



# **MATH101: College Algebra (Online)**

## **Course Syllabus**

# Course Description

This course reviews and extends the concepts of General Mathematics. Topics that are reviewed and extended include linear and quadratic equations, factoring polynomials, rational expressions, exponents, radicals, equations of lines, systems of equations, and functions. New topics include graphs and their translations and reflections, functions, exponential and logarithmic functions, graphs of quadratic functions, non-linear systems of equations, polynomial, rational, and absolute value inequalities, sequences, series, and the Binomial Theorem.

## Course Outcomes

Upon satisfactory completion of this course, you will be able to:

1. simplify expressions and solve equations involving absolute values, polynomials, rational expressions, radicals, exponentials, and logarithms.
2. solve systems of equations and solve linear, polynomial, rational, and absolute value inequalities.
3. demonstrate an understanding of the definition of a function and use function notation, including the algebra of functions, their domains and ranges, composite functions, and inverse functions.
4. sketch the graphs of basic functions, quadratic functions, and transformations of these functions.
5. apply algebraic methods when solving word problems.

## Course Materials

### ***Required Material(s)***

*Students must purchase:*

*This course uses Knewton's Alta platform. The fee for a Single Term Access will be charged to your student account.*

*All other required materials are provided as PDFs or links in the Course Materials folder. See the weekly schedule for more complete information on course readings.*

### ***Recommended (but not required) Additional Reading***

None

## Class Policies

You are expected to read all assigned readings, view all lecture videos, screencasts, and access any links posted by the professor. Be prepared to discuss the contents of each.

## Attendance and Participation

Because online courses require significant interaction between students, you must upload a current photo of yourself to your Moodle profile. The image should be a headshot with your face clearly visible (no pets, group photos, or cartoons).

You are not required to be online at the same times as your classmates. However, you should check in regularly (to access new materials, submit assignments, and/or participate in ongoing threaded discussions).

Each course week includes a threaded discussion focusing on topics related to the course. The discussions are a great place to ask questions, clarify issues, and share insights. You must check in regularly and contribute to the ongoing conversation, posting on the number of required days.

See the Online Discussion Guidelines for more details.

Any student who has not logged in for course participation during the first week will be administratively dropped along with any subsequent courses in the term.

**Note:** If you are off campus for any Jessup-sponsored extracurricular activity, you are still required to maintain and follow the due dates outlined in this syllabus. If you have an exceptional instance where internet access is not present either in your transportation and/or accommodations, you will need to have your supervising individual (professor, coach, etc.) inform your instructor to receive additional time on an assignment.

## Netiquette

Netiquette, or the rules that surround good communication on the internet, is very important in online courses that are based on high levels of interaction and communication between students and professors at a distance.

Some basic rules to guide you in your online communication (see the Online Student Orientation for a longer, expanded list):

1. **Be thoughtful, kind and courteous in your communication.** Avoid language that may offend others and be cautious when using sarcastic language. In addition, respect your classmates' privacy by not asking them to share more than they would be comfortable doing.
2. **Proofread your writing so it is clear and easy to read.** Avoid acronyms (including text speak), do not use ALL CAPS, and do not overuse exclamation marks (use *italics* for emphasis). Write in short paragraphs and use plenty of white space (extra space between paragraphs) as that makes text easier to read on a webpage.
3. **Engage with your classmates.** Make sure your writing communicates what you intend, ask clear questions of your peers and always be aware of your audience when you are writing in the online classroom.

## Written Work Guidelines

Written work is graded for content, organization, style, grammar, and formatting. All papers are to be typed, proof-read, spell-checked, double-spaced, and prepared in accordance with APA style and format. Basic formatting should be Times New Roman 12 with 1 inch margins. For help with APA formatting, see the APA Tab of the Course Resources Folder (located on the main page of the course in Moodle).

The Writing Center is available to all Jessup Online students for help with writing papers as well as APA formatting. You can contact them at [writingcenter@jessup.edu](mailto:writingcenter@jessup.edu) or schedule a session through the WJU Student Services Scheduler.

