	Second Half of Fall 2011	Section 004	3 Credit Hours
Instructor:	Mr. Hipp	Course Days/Time:	Online
Office:	Bancroft 169	Course Location:	https://bb-winthrop.blackboard.com
Office Phone:	803-323-4548	Office Hours:	MW 1-2pm, TTh 9:30-10:30am,
Math Departmen	t: 803-323-2175		F 8:30-9:30am
Campus Email:	hippb@winthrop.edu	Additional off	fice hours are available by appointment

MATH 151: Applied College Algebra

The instructor reserves the right to make modifications to this syllabus. Students will be notified in class and by email.

Course Goals and Alignment with the General Education Goals

Course Goals	General Education Goals				
	2.1 Solve mathematical problems of the type necessary for living in today's and tomorrow's world.				
Use algebraic and	2.3 Understand that quantitative analysis is important to almost every endeavor of humankind.				
geometric methods, modeling, and regression	2.4 Understand the concept and application of quantitative relationships.				
to solve applied problems.	3.1 Identify sound and unsound reasoning.				
	3.2 Analyze and use a variety of information gathering techniques				
	2.1 Solve mathematical problems of the type necessary for living in today's and tomorrow's world.				
Use case studies from a variety of applied contexts	2.2 Make valid inferences from data.				
as a basis to model	2.3 Understand that quantitative analysis is important to almost every endeavor of humankind.				
meaningful problem	2.4 Understand the concept and application of quantitative relationships.				
situations and reach	3.1 Identify sound and unsound reasoning.				
	3.2 Analyze and use a variety of information gathering techniques				
	2.2 Make valid inferences from data.				
Use algebraic techniques to analyze graphs of	2.3 Understand that quantitative analysis is important to almost every endeavor of humankind.				
functions locally, globally,	2.4 Understand the concept and application of quantitative relationships.				
quantitatively, and	3.1 Identify sound and unsound reasoning.				
quantatively.	3.2 Analyze and use a variety of information gathering techniques				

For purposes of departmental and touchstone program assessment of student learning in this course, sections of the final exam will be tabulated for all students and cover the goals listed above. Individual tests and course grades may also be used as an indication of progress toward the above goals.

Winthrop University is dedicated to providing access to education. If you have a disability and need classroom accommodations, please contact Gena Smith, Coordinator, Services for Students with Disabilities, at 323-3290, as soon as possible. Once you have your Professor Notification Form, please tell me so that I am aware of your accommodations well before the first test.

Text and Materials

- Required Text: MyMathLab Standalone Student Access Kit, our MyMathLab course ID: hipp80593
- MATH151 students are expected to have a scientific calculator.

Final Grade Computation	Grading Scale							
Homework 20%	А	93%-100%	B+	87%-89%	C+	77%-79%	D+	67%-69%
Case Studies 5%	A-	90%-92%	В	83%-86%	С	73%-76%	D	63%-66%
Midterm 35%			B-	80%-82%	C-	70%-72%	D-	60%-62%
Final Exam <u>40%</u>							F	0%-59%
100%								

Important Dates

Midterm Exam in Kinard 305 on Thursday, 11/3, 11-1pm OR Friday, 11/4, 2-4pm Cumulative Final Exam (location TBA) on Wednesday, 12/7 at 3pm

Additional Policies

- Review the student code of conduct for university polices on academic misconduct. Academic misconduct will not be tolerated and will result in a failing grade on the assignment and/or in the course. The full handbook is available online at: (http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf)
- 2. All electronic devices (including MP3 players and cell phones) other than a scientific calculator should be off or turned to silent and kept in your book bag or purse throughout testing times unless otherwise instructed. This means that you may not use any of these devices in place of a calculator during the tests. (Note: if you have some educational, health, or physical reason for an electronic device, you must work with your instructor to inform the instructor of the accommodation.)
- 3. Suggested homework problems from the textbook are listed on the third page of this syllabus. The answers to these problems can be found in the back of the textbook. These homework problems will not be collected for a grade.
- 4. Students will complete eight graded homework assignments in MyMathLab (listed in bold in the calendar below). You are allowed multiple attempts, but your final attempt must be completed by 11:59pm on the dates listed on the calendar below.
- 5. Case Study exercises can be turned in electronically (scanned image, PDF, or Word Document) or as a hard copy to Bancroft 169 by 11:59pm on the date listed on the calendar below.
- 6. The midterm and cumulative final exam will be completed on campus during the times listed on the calendar below. If you have a conflict with the dates and/or times listed, you must contact your instructor **before the scheduled exam date** to provide documentation of the conflict and reschedule your exam. No make-up tests will be given unless prior arrangements are made with the instructor.
- 7. Students are required to receive a grade of C or better in MATH151 to move on to MATH105.

Tentative Course Schedule

Sections 1.1 through 1.4 concepts are expected as prerequisite knowledge for MATH151.

