



School of Science, Technology, Engineering & Mathematics

Course Name:	Intermediate Algebra
Course & Section Number:	MTH096-XXX
Meeting Day(s) & Time(s):	
Credits:	4
Contact Hours:	4
Text:	
Instructor's Name:	
Office Hours & Location:	
OCC Phone:	
OCC Email: **	

Please use your Owens email for communications: **EMAIL**

1. **Use student Owens email account**
2. **Place course and section number in the subject area**
3. **Emails from outside the college system will be deleted and/or reported as spam.**

Preferred:

***NAME (Course and Section numbers in subject line)**

Catalog Description:

Equips students with competency in algebra. This course provides a study of factoring, rational equations along with applications, equations and inequalities with absolute value, a study of radicals, rational exponents, radical equations, the solution of quadratic equations by factoring and by the Quadratic Formula, an introduction to functions and the graphs of quadratic functions. Applications are emphasized throughout the course (Not for graduation credit.)

Prerequisite: MTH 091 or satisfactory score on the placement test.

Course Materials:

Elementary and Intermediate Algebra, 4/e by Carson and Jordan. Pearson Education, 2015

Access codes for the virtual textbook and learning materials will be discussed during at the appropriate time.

Calculator

A graphing calculator is permitted. All work must be shown for complete credit.

Course Objectives:

The primary objective of this course is to strengthen and expand upon the skills students developed in prior coursework. Present concepts in intermediate algebra so that students will be prepared for college level mathematics courses. Present intermediate algebra concepts in a structured and accessible way to ensure students are well-prepared for college level mathematics.

Student Learning Outcomes:

Outcome	Where Assessed
1. Simplify, multiply, add and subtract rational expressions.	Chapter 7. Rational Expressions and Equations
2. Solve rational equations and application problems.	Chapter 7. Rational Expressions and Equations
3. Graph an equation by plotting points.	Chapter 10. Quadratic Equations and Functions Chapter 11. Exponential and Logarithmic Functions
4. Identify a function along with its domain and range.	Chapter 11. Exponential and Logarithmic Functions
5. Evaluate and perform the four basic operations on functions.	Chapter 9. Rational Exponents, Radicals, and Complex Numbers

Outcome	Where Assessed
6. Solve linear equations and inequalities including those containing absolute value.	Chapter 8. More on Inequalities, Absolute Value, and Functions
7. Convert between radicals and rational exponents and perform calculations using rational exponents.	Chapter 9. Rational Exponents, Radicals, and Complex Numbers
8. Simplify expressions containing radicals, including rationalizing the denominator.	Chapter 9. Rational Exponents, Radicals, and Complex Numbers
9. Solve equations containing radicals.	Chapter 9. Rational Exponents, Radicals, and Complex Numbers
10. Perform the four basic operations with complex numbers.	Chapter 9. Rational Exponents, Radicals, and Complex Numbers
11. Solve quadratic equations using the quadratic formula.	Chapter 10. Quadratic Equations and Functions
12. Solve application problems involving quadratic equations.	Chapter 10. Quadratic Equations and Functions
13. Graph quadratic functions.	Chapter 10. Quadratic Equations and Functions
14. Exponential Functions	Chapter 11. Exponential and Logarithmic Functions
15. Solve logarithmic equations by converting them to exponential equations.	Chapter 11. Exponential and Logarithmic Functions

Technology, Lab, and File Requirements:

Students must have internet access to the college website and Pearson Learning. They should have a complete understanding of how to log in and navigate the course platform. Their computer must have updated software to read PowerPoint presentations, complete homework assignments, and watch instructional videos. For any technical issues or complications, contact the Computer Service Help Desk at (567-661-7120).

Academic Support

Disability Services Resource Center: If you have a disability or acquire one, you may be entitled to receive reasonable accommodation intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for accommodations, please contact the Disability Resource Center at 567-661-7007, email disability@owens.edu, visit <https://www.owens.edu/disability/>, or stop by College Hall 124.