## Assignments

### Submission Format

All assignments must be submitted as an attachment via Moodle no later than 11:59 PM (PST) the day the assignment is due. Unless otherwise specified, you should submit all papers as Microsoft Word documents (.doc or .docx files) via Moodle. Use the “How to Submit Pages Doc (Mac) to Turnitin” link on Moodle when uploading documents in Mac format.

### Late assignments

Whether instructors accept late work or not is up to their discretion.

In the case that they do, late work may be penalized 10% of the possible points for the assignment for each day, or part thereof, that it is late. *Work may not be submitted more than a week late.*

If you face particular difficulty meeting a deadline, please contact the professor ahead of time to discuss any options.

**NOTE:** The professor is not obliged to accept any late work after the final day of the class session unless prior arrangements have been made.

### Feedback and Grades

You can expect to receive written feedback and grades on each weekly assignment via Moodle within 72 hours of the due date for submission.

For larger assignments (research papers, projects, etc.), you can expect to receive feedback within a week.

## Academic Integrity

The University Catalog states:

Academic integrity is an essential component of Christian higher education. Instances of plagiarism will not be treated lightly. If it is a student's first offense, the paper will simply receive a zero. The student may or may not have the option to re-write the assignment for half credit, according to the instructor's discretion. If evidence of plagiarism exists a second time the student will receive an academic dismissal, which can be appealed by the student.

Plagiarism includes:

- The intentional or unintentional representation of another's words or ideas as your own in an academic exercise.
- Using the “copy and paste” method to use text found on a Web site without giving credit to the source.

- Copying information from a source without proper citation and without use of quotation marks or block quotation formatting. If any words or ideas used do not represent your original words or ideas, you must distinguish them with quotation marks or an indented block quotation followed by the appropriate citation.
- Paraphrasing statements or paragraphs without proper citation or using someone else's ideas, data, language, and/or arguments without acknowledgement.
- Presenting work as your own that has been prepared in whole or part by someone other than you.
- Failure to properly cite statistics, data, or other sources of information in your paper.
- Resubmitting a paper that you have already turned in as an assignment for a different course (including a different section of the same course). While the paper may be considered your original work, resubmitting it is considered a form of plagiarism. Your assignments for every class should be unique and original for that course.

## Student Complaints

For complete information about WJU and how to file a complaint as a student please see the Consumer Information section of the Jessup website.

If a distance education student who lives outside the state of California believes that the university's internal procedures have not adequately addressed concerns identified under the Program Integrity Rule, there is a link on the Jessup website with Student Complaint information by State and Agency.

## Discussion Forums

Discussion Forums are an integral part of every Jessup Online course. A high percentage of learning in an online environment comes through the dialogue that takes place in Discussion Forums. You should think about the discussion questions in this class as an opportunity for you, your classmates, and your instructor to enter into an interesting conversation about what you are studying. Therefore, you are encouraged to jump into the discussion as often as you'd like. This ensures that everyone will benefit from a variety of opinions and insights on the topics at hand. In other words, your contribution is valuable and important! Since this is a conversation, it's also important that you read the *entire* forum; not only are your contributions important, but you'll find that your classmates' contributions are as well!

## Substantive Posts

You must post **at least 3 substantive responses** each week. A substantive post is one that contributes something significant to the academic conversation using academic language (avoid "text speak" or other informal language in your discussion posts). To be substantive and earn full credit, a post should:

1. **Be of appropriate length** (initial = 250-400 words; secondary = 125-225 words).
2. **Engage with the course materials** (lecture, texts, videos, etc.) in such a way that it is evident that you have integrated the course content into your thinking.
3. **Demonstrate critical thinking skills.** In other words, your substantive posts should reflect that you have carefully considered the discussion question and have put effort into writing a response that makes a relevant contribution to the conversation.

