academic integrity in your student handbook, HOWEVER, you should be aware of my specific policies on cheating. I consider cheating to be the copying of work (homework or exam) from any source, getting someone else to complete your assignment, or turning in group work to which you have not contributed. If I suspect that you have cheated on any assignment/exam, your grade will be a zero (non-negotiable). If someone else in the class is involved in cheating with you, that person will receive a zero as well.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance): http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/

Attendance Procedures

Attendance is very important along with punctuality. If you arrive after class has started please quietly sign in at the front of the classroom and take whatever necessary handouts are available. This will also include test days. You are responsible for any materials and/or assignments covered that day if you miss a class. Due dates for classwork and homework assignments will not change due to absences. According to HCC policy if you miss more than six (6) hours of instruction, including tardiness, you can be dropped from the course. Please see your student handbook for more specific information. The last day to withdraw from this course is **APRIL 1, 2019**

No longer attending or participating in this class does not constitute withdrawal from this course, nor does the student's notification to the instructor that the student wishes to be

dropped. It is the student's responsibility to fill out a "schedule change form" to officially drop this class. Failure to do so may result in the grade of "F".

Student Conduct

It is our shared responsibility to develop and maintain a positive learning environment for everyone. As a fellow learner, you are to respect the learning needs of your classmates and assist your instructor achieve this critical goal. Any conduct that is deemed detrimental to the academic atmosphere, such as cell phone use or consistently talking during instructional delivery, will not be tolerated.

Electronic Devices

Please see that all mobile devices (tablets, phones, laptops, etc.) are silenced and put away during class time. Their use is not permitted in this course. If you have an emergency and need to respond to a text message, phone call, or voicemail, please quietly excuse yourself from the class. Thank you in advance.

Per department policy, Math 0314 students will be allowed the use of a **basic calculator** during the **departmental midterm exam** and the **departmental final exam**. Students should provide their own basic calculator. Scientific and graphing calculators are **prohibited**.

The use of any calculator during any exam other than the departmental midterm exam and departmental final exam is prohibited and will be considered cheating (see academic integrity section above).

Developmental Math Program Information

For more information on the developmental math program visit: https://learning.hccs.edu/programs/developmental-mathematics

HCC Policies

Here's the link to the HCC Student Handbook http://www.hccs.edu/resources-for/current-students/student-handbook/ In it you will find information about the following:

Academic Information	Incomplete Grades
Academic Support	International Student Services
Attendance, Repeating Courses, and Withdrawal	Health Awareness
Career Planning and Job Search	Libraries/Bookstore
Childcare	Police Services & Campus Safety
disAbility Support Services	Student Life at HCC
Electronic Devices	Student Rights and Responsibilities
Equal Educational Opportunity	Student Services
Financial Aid TV (FATV)	Testing
General Student Complaints	Transfer Planning
Grade of FX	Veteran Services

EGLS³

The EGLS³ (<u>Evaluation for Greater Learning Student Survey System</u>) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable

information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/

Campus Carry Link

Here's the link to the HCC information about Campus Carry: http://www.hccs.edu/departments/police/campus-carry/

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID and activate it now. You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (http://www.hccs.edu/departments/institutional-equity/)

disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to http://www.hccs.edu/support-services/disability-services/

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu
http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/

Department Chair Contact Information

College Level Math Courses

Susan Fife - Chair of Mathematics	SW Campus	713-718-7241	Stafford, Scarcella, N108
Jaime Hernandez - Associate Chair	CE Campus	713-718-7772	San Jacinto Building, Rm 369
Ernest Lowery - Associate Chair	NW Campus	713-718-5512	Katy Campus Building, Rm 112
Mahmoud Basharat - Associate Chair	NE Campus	713-718-2438	Codwell Hall Rm 105
Tiffany Pham - Admin. Assistant	SW Campus	713-718-7770	Stafford, Scarcella, N108
Christopher Cochran - Admin. Assistant	SW Campus	713-718-2477	Stafford, Scarcella, N108

Developmental Math Courses

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Marisol Montemayor - Chair of Dev Math	SE Campus	713-718-7153	Felix Morales Building, Rm 124
Hien Nguyen - Associate Chair	SE Campus	713-718-2440	Felix Morales Building, Rm 124
Jack Hatton - Associate Chair	NE Campus	713-718-2434	Northline Building, Room 321
Carmen Vasquez - Admin. Assistant	SE Campus	713-718-7056	Felix Morales Building, Rm 124

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

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

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