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COURSE SYLLABUS

Term: Fall 2015 (2015-1)

MATH 103 A Intermediate Algebra

Instructor Information:	
Instructor Name	Carrie Hutton
Office Number:	302
Phone Number:	219-473-4284
Email:	chutton@ccsj.edu
Other Contact :	
Hours Available:	Mon/Wed: 9 am – 10 am, 2:30 pm – 4 pm; Tues/Thurs: 10 am – 12 pm; 2 pm – 3 pm *Please note that meetings and appointments can effect these hours. **Additional office hours by appointment.
Instructor Background: : B.S. Actuarial Science, Indiana University; M.S. Mathematics and Statistics, Purdue University; M.S.E. Engineering, Purdue University	

Course Information:	
Course Time:	Monday and Wednesday 12:00 pm – 1:30 pm
Classroom:	
Prerequisites:	MATH 097 with a grade of 'C' or better, or an equivalent Accuplacer score
Textbooks:	Lial, Hornsby, McGinnis <u>Intermediate Algebra</u> , 10 th edition, Pearson, 2014 ISBN: 9780321872180
Learning Outcomes/ Competencies:	
Through appropriate assessments students will demonstrate that they are able to:	

1. **Remember** the necessary steps and procedures for manipulating, simplifying, and solving: algebraic expressions, exponents, polynomials, graphs, inequalities, absolute value, linear and quadratic expressions, systems of equations, rational expressions, and logarithms.
2. **Understand** what each procedure, manipulation, simplification, and solution means on a conceptual level.
3. **Apply** their understanding of algebraic expressions, exponents, polynomials, graphs, inequalities, absolute value, linear and quadratic expressions, systems of equations, rational expressions, and logarithms to solve application problems.
4. **Analyze** problems in physics, economics, business, and biology to determine appropriate methods for solving them using algebra skills and concepts.

Course Description:

This course treats algebraic expressions, exponents, polynomials, graphing, inequalities, absolute value, linear and quadratic expressions, and systems of equations, applications, rational expressions, and logarithms.

Learning Strategies:

Group discussions, lecture, IXL software, and lots of practice. The objective is to promote your understanding of mathematics concepts and to enable you to apply them in a meaningful way. You are encouraged to rely on logical thinking, rather than on memorization. It is VERY important that you READ the sections of the textbook, STUDY the examples and WORK problems. Active participation in class and utilization of services such as the CCSJ Student Success Center will help ensure your success.

It is also suggested that you utilize Khan Academy for additional help on homework outside of the classroom.

<http://www.khanacademy.org/math/algebra>

Experiential Learning Opportunities

Applications of the course objectives

Assessments:		
Exams:	Four chapter exams (R-2, 3-5, 6-8, 9-10)	40% of grade
Cumulative Final Exam:	Chapter R – Chapter 10	25% of grade
Textbook Homework:	Assigned Weekly per schedule	15% of grade
IXL Homework:	Assigned Weekly per schedule	20% of grade

Grading Scale:

Grade	Points
A	100-92
A-	91-90
B+	89-88
B	87-82
B-	81-80
C+	79-78
C	77-72
C-	71-70
D+	69-68
D	67-62
D-	61-60
F	59 and below

Policies and Procedures	
Class Policy on Attendance:	<p><i>Eighty percent of success is showing up.</i> -Woody Allen</p> <p>Attendance is important and is expected. You are responsible for all material covered in class, including announcements of assignments and quizzes. If you miss class, you must contact the instructor by email (chutton@ccsj.edu) within 24 hours. The instructor is more than willing to meet you halfway on this, but remember that there are TWO halves. You are allowed to miss 2 classes, without penalty. After that, every class that you are absent from will result in a one (1) percentage point loss from your final grade. You should ‘save’ your two absences for emergencies. If you are more than 15 minutes late to class, that will count as an absence. BE PRESENT, BE ON TIME.</p>