Tutoring Services: Owens Community College offers academic tutoring and assistance in a variety of subjects including accounting, computing, economics, mathematics, science, and writing. For more information go to: <https://www.owens.edu/successcenters/>.

Counseling Services: Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at counselingservices@owens.edu. More information is at <https://www.owens.edu/counseling/>.

Campus and Community Connections: The Center for Campus and Community Connections (College Hall 151) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: <https://www.owens.edu/connection/> or contact connections@owens.edu

Owens Library: The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit <https://www.owens.edu/library/>.

Students can find more information on campus resources, student support, student life, and security at this [link](#).

General Information:

Student Code of Conduct: All students are expected to follow Owens Community College's [Student Code of Conduct](#), which includes academic honesty, encompassing plagiarism. See the [Board Policy](#) for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's [Anti-Discrimination and Harassment Policy](#) and the College's [Title IX Policy/Sexual Misconduct Procedures and Guidelines](#). The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written

email notice with the specific dates for an absence and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu

The policy may be found on the Owens website: [3358:11-2-63 Accommodation for a Student Absence for the Observance of Religious Beliefs and Practices Policy](#)

Document Collection: Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials by the end of the semester.

Classroom Admittance: OCC classes shall only be attended by officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See [FERPA](#) regulations for more information.

Use of AI Tools: In this course, students are encouraged to explore and utilize generative AI tools, such as chatbots, text generators, paraphrasers, etc., as part of their learning and coursework. Proper attribution and transparency about your usage of an AI tool are expected. Here are some examples of ethical and responsible generative AI use.

- Use AI tools only for tasks that are appropriate for your level of learning and understanding. Do not use AI tools to replace your own thinking or analysis, or to avoid engaging with the course content.
- Cite any AI tools you use properly, following the citation style specified by the instructor. APA Example:
 - OpenAI. (2024). *ChatGPT* (Mar 14 version) [Large language model]. <https://chat.openai.com/chat>
- Provide evidence of how you used the AI tool and how it contributed to your assignment. Explain what you learned from the AI tool, how you verified its accuracy and reliability, how you integrated its output with your own work, and how you acknowledged its limitations and biases.
- Take full responsibility for any mistakes or errors made by the AI tool. Do not rely on the AI tool to produce flawless or correct results. Always check and edit the output before submitting your work. If you discover any inaccuracies or inconsistencies in the output after submission, notify the instructor immediately and correct them as soon as possible.
- If you are working on a group assignment, discuss the use of AI tools with your group members and agree on how you plan to use them and how you will be transparent with the instructor regarding their use.

If you have any questions about what constitutes ethical and responsible use of AI tools, please consult with the instructor before submitting your work.

Instructor/Students Communication Expectations:

Office Hours - My office hours are listed at the top of the of this document. If for any reason I'm out of the office during my designated hours, email me at NAME to set up an appointment. This appointment may be done virtually.

Upon emailing me, place your course and section number on the subject line. When emailing for a medical reason, attach a document with the time and date of your doctor's visit or hospitalization. This includes family members that are in your care. Please, do not include details of the medical circumstance, since you have a right to this privacy.

Make-up policy:

Please contact me if you have any issues which interfere with your ability to complete Your work on time, please contact me immediately. I will ask for some form of documentation that has prevented you from completing your work. The detailed reason and cause is not important. However, the Date and Time of an incident is very important. Then we can discuss options.

Study and Homework Recommendations

Taking notes during class lectures is a vital part of the learning process. Carefully writing down the steps demonstrated by the instructor is highly recommended. Students are also encouraged to use examples provided by Pearson Education to reinforce understanding.

You may show your work using a variety of methods, as long as the process of solving the question is clearly and completely written.

It is highly recommended that you complete your homework in a spiral notebook prior to taking the chapter quiz, as this will help you achieve the best results. Homework is available for the entire semester, allowing continued practice throughout the course. So, the deadline for each of them will be on the last day of Final Exam week.