# Requirements

Since discussion questions are usually given a lot of weight in terms of the final course grade, there are also academic expectations. These are as follows.

You must be active in the discussion forum **at least 3 days per week**. This means that you must post a response on 3 of the 7 days each week of the course in order to receive full credit. Do not write all of your forum posts on one day – that eliminates the opportunity for dialogue with classmates.

NOTE: All Discussion due dates/times are for the Pacific Time Zone.

## For weeks with one discussion question:

1. You must post your **initial response** to the question by **Wednesday @ 11:59 p.m.**
2. By **Sunday @ 11:59PM**, you must post (at minimum) **two secondary posts** (posts responding to your classmates' comments or to your instructor's prompts) for a **total of three posts**. All posts must be substantive to receive full credit.

## For weeks with two or more discussion questions:

1. You must post your **initial response to DQ#1** by **Wednesday @ 11:59 p.m.**
2. You must post your **initial response to DQ#2** by **Friday @ 11:59 p.m.**
3. By **Sunday @ 11:59PM**, you must post (at minimum) **four secondary posts** (spread across both questions; responding to your classmates' comments or to your instructor's prompts) for a **total of six posts**. All posts must be substantive to receive full credit.

# Grading (Discussion Questions)

You are encouraged to take part in the weekly dialogue as much as you would like. Your instructor will rate your discussion posts according to the following guidelines:

### Initial posts = 0 – 4 points each

- Points can be deducted for posting late (after the stated deadline), and/or for your post not meeting the requirements for being substantive (see above).

### Secondary posts = 0 – 3 points each

- Points can be deducted for your post not meeting the requirements for being substantive (see above).
- All secondary posts are due each week by Sunday night @ 11:59 p.m. No credit will be given for late discussion posts after this time.

Each discussion question is worth 10 points [4 pts. for your initial post; 3 pts. for each secondary post]. Therefore, for weeks with **one discussion question**, you can earn up to a total of **10 points**. For weeks with **two discussion questions**, you can earn up to **20 points**.

These totals will be accumulated throughout the week in your gradebook as your instructor rates your posts. Your **final grade** [0 – 10 or 20] for the entire week will be reflected in your gradebook **no later than Wednesday of the following week**.

# Services for Students with Disabilities

In accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, WJU Disability Support Services office (DSS) provides eligible students with a variety of individualized, reasonable accommodations. These accommodations are intended to assist college students with disabilities in having equal access to regular college programs and activities. Accommodations are determined individually for each student through an interactive process and are based on functional limitations resulting from a documented disability. Recent (within 3 years), verifiable documentation must be provided by a medical doctor or appropriately licensed professional.

Approved accommodations will be provided for students who present instructor with a copy of their Faculty Notification Letter (issued by DSS).

For more information, please visit the Disability Support Services website.

## **Disability Support Services Contact Information:**

### **WJU Disability Support Services**

(916) 577-2253

dss@jessup.edu

## **Technology Requirements**

Sufficient technology tools and Internet access are required when taking a course through Jessup Online. The following list will help ensure that you are adequately equipped.

## **Supported Operating Systems**

- Windows 8 and Windows 10
- MacOS is supported for most online course materials

It is highly recommended that you have administrative rights to the computer used for your coursework. If you must use a computer over which you do not have administrative rights (such as a workplace computer), you may experience difficulties with needed functions, such as installing plug-ins. Check with your workplace IT department to ensure that you may access course materials from your company's network.

## **Productivity Tools**

Microsoft Office (this software is available to students at deeply discounted pricing through Microsoft or JourneyEd.com.).

## **WJU Email Account**

All students are provided with a WJU email address. It should be used for all course communication between you and your instructor. This will avoid issues with Spam blockers and other problems that may prevent you from receiving email from your instructors. Use of this email account will also enable you to participate in special student offers that are available only to students with an "edu" email address. You can access your Jessup e-mail account

at my.jessup.edu.

## Supported Browsers

- Google Chrome
- Mozilla Firefox

## Browser Settings

Please refer to your browser's Help features to check these settings.