<p>Class Policy on Electronic Devices</p>	<p>Electronic devices are out of place in the classroom. Please keep them silent and put away during class. Additionally, NO ELECTRONIC DEVICES OF ANY KIND ARE TO BE USED ON QUIZZES OR EXAMS.</p>
<p>Class Participation:</p>	<p>Tests and Quizzes:</p> <ul style="list-style-type: none"> • Four <u>chapter tests</u> will be given during the term and <u>one comprehensive final exam</u> during exam week. • You will be allowed to use one piece of paper (8 ½ x 11), one side only, of notes on your chapter tests. • You will be allowed to use one piece of paper (8 ½ x 11), both sides, of notes on your final exam. • You will be allowed to use a calculator on all exams. • You will NOT be allowed to use any electronic devices on an exam (i.e. phone, tablet, etc.). • Please note that you MUST pass your exams to pass this course. • Thoughtful completion of your homework should be done to practice and prepare for your exams. <p>Written homework assignments and IXL homework assignments:</p> <ul style="list-style-type: none"> • Homework is critical to your success in this course. The written homework and IXL homework are meant to serve as practice for the exams. • Your written homework should be neat and organized. Problems should be copied from the book and all necessary work should be shown. Answers without work will not be given credit. All written homework from the textbook will be due when you take your exams. • IXL homework will be due each week (see calendar for due dates). You MUST do at least 12 problems in each assignment, but can do more (before the due date) to raise your IXL homework score. • It is expected that you will spend 3 – 5 hours outside of class each week practicing math. You must practice to succeed. • NO LATE HOMEWORK will be accepted, for any reason, period. You are welcome to turn it in early, but never late.
<p>Statement of Plagiarism:</p>	<p>If an instructor or other Calumet College of St. Joseph personnel find that a student has plagiarized or been involved in another form of academic dishonesty, the instructor or other personnel may elect to bring the matter up for judicial review. The maximum penalty for any form of academic dishonesty is dismissal from the College. The</p>

	<p>procedures for judicial review are listed under the section of CCSJ handbook that addresses student grievances.</p> <p>PLEASE NOTE: All papers can and may be submitted for checks on plagiarism from the Internet/Electronic sources/Databases.</p>
Citation Guidelines:	<p>Calumet College of St. Joseph uses citation guidelines, generally MLA or APA format, to document sources quoted or paraphrased in student papers. Check the syllabus for <u>each</u> course to see what <u>each</u> instructor requires. The Library has reference copies of each manual; the Follett has copies for sale when required by the instructor. In addition, there are brief MLA and APA checklists in your spiral “Student Handbook and Planner” and on the Library website and literature rack. These texts show how to cite references from many sources, including electronic media, as well as how to space and indent the “Works Cited” and “References” pages respectively. EBSCO and ProQuest articles provide both formats for you to copy and paste. Proper documentation avoids plagiarism.</p>
Withdrawal from Classes Policy:	<p>After the last day established for class changes has passed (see College calendar), students may withdraw from a course in which they are registered and wish to discontinue. A written request detailing the reason(s) for the withdrawal must be completed with the Office of Academic Advising and filed with the Registrar. The Office of Academic Advising must receive written request for withdrawal by the last day of classes prior to the final examination dates specified in the catalogue. Written requests should be submitted in person or, when an in-person visit is not possible, may be mailed to the Office of Academic Advising, emailed, or faxed to 219-473-4336. Students are to make note of the refund schedule when withdrawing from courses. If the request requires instructor approval per the College calendar, it must be forwarded to the faculty member, who makes the final determination to accept or deny the request.</p> <p>If the request is honored by the faculty member, the student will receive notification of official withdrawal from the Registrar after meeting or speaking with a member from Academic Advising, Financial Aid and Athletics (if applicable). These departments will notify the student of academic, financial, and athletic eligibility effects of a possible withdrawal.</p> <p>If the request is denied by the faculty member, the notification will indicate why the withdrawal is disallowed. Please note that if the request does not require instructor approval, the student must still meet or speak with a member from Academic Advising, Financial</p>