Email – If you send me an email I will respond within 24 hours. If you do not hear from me within a reasonable time frame, I probably did not know the information listed above. So, to expedite your issue and resolve it quickly, help me with being specific with your request/question.

Computer – Make sure your computer is ready to receive the required materials for this course. This hasn't been an issue in the past. However, call the Owens Help desk for any issues regarding Bb access

Grading Procedure:

Grades will be calculated on the following scale.

70-100% Pass No Points (PNP)
69% Fail No Credit (FNC)

(A traditional letter grade will not appear on the student transcript, and a PNP is needed for successful completion of this course)

The final course grade is to be computed using the following weights.

Evaluation Measure The grade points for the areas of work are as follows.	Student Learning Outcomes Assessed	Value
Chapter Quizzes	1-15	50%
Attendance	1-15	10%
Homework	1-15	20%
Comprehensive Final Exam	1-15	20%
Total		100%

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(A traditional letter grade will not appear on the student transcript, and a PNP is needed for successful completion of this course)

Class Assignments Calendar:

(Tentative assignment Due Dates/Start dates. Any changes made will take effect during the next class period.)

Week	SLO	Topic	Due Dates
1	1 & 2	Introduction to the Course and its Requirements Simplifying Rational Expressions (Sec. 7.1)	Starts: DATE at TIME
2	1 & 2	Multiplying and Dividing Rational Expressions (Sec 7.2) Add and Subtract Rational Expressions with the Same Denominator (Sec 7.3)	DATE at TIME
3	1 & 2	Add and Subtract Rational Expressions with Different Denominator (Sec 7.4) Solving Equations Containing Rational Expressions (Sec 7.6)	Start DATE at TIME
4	1 & 2	Applications with Rational Expressions (Sec 7.7) Solving Linear Inequalities (Sec 2.8)	Start DATE at TIME – Due DATE at TIME

Week	SLO	Topic	Due Dates
		Chapter 7 & 2.8 Quiz	
5	5 & 6	Compound Inequalities (Sec 8.1) Equations Involving Absolute Value (Sec 8.2)	Start DATE at TIME – Due DATE at TIME
6	5 & 6	Inequalities Involving Absolute Value (Sec 8.3) Introduction to Functions and Function Notation (Sec 3.7)	Start DATE at TIME – Due DATE at TIME
7	5 & 6	Graph Absolute Value Functions (Sec 8.2) Optional: Graph Cubic and Square Root Functions Chapter 8 Quiz	Start DATE at TIME – Due DATE at TIME
8	7,8,9 & 10	Radical Expressions and Functions (Sec 9.1) Rational Exponents (Sec 9.2)	Start DATE at TIME Due DATE at TIME
9	7,8,9 & 10	Multiplying, Dividing, and Simplifying Radicals (Sec 9.3) Adding, Subtracting, and Multiplying Radical Expressions (Sec 9.4)	Start DATE at TIME –Due DATE at TIME
10	7,8,9 & 10	Rationalizing Numerators and Denominators of Radical Expressions (Sec 9.5) Radical Equations and Problem Solving (Sec 9.6)	Start DATE at TIME Due DATE at TIME
11	7,8,9 & 10	Complex Numbers (Sec 9.7) Chapter 9 Quiz	Start DATE at TIME Due DATE at TIME
12	11,12 & 13	Solving Quadratic Equations Using the Quadratic Formula (10.2) Graphing Quadratic Functions (Sec 10.4) Function Operations (Sec 10.6)	Start DATE at TIME – Due DATE at TIME
13	11,12 & 13	Chapter 10 Quiz	Start DATE at TIME – DATE at TIME
14	3,4 & 15	Composite and Inverse Functions (Sec 11.1) Exponential Functions (Sec 11.2)	Start DATE at TIME Due DATE at TIME
15	3,4 & 15	Logarithmic Functions (Sec 11.3) Chapter 11 Quiz	Start DATE at TIME – DATE at TIME
16	1-15	Final Exam	Start DATE at TIME – Due DATE at TIME

Disclaimer: The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.