- Pop-Up Blocker should be disabled
- JavaScript should be enabled
- Java should be enabled
- Cookies should be enabled

## Plug-ins

The most recent version of the following plug-ins is required for many of the resources available in your online courses:

- Adobe Acrobat Reader
- Apple QuickTime Player
- Java SE 8 or higher

All plug-ins needed to participate in components of your online classes are available at no additional cost. It is recommended that you review the list of plug-ins and install them prior to beginning your coursework.

## Screen Settings

Screen resolution (size) should be set at minimum 1024 x 768 or higher.

## HelpDesk

There is a link on every Moodle page for 24/7 technical support through an outside vendor.

You can also contact the Jessup HelpDesk (which is not 24/7) is through WJU. Email [helpdesk@jessup.edu](mailto:helpdesk@jessup.edu) or call 916.577.2345.



# Course Grading Explanations

Points	Grade
90-100	A
80-89	B
70-79	C
60-69	D
<59	F

**A = Excellent performance.** Work is truly exemplary and worthy of emulation by others. Student exceeds expectations and constructively contributes to the learning environment.

**B = Above average performance.** All assignments are complete and on time and exhibit a complete understanding and an ability to effectively apply concepts.

**C = Average performance.** Student accomplishes only the minimum requirements or does not complete all requirements. Oral and written communication is at an acceptable level for a college student.

**D = Work is below acceptable level for a college student.** Student shows only a very basic understanding of the material or does not meet all assignment requirements.

**F = Work is not passing.** Student's work is incomplete or does not apply information and concepts in a satisfactory man-

## *Final Grade Calculation*

<i>Assignments</i>	<i>Value</i>
Weekly Assignments	50%
Exams	30%
Final Exam	20%
TOTAL:	<hr/> 100%

## Course Outline

Week 1	Details	Due	Demand Hours	Course Objective
<b>Topics and Learning Objectives</b>	<b>Prerequisites</b> By the end of this week, you should be able to: <ul style="list-style-type: none"> <li>• Simplify expressions involving polynomials, radicals, and exponentials</li> </ul>			
<b>Assignments</b>	<b>Read</b> <i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i>  OpenStax- Section 1.2 OpenStax- Section 1.3  <b>Complete</b> <i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i>  1: Product, Quotient, and Power Properties of Exponents 2: Negative Exponents and Simplifying Exponential Expressions	<b>Wednesday Week 1 11:59PM PT</b>	<b>6.5 hours</b>	
<b>Assignments</b>	<b>Read</b> <i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i>  OpenStax- Section 1.5  <b>Complete</b> <i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i>  4: Operations with Radicals 5: Rational Exponents and Higher Order Radicals 6: Factor Quadratics 7: Factor Quadratics with Special Products 8: Factor Cubics	<b>Sunday after Week 1 class 11:59PM PT</b>	<b>6.0 hours</b>	

	9: Factor Expressions with Fractional or Negative Exponents			
		<b>TOTAL HOURS FOR THE WEEK:</b>	<b>12.5 hours</b>	

<i>Week 2</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
<b>Topics and Learning Objectives</b>	<p><b>Equations and Inequalities</b></p> <p>By the end of this week, you should be able to:</p> <ul style="list-style-type: none"> <li>• Simply Rational Expressions</li> <li>• Sketch the graphs of linear equations</li> </ul>			
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 1.6 OpenStax- Section 2.1</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>10: Multiply and Divide Rational Expressions 11: Add and Subtract Rational Expressions and Simplify Complex Rational Expressions 12. Cartesian Coordinates and Distances</p>	<b>Wednesday Week 2 11:59PM PT</b>	<b>5.25 hours</b>	

<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 2.2</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>13: Solve Linear Equations in One Variable  14: Solve Rational Equations  15: Identify Slopes and Intercepts  16: Find Linear Equations</p>	Sunday after Week 2 class 11:59PM PT	6.25 hours	
		<b>TOTAL HOURS FOR THE WEEK:</b>	<b>11.5 hours</b>	

