MATH 104 (Hybrid)
Beginning Algebra

Early Fall Session 15/11
August 17 – October 10, 2015

Course Description

Introduction to the fundamental concepts of algebra. Review of fractions, decimals, and signed numbers. Methods for solving linear equations, linear inequalities, and systems of linear equations. Thorough treatment of graphing lines and linear inequalities in the plane. Introduction to rules of exponents. Real-world applications will be integrated throughout the course. Students must repeat the course if a grade of U, F, or D grade is awarded.

Prerequisite: None

Class Day and Time: Wednesday, 6:30 pm – 9:30 pm, Crystal Lake Campus

This is a hybrid course which is defined as an online course supported by a weekly in-seat class. Our class will consist both in-seat and online instruction through various resources, discussion and homework. Please note that we will meet every week, unless otherwise noted.

You are expected to attend every class. If you know prior to the beginning of the session that you will miss more than one in-seat class, it is strongly recommended that you wait to take this course at another time.

The online portion of our course is located in D2L. You will access the course through CougarTrack.

Textbooks


ISBN of BUNDLE (physical textbook and access): 978-1-323-00007-6

You will need the textbook (physical or online copy via the MyLabsPlus code) and an access code for MyLabsPlus (an online homework and resource site). You will activate MyLabsPlus (MLP) once you have access to the course, through the MyLabsPlus link in the course navigation bar. The textbook and access code can be purchased as a bundle through MBS Direct.

If you buy the textbook from a source other than MBS Direct, you will still need a MyLabsPlus access code. MyLabsPlus access codes can be purchased separately through the MyLabsPlus link in the course. Access codes that come packaged with textbooks from sources other than MBS Direct are not guaranteed to work. Do not purchase a MyMathLab access code, because it will not work for this course.
Another option is to purchase only a MyLabsPlus access code through the MyLabsPlus link in the course, and utilize the online textbook and solutions manual that are available electronically through the MyLabsPlus website with the code.

If you do not have access to MyLabsPlus when the course begins, the publisher provides a temporary log-in; however, you must procure access within the first two weeks of the course.

Textbooks for the course may be ordered from MBS Direct:

- online at [http://direct.mbsbooks.com/columbia.htm](http://direct.mbsbooks.com/columbia.htm)
- by phone at 800-325-3252

For additional information about the bookstore, visit [http://www.mbsbooks.com](http://www.mbsbooks.com).

**Calculator**

You will need a graphing calculator for our class. The TI-83 or TI-84 series graphing calculator is strongly recommended, as this calculator will likely be required for other math courses. Instructions in the course are given for this calculator.

It is possible to purchase this calculator from MBS Direct or other retailers. You can also look into prices on used calculators online. You may choose to rent a calculator. The vendor [www.RentCalculators.org](http://www.RentCalculators.org), has a discount for Columbia College students.

**Course Overview**

In this course we will study the language and concepts of algebra with an introduction to the fundamental concepts of algebra, a review of arithmetic skills, solving linear equations and inequalities, application problems, graphing lines, and an introduction to exponents.

**Technology Requirements**

Participation in this course will require the basic technology for all online classes at Columbia College:

- A computer with reliable Internet access,
- a web browser,
- Acrobat Reader,
- Microsoft Office or another word processor such as Open Office.

You can find more details about standard [technical requirements](http://www.mbsbooks.com) for our courses on our site.

Additional requirements specific to this course:

- Adobe Flash Player,
- The most updated version of Java.
- Access to MyLabsPlus to complete weekly homework.

**Course Objectives**

- To communicate mathematically in both written and verbal forms.
- To reason with symbolic and graphical representations.
- To use mathematics to solve real-world problems.
- To use technology, such as graphing calculators and computers, to enhance your mathematical understanding.
Measurable Learning Outcomes

- Manipulate algebraic and numerical expressions including fractions, decimals, and signed numbers using the correct order of operations
- Solve linear equations and inequalities
- Evaluate formulas
- Solve real-world problems using equations and inequalities
- Graph lines and linear inequalities in the Cartesian plane
- Find equations of lines using slope-intercept and point-slope forms
- Find and interpret the slope and the intercepts of a line
- Create scatterplots and use technology to find lines of best fit
- Solve systems of linear equations by graphing
- Apply rules of exponents to simplify simple algebraic expressions
- Use scientific notation