Date	Sections	Торіс	Key Ideas				
10/11		Read the syllabus, Get familiar with Blackboard and MyMathLab	 Negative and rational exponents: properties, radical notation, rationalizing First-degree equations: properties, extraneous solutions, absolute values, 				
Tuesday, 10/11		Chapter 0 in MyMathLab	applications				
10/11-10/14	1.1-1.4 1.5	Brief Review of Prerequisite Material Exponents and Radicals	• Quadratic equations: properties, quadratic formula, discriminant, Pythagorean theorem				
Due Friday, 10/14		Check Progress One in MyMathLab	Graphs: constructing, reading, coordinates, quadrants, intercepts,				
10/15-10/21	1.6, 1.7, 2.1	First Degree Equations, Quadratic Equations, Graphs	 technology, Geometric/algebraic features of lines: slope, horizontal/vertical lines, 				
Due Friday	, 10/21	Check Progress Two in MyMathLab	constant functions, parallel/perpendicular lines, linear equations				
10/22-10/27	2.2, 2.4, 2.5	Equations of Lines, Linear Inequalities, Polynomial & Rational Inequalities	 Linear inequalities: solutions, properties, absolute values Polynomial / rational inequalities: solutions, algebraic methods ,visual ostimation 				
Due Thursda	y, 10/27	Check Progress Three in MyMathLab	 Single variable functions: inputs, outputs, domain, range, notation 				
10/28-11/2	3.1, 3.2, 3.3	Functions, Graphs of Functions, Applications of Linear Functions	 Graphs: construct, analyze, step functions, plotting points, the vertical lin 				
Due Wednesday, 11/2		Check Progress Four in MyMathLab	test, technology				
Thursday, 11/3, 11-1pm OR Friday, 11/4, 2-4pm		Midterm Exam in Kinard 305	Applications: revenue, cost, profit, rates of change, supply, demand, equilibrium				
11/5-11/11	3.4, 3.5, 3.6	Quadratic Functions, Applications of Quadratic Functions, Polynomial Functions	 Quadratic functions: characteristics, parabola, vertex, axis, intercepts Applications: solutions, algebraic geometric methods, modeling, regress 				
Due Friday, 11/11		Check Progress Five in MyMathLab	 Polynomial functions: nature, basic properties, graphing techniques 				
11/12-11/18	3.7, 4.1, 4.2	Rational Functions, Exponential Functions, Applications of Exponential Functions	 Rational functions: nature, asymptotes, technology, applications Exponential functions: nature, bases, exponential growth / decay, the number e. analyzing graphs 				
Due Tuesday, 11/15		Case 3, Exercises 1-4 on page 211	Applications: solution techniques, specific models				
Due Friday, 11/18		Check Progress Six in MyMathLab	Logarithmic functions: importance, properties, general definition,				
11/19-11/28	4.3, 4.4	Logarithmic Functions, Logarithmic & Exponential Equations	algebraic properties, change of base formula, inverse relationship between exponential/logarithmic functions				
Due Monday, 11/28		Check Progress Seven in MyMathLab	Logarithmic / exponential equations: solutions, identities, applications Simple interest and discount: computation, future (present values, interest)				
11/29-12/5	5.1, 5.2	Simple Interest and Discount, Compound Interest	 on present values, interest and discount, computation, ruture, present values, interest notes, discount notes Compound interest: computation, discrete compounding, continuous 				
Due Thursday, 12/1		Case 5, Exercises 1-5 on page 309	compounding, present value				
Due Monday, 12/5		Check Progress Eight in MyMathLab					
Wednes	day, 12/7 a	t 3pm – Final Exam, Location TBA					

MATH151 – Suggested Homework Problems

Prerequisite Practice Problems

Order of operations: page 10, 19-25 odd

Inequalities: page 10, 29-33 odd

Intervals: page 10, 35-41 odd

Absolute value: page, 11 59-71 odd

Exponents: page 19, 7-11 odd

Practice with polynomials: page 19, 13-35 odd

Factoring: page 27, 1-77 odd

Rational expressions: page 340, 1-49odd

Section 1.5: pages 46-48, 1-21 odd, 43-69 odd, 91-109 odd

Section 1.6: pages 57-59, 23, 25, 33-63 odd, 73, 75

Section 1.7: pages 67-69, 1-19 odd, 25, 27, 29, 43-51 odd, 55, 57

Section 2.1: pages 83-87, 1-25 odd, 41-61 odd

Section 2.2: pages 97-100, 1-23 odd, 41-73 odd

Section 2.4: pages 118-120, 3-25 odd, 31-47 odd, 51-55 odd

Section 2.5: pages 126-127, 1, 5, 9, 13-21 odd, 29-37 odd, 41-47 odd

Section 3.1: pages 140-142, 1-21 odd, 25, 29, 31, 33, 37, 41, 43, 45, 49, 51, 53, 57, 59

Section 3.2: pages 151-155, 3-15 odd, 31-37 odd, 47, 51, 53, 57, 59

Section 3.3: pages 164-167, 1-27 odd, 33-43 odd, 49, 51

Section 3.4: pages 173-175, 7-25 odd, 35-45 odd

Section 3.5: pages 181-184, 1-21 odd, 33

Section 3.6: pages 193-196, 5-21 odd, 27-31 odd

Section 3.7: pages 203-205, 1-21 odd

Section 4.1: pages 220-223, 1-19 odd, 35, 37, 39, 43, 45, 49

Section 4.2: pages 229-232, 1-7 odd, 13, 17

Section 4.3: pages 240-241, 1-23 odd, 31-41 odd, 47, 49

Section 4.4: pages 250-252, 1, 5, 9, 13, 17, 19, 31-49 odd, 53, 57, 59

Section 5.1: pages 265–267, 3, 7, 11, 17-43 odd

Section 5.2: pages 276-279, 7, 11-15 odd, 19-25 odd, 29, 33, 35, 39-63 odd