<b>Week 3</b>	<b>Details</b>	<b>Due</b>	<b>Demand Hours</b>	<b>Course Objective</b>
<b>Topics and Learning Objectives</b>	<p><b>Equations and Inequalities</b></p> <p>By the end of this week, you should be able to:</p> <ul style="list-style-type: none"> <li>Simplify expressions and solve equations involving polynomials, and radicals</li> <li>Apply algebraic methods when solving word problems.</li> </ul>			
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 2.3  OpenStax- Section 2.4</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>17: Word Problems with Linear Equations  18: Problem Solving  19: Basics of Complex Numbers</p>	Wednesday Week 3 11:59PM PT	5.5 hours	

<b>Assignments</b>	<b>Read</b> <i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i>  <i>OpenStax- Section 2.5</i> <i>OpenStax- Section 2.6</i>  <b>Complete</b> <i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i>  20: Operations on Complex Numbers 21: Solve Quadratic Equations by Factoring 22: Complete the Square 23: Quadratic Formula 24: Solve Higher Order Equations with Factoring	<b>Sunday after Week 3 class</b> <b>11:59PM PT</b>	<b>6.25 hours</b>	
		<b>TOTAL HOURS FOR THE WEEK:</b>	<b>11.75 hours</b>	

<i>Week 4</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
<b>Topics and Learning Objectives</b>	<b>Equations and Inequalities</b> By the end of this week, you should be able to: <ul style="list-style-type: none"> <li>• Simplify expressions and solve equations involving absolute values, polynomials, rational expressions, and radicals.</li> <li>• Solve linear, polynomial, rational, and absolute value inequalities.</li> </ul>			

<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p><i>OpenStax- Section 2.7</i></p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>25: Solve Equations Quadratic in Form by Factoring  26: Solve Radical Equations  27: Solve Other Types of Equations  28: Use Radicals in Applications  29: Interval Notation and Inequalities  30: Absolute Value Equations and Inequalities  31: Applications with Linear Inequalities</p>	<p><b>Wednesday</b>  <b>Week 4</b>  <b>11:59PM PT</b></p>	<p><b>6.75 hours</b></p>	
<b>Test 1</b>	<p><b>Complete</b></p> <p>Review 1  Test 1</p>	<p><b>Sunday af-</b>  <b>ter Week 4</b>  <b>class</b>  <b>11:59PM PT</b></p>	<p><b>6.5 hours</b></p>	
		<p><b>TOTAL</b>  <b>HOURS</b>  <b>FOR THE</b>  <b>WEEK:</b></p>	<p><b>13.25 hours</b></p>	

<i>Week 5</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
<p><b>Topics and Learning Objectives</b></p>	<p><b>Functions</b></p> <p>By the end of this week, you should be able to:</p> <ul style="list-style-type: none"> <li>Demonstrate an understanding of the definition of a function and use function notation, including the algebra of functions, their domains and ranges, composite functions, and inverse functions.</li> </ul>			

<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 3.1</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>32: Relations and Functions 33: One-to-One Functions 34: Function Notation</p>	<p><b>Wednesday</b> <b>Week 5</b> <b>11:59PM PT</b></p>	<p><b>5.0 hours</b></p>	
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 3.3 OpenStax- Section 3.5</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>35: Domain and Range of Functions 36: Combinations of Functions 37: Evaluate Composite Functions 38: Properties of Composite Functions</p>	<p><b>Sunday af-</b> <b>ter Week 5</b> <b>class</b> <b>11:59PM PT</b></p>	<p><b>8.5 hours</b></p>	
		<p><b>TOTAL</b> <b>HOURS</b> <b>FOR THE</b> <b>WEEK:</b></p>	<p><b>13.5 hours</b></p>	

