



MACS 0314.610 – Algebra Support 3
Fall 2021 – Aug 25 (W) to Dec 14 (Th)

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Office Hours: Mon-Thu 8:00 A.M. - 3:15 P.M. and Fri 8:00 A.M. – 2:00 P.M.
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Prerequisites: TSI score 343-349; completed previous course
Class Meeting Dates/Days/Times:- MWF – TBA, RM 303

I. Course Description:
MACS 0314 – Algebra Support 3
Three semester hour.....(3-0)
3-hour lecture, 0 hours lab

This 3-hour NCBO supports students in developing skills, strategies, and reasoning needed to succeed in MATH 1314 College Algebra, including communication and appropriate use of technology. Topics may include the study of relations and functions, inequalities, algebraic expressions, and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Students enrolled in this course must be concurrently enrolled in MATH 1314. This course does not transfer or apply towards graduation.

II. Instructional Materials:

- The ISBN for your course(s): OHM General ISBN 978-1-64087-163-2
- Activation Code Order form: https://lumenlearning.zendesk.com/hc/en-us/requests/new?ticket_form_id=360000131754



Course Assessment Activation

To access this and future assessments for this course, select an option below. Course content is always available and free.

Enter Activation Code ⓘ	<input type="button" value="Enter Code"/>	HC Bookstore \$34.50
Pay \$25 Activation Fee Online	<input type="button" value="Pay Now"/>	You pay with CC/Debit
Need More Time? Start a Two-week Trial	<input type="button" value="Start Trial"/>	Click for temporary 2 weeks

By clicking on Enter Code, Pay Now, or Start Trial you agree to Lumen Learning's [Terms of Service](#) and [Privacy Policy](#).

Required: TI-84 Plus CE graphic calculator
Other for classroom: Notebook, pencil/pen,
Other: Computer with internet access – **Chrome** (not Internet Explorer, Safari or Firefox)

III. Learning Objectives

a. Program Objectives

- **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.
- **Teamwork:** to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
- **Empirical and Quantitative Skills:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
- **Personal Responsibility:** to include the ability to connect choices, actions and consequences to ethical decision-making.
- **Social Responsibility:** to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.

b. Student Learning Outcomes

Upon successful completion of this course, students will:

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

IV. Course Requirements:

Students taking the MACS 0314 courses are expected to master all of the course materials with a grade of 70% (C) or better and pass the course.

Homework and Video Homework:

Homework and video homework will be assigned for each section covered. Homework will be done on the computer using Lumen Learning. You will have several online help aids available as you work the homework problems. Please try to work the assignments in order and pay attention to the due dates. Homework assignments are not timed. You may rework the problems as three times as you wish before the due date (by clicking "Similar Exercise") in order to improve your grade and to prepare for quizzes and exams. You are expected to work the homework problems for a particular section from eBook and will discuss the lesson in class. Homework and video homework grades will be averaged together to make up 20% of your overall course grade.

Quizzes:

You will have quizzes over the topics covered in class notes and from homework. **Quizzes may be made up if missed after the due date with late passes and 5% penalty.** Quiz grades will be averaged together to make up 20% of your overall course grade. The quizzes are not timed and do not have any online help aids. You will have only three attempts at each quiz. To be successful on the section's quiz, you will first need to complete the assigned homework for that section. Please pay attention to the quiz due dates.

Exams:

Exam grades will be averaged together to make up 45% of your overall course grade. **Exam may be made up if missed after the due date with late passes and 5% penalty.** A comprehensive midterm and final exam worth 10% of the overall course grade. The final exams will be taken at Math classroom. (**ZOOM meet – must be opened** if quarantine). Nothing will replace the final; the final exam is mandatory for everyone. Calculators may be used on all assignments.

EACH STUDENT IS EXPECTED TO DO HIS/HER OWN WORK.

Students who do not complete the course work by the end of the 8 weeks will receive the grade they have earned for the course – usually a D or F if work is incomplete. Students cannot move forward with these grades. Students who earn a D or F in the course will have to retake the course unless they take and pass the prescribed placement test to move them forward. Students can attempt to take and pass the TSI or any other state approved placement test to move into college credit courses at any time. Students may also drop this course if they pass the placement test before the last day to drop if Financial Aid requirements are met.