Grading

### Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Percent</th>
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<tbody>
<tr>
<td>A</td>
<td>900 – 1000</td>
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<tr>
<td>B</td>
<td>800 – 899</td>
<td>80-89%</td>
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<tr>
<td>C</td>
<td>700 – 799</td>
<td>70-79%</td>
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<tr>
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<td>60-69%</td>
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### Grade Weights

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<tr>
<th>Assignment Category</th>
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<tr>
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<tr>
<td>Exit Quizzes (In Class)</td>
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<td>Homework (Online)</td>
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<tr>
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<tr>
<td>Final Exam (In Class)</td>
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<td><strong>Total</strong></td>
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Schedule of Graded Assignments

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<th>Assignment</th>
<th>Points</th>
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<th>Due In-Seat</th>
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<tr>
<td></td>
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<td>Due Date</td>
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<tr>
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* Whatever percentage you have earned on the homework assignments throughout the course will be applied to the 200 points available for MLP Homework in week 8.

**Assignment Overview**

**Readings (Before Class)**

All readings and lecture review should be completed prior to coming to the in-seat portion of class. I encourage you to take advantage of the self-study resources available in the course.

You should utilize the information from the readings and incorporate it into all assignments within the course.

**In Class Activities**

The in-seat portion of the course will include review of material covered in previous weeks and an introduction to the new material.

We will have various discussions and activities that will be graded. These include group discussion and presentation of problems from the appropriate sections of the textbook in weeks 1, 2, 3, 5, 6, and 7. These weeks will also include a short exit quiz at the end of class to reinforce the material presented in class.
You must be present at the in-seat class and actively participate in order to receive points for the in-seat activities.

**Discussions (Online)**

Discussions and communication are an integral part of the learning process. It is through discussing ideas that we evaluate our understanding and are able to move further into a topic. **Discussions are not graded**, but are useful if you are having difficulty understanding a concept. Fortunately, this is a hybrid class and you will have the opportunity to discuss the mathematical concepts we are covering once a week during our in-seat class. However, there are discussion areas provided for each week that will allow you to communicate with each other before and after class. That way, if you have trouble figuring out a concept after class, you will have an area to seek assistance.

Conventions of “netiquette” (online etiquette), which include courtesy to all users, will be observed online and the equivalent will be observed in the classroom setting.

**Homework (Online)**

You will complete homework in MyLabsPlus each week. You may rework each homework assignment **until its due date**. You may continue to work problems for additional practice after the due date.

MyLabsPlus provides tools to assist you with the homework such as *Show me an Example* or *Help Me Solve It*. If you use these tools, you will have to complete a similar problem without using the tools in order to receive credit for the problem. You may rework each homework exercise until you get it correct by selecting “similar exercise” at the bottom of the screen. I recommend practicing until you feel very comfortable with the problems.

Your final grade for Homework will be whatever percentage you have earned on the homework assignments throughout the course. This will be applied to the 200 points available for Homework in week 8.

**Quizzes (Online)**

You will complete a quiz each week in weeks 1, 2, 3, 5, 6, and 7. Each quiz is due **by 11:59 PM CT on Tuesday of the appropriate week**. Quizzes are timed (60 minutes), multiple choice, and computer graded. You will have unlimited attempts on each quiz during the quiz period to maximize your learning and improve your grade.

**Midterm and Final Exams (In Class)**

There will be a Midterm and a Final Exam. The Midterm Exam will have a 2-hour time limit. The Final Exam will have a 3-hour time limit.

The Midterm and Final Exams will be **given during the In Class session** of this course.

**Course Schedule**

**Week 1: Fractions, Real numbers, & Basic Rules of Algebra**

- **Readings (Before Class)**
  - Chapter 1: Sections 1.1, 1.2, 1.3, and 1.4

- **In Class Activity 1 (In Class)**

- **Homework 1 (Online)**
  - Completed in MyLabsPlus
Quiz 1 (Online)
You will complete the weekly multiple choice quiz in the Quizzes area of D2L. The quiz must be completed by 11:59 pm on Tuesday.