	<p>Aid and Athletics (if applicable) before the withdrawal will be processed.</p> <p>An official withdrawal is recorded as a "W" grade on the student's transcript. Discontinuing a course without a written request for withdrawal automatically incurs an "FW" grade for the course (see Refund Schedule). Failure to Withdraw (FW) is indicated when the student does not complete withdrawal paperwork with the Office of Academic Advising nor does the student notify the instructor of their intent to withdraw due to an illness, accident, grievous personal loss, or other circumstances beyond the student's control. <u>This grade is submitted by the instructor at the end of term.</u></p>
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Resources	
Student Success Center:	<p>The Student Success Center supports Calumet College of St. Joseph students through an interactive learning experience. Students work with faculty tutors to develop course competencies and study skills such as time management, test preparation, and note taking. In addition, students are provided with tutoring support to help pass courses, to improve grade point average, and to promote continuing education and career advancement. Tutors have a specific charge: to help students learn how to master specific subject matter and to develop effective learning skills. The Student Success Center is open to all students at Calumet College of St. Joseph at no charge and is available to support academic courses at the introductory and advanced levels. For assistance, please contact the Student Success Center at 219 473-4287 or stop by the Library.</p>
Disability Services:	<p>Disability Services strives to meet the needs of all students by providing academic services in accordance with Americans Disability Act (ADA) guidelines. Students must meet with the Coordinator of Disability Services to complete an intake form in order to request an accommodation and/or an auxiliary aid (<i>e.g., additional time for tests, note taking assistance, special testing arrangements, etc.</i>). It is the student's responsibility to contact the Academic Support Programs Office to request an accommodation at least <u>one month prior to enrollment</u> for each academic term. Students who are requesting an accommodation and/or an auxiliary aid must submit documentation from a professional health care provider to verify eligibility under Section 504 of the Rehabilitation Act of 1973 and/or the Americans with Disabilities Act of 1990. The cost of obtaining the professional verification is the responsibility of the student.</p>

	<p>If a student believes that he or she needs a “reasonable accommodation” of some kind because of a physical, psychological, or mental condition, he or she should contact Disabilities Services. The Coordinator will secure documentation pertinent to the disability and work with faculty and staff, if necessary, to address the matter. All questions and inquiries pertaining to disability services should be directed to the Disability Services Coordinator at 219-473-4349.</p>
<p>CCSJ Alert:</p>	<p>Calumet College of St. Joseph utilizes an emergency communications system that transmits messages via text, email, and voice platforms. In the event of an emergency, of weather related closings, or of other incidents, those students who are registered for the system shall receive incident specific message(s) notifying them of the situation. Please sign-up for this important service at any time on the College’s website. Alternatively, you can register at the time you register for classes. This service requires each user to register once per academic year. Therefore, at the beginning of each academic year, please remember to re-register for the system. This can be done at: http://www.ccsj.edu/alerts/index.html.</p> <p style="text-align: center;"><u>School Closing Information:</u></p> <p><u>Internet:</u> http://www.ccsj.edu</p> <p style="text-align: center;"> http://www.EmergencyClosings.com Facility: Calumet College of St. Joseph Phone: 219.473.4770 </p> <p><u>Radio:</u></p> <p style="text-align: center;"> WAKE – 1500 AM WGN - 720 AM WIJE – 105.5 FM WLS – 890 AM WZVN – 107.1 FM WBBM NEWS RADIO 78 </p> <p><u>TV Channels:</u></p> <p style="text-align: center;">2, 5, 7, 9, 32</p>

Date	Topic	Homework Assigned	Homework Due Date/Time
8-31-15	Introduction to class Chapter R: Review of the Real Number System	Textbook (TB) p.44 #1-15 all IXL Algebra I: A.1 – Classify Numbers A.7 – Square Roots A.8 – Cube Roots B.2 – Order of Operations with Integers B.7 – Evaluate Variable Expressions using Rational Numbers	9-21-15 at the beginning of class (Exam I) 9-7-15 by 10 pm
9-2-15	Chapter R: Review of the Real Number System	IXL Algebra I: H.1 – Properties of Addition and Multiplication H.2 – Distributive Property H.4 – Properties of Equality	9-7-15 by 10 pm
9-7-15	NO CLASS IN OBSERVANCE OF Labor Day		
9-9-15	Chapter 1: Linear Equations and Applications	TB p. 106 #1-8 all IXL Algebra I: J.7 – Identities and Equations with No Solutions	9-21-15 at the beginning of class (Exam I) 9-21-15 by 10 pm