V. Objectives of the Course:

At the completion of the course students will be able to explain and work problems dealing with:

- ✚ Introduction to Factoring
- ✚ Introduction to Rational Expressions
- ✚ Introduction to Radicals
- ✚ Introduction to Quadratics
- ✚ Introduction to Functions

VI. Attendance Policy/Makeup Work:

Attendance is very important in a math course. Attendance is taken each class meeting until the end of the semester or until the level is completed. Attendance will also be counted in the overall grade. Students are expected to arrive on time and stay the entire class period. **THE ONLY EXCUSED ABSENCE IS FOR A COLLEGE-RELATED ACTIVITY AND FAMILY EMERGENCY FOR WHICH THE STUDENT HAS MADE PRIOR ARRANGEMENTS WITH THE INSTRUCTOR.** All attendance problems will be reported to Financial Aid and Advising. Due to the nature and set-up of the course, **make-up work is not an option.** See course requirements/grading for explanation of how this course works.

VII. Class Assessment/Grading:

Grading breakdown:

- ✚ **Attendance** –5% of overall grade will be based on the following:
 - Your attendance grade will be counted 5 points for absence, tardy (15 minutes late – 50%)
- ✚ **Homework** – 10% of overall grade
- ✚ **Video Homework** – 10% of overall grade
- ✚ **Quizzes** – 25% of overall grade
- ✚ **Tests** – 50 % of overall grade

Letter grades and their corresponding numeric averages will be:

A (90-100) B (80-89) C (70-79) D (60-69) F (below 60)

The Blackboard gradebook is the official gradebook and will be updated daily. The built-in gradebook in Lumen Learning will show only your progress and scores for the online assignments.

Because this course requires mastery of the material, you will work until your complete mastery of all sections. Students who do not complete the course work will receive the grade they have earned for the course – usually a D or F if work is incomplete.

VIII. Course Content and Rigor:

College-level courses may include controversial, sensitive, and/or adult material. Students are expected to have the readiness for college-level rigor and content.

IX. Confidentiality in Courses:

Any personal information shared by students in college-level courses, either written or verbal, face-to-face or online, is not considered confidential nor does it fall under FERPA guidelines. Students should refrain from sharing information they do not wish to make public knowledge. The instructor reserves the right to report pertinent information to the appropriate administration if s/he feels that the student may be a danger to him/herself or others.

X. Accessibility Statement:

Howard College and SouthWest College for the Deaf strive to ensure the accessibility of programs, classes, and services to students with disabilities. If you have a documented disability and believe you need accommodation for this class, or if you have concerns about your learning needs, please contact your campus Accessibility Services Coordinator as soon as possible. See the “ADA and Student Disability Services” page at <https://howardcollege.edu/come-to-howard-college/disability-services> for Campus Accessibility Coordinator contact information and a description of our accommodation process. Remember to allow a reasonable amount of time, before the course begins if possible, for processing your request.

XI. Student Conduct Policy:

Each student will be expected to conduct himself/herself in a manner that is conducive to an effective learning environment. Any student who unduly disrupts a class or violates any behavior rule, regulation or policy of Howard College/SWCID during class will be subject to immediate removal from the class and to appropriate disciplinary action. Tobacco is not allowed in the classroom. **No electronic devices (phones, tablets, music) must be turned OFF/Silent and put away on the laptop cart during class time. Students who choose to text during class time will be asked to leave the class (0% absence).**

XII. Additional Information: A faculty member may award a grade of FX at the end of the term to a student regardless of mode of instruction (face to face, online, ITV) or student classification (dual credit, traditional). This grade means that the student registered and paid for the course and failed the course because the student missed an excessive number of classes and did not exercise the right to drop the course or was not eligible to drop the course because of regulations. Logging into an online course without active participation is seen as non-attending. Excessive Absences shall be defined by the individual faculty member clearly in his/her syllabus. **For this class, a student who earns a grade of “F” and has only completed 32 hours or less of work may receive a grade of “FX.”**

A grade of "FX" is treated exactly the same as a grade of "F" in terms of grade point average, probation, suspension, and satisfactory academic progress. The grade of FX indicates a completed course just as a grade of F indicates a completed course. The grade of FX is not a drop or withdrawal and will appear on the transcript as FX. The process to appeal the grade of FX is the same as an appeal for any other faculty awarded grades.