Week 2: Addition/Subtraction/Multiplication/Division of Real numbers, Exponents & Order of Operations
Readings (Before Class)
- Chapter 1: Sections 1.5, 1.6, 1.7, and 1.8
In Class Activity 2 (In Class)
Homework 2 (Online)
Completed in MyLabsPlus
Quiz 2 (Online)
You will complete the weekly multiple choice quiz in the Quizzes area of D2L. The quiz must be completed by 11:59 pm on Tuesday.

Week 3: Addition/Multiplication Properties, Linear Equations, Formulas & Percents
Readings (Before Class)
- Chapter 2: Sections 2.1, 2.2, 2.3, 2.4 and 2.5
In Class Activity 3 (In Class)
Homework 3 (Online)
Completed in MyLabsPlus
Quiz 3 (Online)
You will complete the weekly multiple choice quiz in the Quizzes area of D2L. The quiz must be completed by 11:59 pm on Tuesday.

Week 4: Review for Midterm
Readings (Before Class)
- Reread chapters 1 and 2
- Review Learning Guides for Chapters 1 and 2
Midterm Exam (In Class)
The Midterm Exam will be completed during the in-seat class this week. You will have two hours to complete the exam.
*We will review section 2.7 (assigned during week 5) during the first hour of class. The midterm will be completed during the last two hours of class.

Week 5: Linear Inequalities, Graphing Linear Equations, and Slope
Readings (Before Class)
- Chapter 2: Section 2.7
- Chapter 3: Sections 3.1, 3.2 and 3.3
In Class Activity 4 (In Class)
Homework 4 (Online)
Completed in MyLabsPlus

Quiz 4 (Online)
You will complete the weekly multiple choice quiz in the Quizzes area of D2L. The quiz must be completed by **11:59 pm on Tuesday**.

**Week 6: Slope, Slope-Intercept and Point-Slope form, Linear Inequalities in two variables, Solving Systems of Equations by Graphing**

**Readings (Before Class)**
- Chapter 3: Sections 3.4, 3.5, and 3.6
- Chapter 4: Section 4.1

**In Class Activity 5 (In Class)**

**Homework 5 (Online)**
Completed in MyLabsPlus

Quiz 5 (Online)
You will complete the weekly multiple choice quiz in the Quizzes area of D2L. The quiz must be completed by **11:59 pm on Tuesday**.

**Week 7: Negative Exponents and Scientific Notation**

**Readings (Before Class)**
- Chapter 5: Sections 5.2 (Objectives 1-4 only), 5.5 (Objectives 1-3), and 5.7

**In Class Activity 6 (In Class)**

**Homework 6 (Online)**
Completed in MyLabsPlus

Quiz 6 (Online)
You will complete the weekly multiple choice quiz in the Quizzes area of D2L. The quiz must be completed by **11:59 pm on Tuesday**.

**Week 8: Review for Final Exam**

**Readings (Before Class)**
- Reread Chapters 3, 4, and 5
- Review Learning Guides from Chapters 1-5

**Final Exam (In Class)**
The Final Exam will be completed during the in-seat class this week. You will have three hours to complete the exam.

**Course Policies**

**Cell Phone/Computer Use**
Cell phones can be a distraction to the learning process. Course instructors may require that cell phones be turned off or set to vibrate during class periods. Students requiring special arrangements to receive a cell phone call during class should make prior arrangements with the instructor. No laptop computer use will be allowed during class time.
Student Conduct

All Columbia College students, whether enrolled in a land-based or online course, are responsible for behaving in a manner consistent with Columbia College’s Student Conduct Code and Acceptable Use Policy. Students violating these policies will be referred to the office of Student Affairs and/or the office of Academic Affairs for possible disciplinary action. The Student Code of Conduct and the Computer Use Policy for students can be found in the Columbia College Student Handbook. The Handbook is available online; you can also obtain a copy by calling the Student Affairs office (Campus Life) at 573-875-7400. The teacher maintains the right to manage a positive learning environment, and all students must adhere to the conventions of online etiquette.