		<p>J.8 – Solve Linear Equations, Word Problems</p> <p>J.9 – Solve Linear Equations, Mixed Review</p> <p>G.1 – Coordinate Graph Review</p> <p>H.3 – Simplify Variable Expressions using Properties</p>	
9-14-15	<p>Chapter 1: Linear Equations and Applications</p> <p>Chapter 2: Linear Inequalities and Absolute Value</p>	<p>TB p. 158 #1-34 all</p> <p>IXL Algebra I:</p> <p>K.2 – Write Inequalities from Graphs</p> <p>K.11 – Graph Solutions to Advanced Linear Inequalities</p> <p>K.13 – Write Compound Inequalities from Graphs</p> <p>K. 15 – Graph Solutions to Compound Inequalities</p>	<p>9-21-2015 at the beginning of class (Exam I)</p> <p>9-21-15 by 10 pm</p>
9-16-15	<p>Chapter 2: Linear Inequalities and Absolute Value</p>	<p>TB p. 156 #1-7 all, #10 – 22 all</p> <p>IXL Algebra I:</p> <p>L.2 – Graph Solutions to Absolute Value Equations</p> <p>L.4 – Graph Solutions to Absolute Value Inequalities</p>	<p>9-21-15 at the beginning of class (Exam I)</p> <p>9-21-15 by 10 pm</p>

9-21-15	Exam I (Chapter R – Chapter 2)	None	All Textbook homework is due TODAY, at the BEGINNING of class. NO LATE HOMEWORK will be accepted.
9-23-15	Chapter 3: Graphs, Linear Equations, and Functions	<p>TB p. 237 #1-22 all</p> <p>IXL Algebra I:</p> <p>S.3 – Find Slope from Two Points</p> <p>S.6 – Slope Intercept Form, Graph an Equation</p> <p>S.7 – Slope-Intercept Form: Write an Equation from a Graph</p> <p>S.9 – Linear Equations: Solve for y</p> <p>S.11 – Write Equations in Standard Form</p> <p>S.12 – Standard Form, Find x- and y-Intercepts</p> <p>S.13 – Standard Form, Graph and Equation</p> <p>S.15 – Graph a Horizontal or Vertical Line</p> <p>S.18 – Point-Slope Form: Write an Equation</p> <p>S.19 – Slopes of Parallel and Perpendicular Lines</p> <p>S.20 – Write an Equation for a Parallel or Perpendicular Line</p> <p>T.3 – Graph a Linear Inequality in the Coordinate Plane</p>	<p>10-14-15 at the beginning of class (Exam II)</p> <p>10-5-15 by 10 pm</p>

		T. 4 – Linear Inequalities Word Problems	
9-28-15	Chapter 3: Graphs, Linear Equations, and Functions	Continue with Chapter 3 homework	
9-30-15	Chapter 3: Graphs, Linear Equations, and Functions	Continue with Chapter 3 homework	
10-5-15	Chapter 4: Systems of Linear Equations	<p>TB p. 287 #1-11 all</p> <p>IXL Algebra I: U.1 – Is (x,y) a Solution to the System? U.2 – Solve a System of Equations by Graphing U.8 – Solve a System of Equations using Substitution U.10 – Solve a System of Equations using Elimination U.15 – Solve a System of Equations using Any Method, Word Problems</p>	<p>10-14-15 at the beginning of class (Exam II)</p> <p>10-12-15 by 10 pm</p>
10-7-15	<p>Finish Chapter 4: Systems of Linear Equations</p> <p>Chapter 5: Exponents, Polynomials, and Polynomial Functions</p>	<p>TB p. 346 #1-22 all</p> <p>IXL Algebra I: V.6 – Multiplication and Division with Exponents V.8 – Simplify Expressions Involving Exponents</p>	<p>10-14-15 at the beginning of class (Exam II)</p> <p>10-19-15 by 10 pm</p>

		<p>W.1 – Convert Between Standard and Scientific Notation</p> <p>Z.4 – Add and Subtract Polynomials</p> <p>Z.8 – Multiply Two Binomials</p> <p>Z.10 – Multiply Polynomials</p> <p>GG.5 – Divide Polynomials</p>	
10-12-15	Chapter 5: Exponents, Polynomials, and Polynomial Functions	TB p. 348 #1-35 all	10-14-15 at the beginning of class (Exam II)
10-14-15	Exam II (Chapter 3 – Chapter 5)	None	All Textbook homework is due TODAY, at the BEGINNING of class. NO LATE HOMEWORK will be accepted
10-19-15	Chapter 6: Factoring	<p>TB p. 391 #1-20 all</p> <p>IXL Algebra I:</p> <p>AA.1 – GCF of Monomials</p> <p>AA.2 – Factor out a Monomial</p> <p>AA.3 – Factor Quadratics with Leading Coefficient of 1</p> <p>AA.4 – Factor Quadratics with other Leading Coefficients</p> <p>AA.5 – Factor Quadratics: Special Cases</p> <p>AA.7 – Factor by Grouping</p>	<p>11-11-15 at the beginning of class (Exam III)</p> <p>11-2-15 by 10 pm</p>