Anytime within the term, when a faculty member recognizes that a student will not be able to successfully complete a course due to non-attendance or non-participation, the instructor can give the student a FX. The grade of FX will automatically deny the student access in Blackboard, whether it is an online or enhanced course. The student is still enrolled in the course; they are just disabled in Blackboard. Students are expected to contact the faculty member to explore options (if any) they have in the course.

XIII. Smoking and eCigarettes:

Smoking or other use of tobacco products and use of electronic cigarette devices is prohibited in all Howard County Junior College district facilities and vehicles.

XIV. Other: Please understand that you will need to work inside/outside of class to pass this course.

XV. Cheating and plagiarism will not be tolerated. Any student found to be in violation of Academic Dishonesty offenses will receive an F in the course. The link to the Student Hand Book that defines cheating and plagiarism is:

<http://catalog.howardcollege.edu/content.php?catoid=4&navoid=108&hl=cheating+and+plagiarism&returnto=search>

Instructional Plan for Altered Operations: In an altered operations state, all courses could see changes in their instructional method, attendance requirements, testing/assignment requirements, and contact preferences. Students will be expected to utilize Blackboard in addition to other instructional resources to navigate their courses. Students should work closely with their instructors to make the transition and should communicate any individual needs to the instructor based on changes made. Online courses will continue as previously scheduled unless otherwise stated by the instructor.

Face Covering Requirements: All individuals on campus (faculty, staff, students, and visitors) are required to wear an appropriate face covering when in indoor public areas (including non-private offices, hallways, lobbies, restrooms, classrooms, laboratories, conference rooms, and break rooms). Masks are also required in outdoor spaces where it is not possible to maintain 6 feet of physical distance. Masks will be provided at building entrances for anyone not wearing a face covering. Students who are not wearing a face covering in class, restrooms, other rooms in public buildings, or hallways will be asked to leave until they can return with a face covering. Any student who refuses to wear a face covering will be dismissed from the physical class and/or building. Students may be allowed to join a virtual class if the instructor has that option available. If a student will not leave, the Dean of Students and/or campus security will be notified. Refusal to wear a face covering may result in a student being dismissed from the campus. Students who feel they are unable to wear a face covering should speak with the ADA coordinator on their campus to discuss appropriate alternative options for their situation.

XVI. Course Calendar/Lessons (Tentative):

WEEK	Lessons
Week 1	OHM student assignment tutorial – Aug 25 (W)
Week 1-3	Chapter 6: Factoring
Aug 25 – Sep 14	1. <i>Greatest Common Factor</i>
	2. <i>Grouping</i>
	3. <i>Trinomials where $a = 1$</i>
	4. <i>Trinomials where a is not 1</i>
	5. <i>Factoring Special Products</i>
	6. <i>Factoring Strategy</i>
	7. <i>Solve by Factoring</i>
Week 4-6	Chapter 7: Rational Expressions
Sep 15 – Oct 5	1. <i>Reduce Rational Expressions</i>
	2. <i>Multiply and Divide</i>
	3. <i>Least Common Denominator</i>
	4. <i>Add and Subtract</i>
	5. <i>Complex Fractions</i>
	6. <i>Proportions</i>
	7. <i>Solving rational equations</i>
	8. <i>Application: Dimensional Analysis</i>
Week 7-9	Chapter 8: Radicals
Oct 6 – Oct 26	1. <i>Square Roots</i>
	2. <i>Higher Roots</i>
	3. <i>Adding Radicals</i>
	4. <i>Multiply and Divide Radicals</i>
	5. <i>Rationalize Denominator</i>
	6. <i>Rational Exponents</i>
	7. <i>Radicals of Mixed Index</i>
	8. <i>Complex Numbers</i>
Week 10-12	Chapter 9: Quadratics
Oct 27 – Nov 16	1. <i>Solving with Radicals</i>
	2. <i>Solving with Exponents</i>
	3. <i>Complete the square</i>
	4. <i>Quadratic Formula</i>
	5. <i>Application: Rectangles</i>
	6. <i>Application: Revenue and Distance</i>
	7. <i>Graphs of Quadratics</i>
Week 13-15	Chapter 10: Functions
Nov 17 – Dec 7	1. <i>Function Notation</i>
	2. <i>Operations on Functions</i>
	3. <i>Inverse Functions</i>
	4. <i>Exponential Functions</i>
	5. <i>Logarithmic Functions</i>
	6. <i>Application: Compound Interest</i>