Plagiarism

Your grade will be based in large part on the originality of your ideas and your written presentation of these ideas. Presenting the words, ideas, or expression of another in any form as your own is plagiarism. Students who fail to properly give credit for information contained in their written work (papers, journals, exams, etc.) are violating the intellectual property rights of the original author. For proper citation of the original authors, you should reference the appropriate publication manual for your degree program or course (APA, MLA, etc.). Violations are taken seriously in higher education and may result in a failing grade on the assignment, a grade of "F" for the course, or dismissal from the College.

Collaboration conducted between students without prior permission from the instructor is considered plagiarism and will be treated as such. Spouses and roommates taking the same course should be particularly careful.

All required papers may be submitted for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers may be included in the Turnitin.com reference database for the purpose of detecting plagiarism. This service is subject to the Terms and Conditions of Use posted on the Turnitin.com site.

A plagiarism tutorial is located in the content area of the D2L website. Additionally, work that was completed in a prior course and submitted in the current course will not be accepted.

Non-Discrimination

There will be no discrimination on the basis of sex, race, color, national origin, sexual orientation, religion, ideology, political affiliation, veteran status, age, physical handicap, or marital status.

Disability Services

Students with documented disabilities who may need academic services for this course are required to register with the Coordinator for Disability Services at (573) 875-7626. Until the student has been cleared through the disability services office, accommodations do not have to be granted. If you are a student who has a documented disability, it is important for you to read the entire syllabus before enrolling in the course. The structure or the content of the course may make an accommodation not feasible.

Attendance Policy

The Online Attendance for a week will be counted as having either submitted a course assignment for which points have been earned, completed an exam or quiz, or posted to the discussion during that week of the session. A class week is defined as the period of time between Monday and Sunday (except for Week 8, when the week ends in accordance with the campus end date). The course and system deadlines are all based on the Central Time Zone.

Attendance will also be taken for the in-seat portion of the class.
Email

All students are provided a CougarMail account when they enroll in classes at Columbia College. You are responsible for monitoring email from that account for important messages from the College and from your instructor. You may forward your Cougar email account to another account; however, the College cannot be held responsible for breaches in security or service interruptions with other email providers.

Students should use email for private messages to the instructor and other students. The class discussions are for public messages so the class members can each see what others have to say about any given topic and respond.

Late Assignment Policy

A hybrid class requires regular participation and a commitment to your instructor and your classmates to regularly engage in the reading, discussion and writing assignments. Although most of the communication for this course is asynchronous, you must be able to commit to the schedule of work for the class for the next eight weeks. You must keep up with the schedule of reading and writing to successfully complete the class.

Make-up discussion posts, quizzes, midterm and final exams are highly discouraged and must be pre-approved by the instructor.

Course Evaluation

You will have an opportunity to evaluate the course near the end of the session. A link will be sent to your CougarMail that will allow you to access the evaluation. Be assured that the evaluations are anonymous and that your instructor will not be able to see them until after final grades are submitted.

Additional Resources

Orientation for New Students

This course is offered online, using course management software provided by Desire2Learn and Columbia College. The Student Manual provides details about taking an online course at Columbia College. You may also want to visit the course demonstration to view a sample course before this one opens.

Technical Support

If you have problems accessing the course or posting your assignments, contact your instructor, the Columbia College Helpdesk, or the D2L Helpdesk for assistance. Contact information is also available within the online course environment.

Online Tutoring

Smarthinking is a free online tutoring service available to all Columbia College students. Smarthinking provides real-time online tutoring and homework help for Math, English, and Writing.

Smarthinking also provides access to live tutorials in writing and math, as well as a full range of study resources, including writing manuals, sample problems, and study skills manuals. You can access the
service from wherever you have a connection to the Internet. I encourage you to take advantage of this free service provided by the college.

Access Smarthinking through CougarTrack under Students->Academics->Academic Resources.

Campus Tutoring

You are fortunate to have the opportunity for face to face tutoring at the Crystal Lake Campus. Jennifer Carver, math tutor, will provide a schedule of tutoring dates/times. No appointment is necessary. The schedule will be posted in D2L.