<i>Week 6</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
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<b>Topics and Learning Objectives</b>	<b>Polynomial and Rational Functions</b> By the end of this week, you should be able to: <ul style="list-style-type: none"> <li>• Demonstrate an understanding of the definition of a function and use function notation, including the algebra of functions, their domains and ranges, composite functions, and inverse functions.</li> <li>• Sketch the graphs of basic functions, quadratic functions, and transformations of these functions.</li> <li>• Apply algebraic methods when solving word problems.</li> </ul>			
<b>Assignments</b>	<b>Read</b> <i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i>  <i>OpenStax- Section 3.6</i> <i>OpenStax- Section 3.7</i>  <b>Complete</b> <i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i>  39: Describe Transformations of Functions 40: Transformations of Functions 41: Inverse Function Values 42: Find Inverse Functions	<b>Wednesday Week 6 11:59PM PT</b>	<b>6.0 hours</b>	
<b>Assignments</b>	<b>Read</b> <i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i>  <i>OpenStax- Section 5.1</i>  <b>Complete</b> <i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i>  43: Characteristics of Parabolas 44: Graphs of Quadratic Functions Part 1 45: Graphs of Quadratic Functions Part 2 46: Applications of Quadratic Functions Part 1 47: Applications of Quadratic Functions Part 2	<b>Sunday after Week 6 class 11:59PM PT</b>	<b>7.0 hours</b>	
		<b>TOTAL HOURS FOR THE WEEK:</b>	<b>13.0 hours</b>	



<i>Week 7</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
<b>Topics and Learning Objectives</b>	<p><b>Polynomial and Rational Functions</b></p> <p>By the end of this week, you should be able to:</p> <ul style="list-style-type: none"> <li>Simplify expressions and solve equations involving polynomials, and rational expressions.</li> <li>Sketch the graphs of basic functions, quadratic functions, and transformations of these functions.</li> </ul>			
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 5.2</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>48: End Behavior of Polynomial Functions 49: Local Behavior of Polynomial Functions</p>	<p><b>Wednesday Week 7 11:59PM PT</b></p>	<p><b>5.25 hours</b></p>	
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 5.3</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>50: Write and Graph Polynomial Functions 51: Long Division of Polynomials 52: Synthetic Division and Remainder Theorem</p>	<p><b>Sunday after Week 7 class 11:59PM PT</b></p>	<p><b>7.25 hours</b></p>	
		<p><b>TOTAL HOURS FOR THE WEEK:</b></p>	<p><b>12.5 hours</b></p>	

<i>Week 8</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
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<b>Topics and Learning Objectives</b>	<b>Polynomial and Rational Functions</b> By the end of this week, you should be able to: <ul style="list-style-type: none"> <li>Simplify expressions and solve equations involving polynomials, and rational expressions</li> <li>Sketch the graphs of basic functions, quadratic functions, and transformations of these functions.</li> </ul>			
<b>Test 2</b>	<b>Complete</b> Review 2 Test 2	<b>Wednesday</b> <b>Week 8</b> <b>11:59PM PT</b>	<b>5.5 hours</b>	
<b>Assignments</b>	<b>Read</b> <i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i>  OpenStax- Section 5.4 OpenStax- Section 5.5  <b>Complete</b> <i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i>  53: Rational Zeros of Polynomial Functions Part 1 54: Rational Zeros of Polynomial Functions Part 2 55: Complex Zeros of Polynomial Functions 56: Asymptotic Behavior of Rational Functions Part 1 57: Asymptotic Behavior of Rational Functions Part 2	<b>Sunday after</b> <b>Week 8</b> <b>class</b> <b>11:59PM PT</b>	<b>8.5 hours</b>	
		<b>TOTAL HOURS FOR THE WEEK:</b>	<b>14.0 hours</b>	

<b>Week 9</b>	<b>Details</b>	<b>Due</b>	<b>Demand Hours</b>	<b>Course Objective</b>
<b>Topics and Learning Objectives</b>	<b>Exponential and Logarithmic Functions</b> By the end of this week, you should be able to: <ul style="list-style-type: none"> <li>Simplify expressions and solve equations involving exponentials, and logarithms.</li> <li>Sketch the graphs of basic functions, quadratic functions, and transformations of these functions.</li> <li>Apply algebraic methods when solving word problems.</li> </ul>			

<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 5.8 OpenStax- Section 6.1</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>58: Graphs and Applications of Rational Functions 59: Graphs of Circles</p>	<p><b>Wednesday</b> <b>Week 9</b> <b>11:59PM PT</b></p>	<p><b>5.75 hours</b></p>	
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 6.2</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>60: Evaluate and Write Exponential Functions 61: Applications of Exponential Functions and Base e Part 1 62: Applications of Exponential Functions and Base e Part 2 63: Exponential Function Graphs</p>	<p><b>Sunday af-</b> <b>ter Week 9</b> <b>class</b> <b>11:59PM PT</b></p>	<p><b>7.0 hours</b></p>	
		<p><b>TOTAL</b> <b>HOURS</b> <b>FOR THE</b> <b>WEEK:</b></p>	<p><b>12.75 hours</b></p>	

<i>Week 10</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
<b>Topics and Learning Objectives</b>	<p><b>Exponential and Logarithmic Functions</b></p> <p>By the end of this week, you should be able to:</p> <ul style="list-style-type: none"> <li>• Simplify expressions and solve equations involving exponentials, and logarithms.</li> <li>• Sketch the graphs of basic functions, quadratic functions, and transformations of these functions.</li> </ul>			

<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 6.3 OpenStax- Section 6.4</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>64: Relate Logarithms and Exponents 65: Evaluate Logarithmic Expressions 66: Logarithmic Function Graphs</p>	<p><b>Wednesday Week 10 11:59PM PT</b></p>	<p><b>5.5 hours</b></p>	
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 6.5 OpenStax- Section 6.6</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>67: Basic Properties of Logarithms 68: Rewrite Logarithmic Expressions Using Properties 69: Solve Exponential Equations 70: Solve Logarithmic Equations</p>	<p><b>Sunday after Week 10 class 11:59PM PT</b></p>	<p><b>7.25 hours</b></p>	
		<p><b>TOTAL HOURS FOR THE WEEK:</b></p>	<p><b>12.75 hours</b></p>	

<i>Week 11</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
<b>Topics and Learning Objectives</b>	<p><b>Systems of Equations and Inequalities</b></p> <p>By the end of this week, you should be able to:</p> <ul style="list-style-type: none"> <li>Solve systems of equations</li> <li>Sketch the graphs of basic functions, quadratic functions, and transformations of these functions.</li> <li>Apply algebraic methods when solving word problems.</li> </ul>			

<b>Test 3</b>	<b>Complete</b> Review 3 Test 3	<b>Wednesday Week 11 11:59PM PT</b>	<b>5.5 hours</b>	
<b>Assignments</b>	<b>Read</b> <i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i>  <i>OpenStax- Section 7.1</i>  <b>Complete</b> <i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i>  71: Graphing Systems of Linear Equations 72: Solving Systems of Linear Equations 73: Applications of Systems of Linear Equations 74: Linear Inequalities in Two Variables 75: Applications of Linear Inequalities and Systems of Linear Inequalities in Two Variables	<b>Sunday after Week 11 class 11:59PM PT</b>	<b>6.5 hours</b>	
		<b>TOTAL HOURS FOR THE WEEK:</b>	<b>12.0 hours</b>	

<i>Week 12</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
<b>Topics and Learning Objectives</b>	<b>Systems of Equations and Inequalities</b> By the end of this week, you should be able to: <ul style="list-style-type: none"> <li>• Solve systems of equations</li> <li>• Sketch the graphs of basic functions, quadratic functions, and transformations of these functions.</li> <li>• Apply algebraic methods when solving word problems.</li> </ul>			

<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 7.2 OpenStax- Section 7.3</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>76: Systems of Linear Equations in Three Variables 77: Solving Applications of Systems of Linear Equations in Three Variables 78: Systems of Two Nonlinear Equations 79: Graphing Nonlinear Inequalities and Systems of Inequalities</p>	<p><b>Wednesday</b> <b>Week 12</b> <b>11:59PM PT</b></p>	<p><b>5.75 hours</b></p>	
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 9.1 OpenStax- Section 9.2</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>80: Introduction to Sequences 81: Recursive Sequences 82: Arithmetic Sequences 83: Applications of Arithmetic Sequences</p>	<p><b>Sunday af-</b> <b>ter Week 12</b> <b>class</b> <b>11:59PM PT</b></p>	<p><b>6.5 hours</b></p>	
		<p><b>TOTAL</b> <b>HOURS</b> <b>FOR THE</b> <b>WEEK:</b></p>	<p><b>12.25 hours</b></p>	

<i>Week 13</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
<b>Topics and Learning Objectives</b>	<p><b>Sequences</b></p> <p>By the end of this week, you should be able to:</p> <ul style="list-style-type: none"> <li>Simplify expressions and solve equations involving polynomials.</li> <li>Apply algebraic methods when solving word problems.</li> </ul>			

<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 9.3 OpenStax- Section 9.4</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>84: Geometric Sequences 85: Applications of Geometric Sequences 86: Summation Notation and Arithmetic Series 87: Finite and Infinite Geometric Series</p>	<b>Wednesday Week 13 11:59PM PT</b>	<b>5.5 hours</b>	
<b>Assignments</b>	<p><b>Read</b></p> <p><i>Please read the sections listed below. <b>Please Note:</b> You are not required to complete the example problems in these sections.</i></p> <p>OpenStax- Section 9.6</p> <p><b>Complete</b></p> <p><i>Please complete the following assignments on the Knewton Platform. Links are provided in Moodle.</i></p> <p>88: Binomial Expansion</p> <p><b>Complete</b></p> <p>Review 4 Test 4</p>	<b>Sunday af- ter Week 13 class 11:59PM PT</b>	<b>7.5 hours</b>	
		<b>TOTAL HOURS FOR THE WEEK:</b>	<b>13.0 hours</b>	

<i>Week 14</i>	<i>Details</i>	<i>Due</i>	<i>Demand Hours</i>	<i>Course Objective</i>
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<b>Topics and Learning Objectives</b>	<b>Final Exam</b> By the end of this week, you should be able to: <ul style="list-style-type: none"> <li>• Simplify expressions and solve equations involving absolute values, polynomials, rational expressions, radicals, exponentials, and logarithms.</li> <li>• Solve systems of equations and solve linear, polynomial, rational, and absolute value inequalities.</li> <li>• Demonstrate an understanding of the definition of a function and use function notation, including the algebra of functions, their domains and ranges, composite functions, and inverse functions.</li> <li>• Sketch the graphs of basic functions, quadratic functions, and transformations of these functions.</li> <li>• Apply algebraic methods when solving word problems.</li> </ul>			
<b>Final Exam</b>	<b>Complete</b> Final Review Final	<b>Sunday after Week 14 class  11:59PM PT</b>	<b>11.5 hours</b>	
<b>Course Evaluation</b>	<b>Evaluate</b> <ul style="list-style-type: none"> <li>• Please follow the prompts when you log in to Moodle to fill out the anonymous Course Evaluation survey.</li> <li>• NOTE: The results of these surveys are compiled into one summary report that goes to the Department Chair after the final grades are turned in. They are completely anonymous, so feel free to be honest. Jessup Online uses the reports to guide our decision-making for future courses.</li> <li>• After you have completed the survey, please follow the directions in the Course Evaluation Assignment to let your instructor know that you have completed this course requirement.</li> </ul>	<b>Sunday after Week 14 class  11:59PM PT</b>		
		<b>TOTAL HOURS FOR THE WEEK:</b>	<b>11.5 hours</b>	