		AA.8 – Factor Polynomials BB.5 – Solve an Equation using the Zero Product Property BB.6 – Solve a Quadratic Equation by Factoring	
10-21-15	Chapter 6: Factoring	Continue with Chapter 6 homework	
10-26-15	Chapter 6: Factoring	Continue with Chapter 6 homework	
10-28-15	Chapter 7: Rational Expressions and Functions	TB p. 463 #1-18 all IXL Algebra I: GG.2 – Simplify Complex Fractions GG.3 – Simplify Rational Expressions GG.4 – Multiply and Divide Rational Expressions GG.6 – Add and Subtract Rational Expressions GG.7 – Solve Rational Equations R.5 – Write and Solve Direct Variation Equations R.8 – Write and Solve Inverse Variation Equations	11-11-15 at the beginning of class (Exam III) 11-9-15 by 10 pm
11-2-15	Chapter 7: Rational Expressions and Functions	Continue with Chapter 7 homework	
11-4-15	Chapter 8: Roots, Radicals, and Root Functions	TB p. 541 #1-30 all	11-11-15 at the beginning of class (Exam III)

		<p>IXL Algebra I: EE.1 – Simplify Radical Expressions EE.6 – Simplify Radical Expressions Mixed Review FF.1 – Evaluate a Radical Function FF.2 – Domain and Range of Radical Functions FF.4 – Solve Radical Equations II</p> <p>IXL Algebra II: H.6 – Add, Subtract, Multiply, and Divide Complex Numbers M.6 – Simplify Expressions Involving Rational Exponents II</p>	11-16-15 by 10 pm
11-9-15	Chapter 8: Roots, Radicals, and Root Functions	TB p. 543 #1-44 all	11-11-15 at the beginning of class (Exam III)
11-11-15	Exam III (Chapter 6 – Chapter 8)	None	All Textbook homework is due TODAY, at the BEGINNING of class. NO LATE HOMEWORK will be accepted
11-16-15	Chapter 9: Quadratic Equations, Inequalities, and Functions	TB p. 627 #1-11 all, 20 – 25 all IXL Algebra I: BB.1 – Characteristics of Quadratic Functions BB.2 – Complete a Function Table: Quadratic Functions	11-30-15 at the beginning of class (Exam IV) 11-23-15 by 10 pm

		<p>BB.3 – Transformations of Quadratic Functions</p> <p>BB.4 – Solve a Quadratic Equation Using Square Roots</p> <p>BB. 8 – Solve a Quadratic Equation by Completing the Square</p> <p>BB. 9 – Solve a Quadratic Equation by using the Quadratic Formula</p> <p>BB. 10 – Using the Discriminant</p>	
11-18-15	Chapter 9: Quadratic Equations, Inequalities, and Functions	Continue with Chapter 9 homework	
11-23-15	Chapter 10: Inverse, Exponential, and Logarithmic Functions	<p>TB p. 692 #1, 5 – 22 all</p> <p>IXL Algebra II:</p> <p>R.1 – Convert Between Exponential and Logarithmic Form: Rational Bases</p> <p>R.3 – Convert Between Exponential and Logarithmic Form: All Bases</p> <p>R.4 – Evaluate Logarithms</p> <p>R.6 – Change of Base Formula</p> <p>R.11 – Properties of Logarithms: Mixed Review</p> <p>R.12 – Evaluate Logarithms: Mixed Review</p> <p>S.2 – Evaluate Exponential Functions</p>	<p>11-30-15 at the beginning of class (Exam IV)</p> <p>11-30-15 by 10 pm</p>

		<p>S.5 – Solve Exponential Equations using Common Logarithms</p> <p>S.7 – Solve Logarithmic Equations I</p>	
11-25-15	Chapter 10: Inverse, Exponential, and Logarithmic functions	<p>TB p. 694 #1-36 all</p>	<p>Week of 12-7-15 at the beginning of class (Final Exam)</p>
11-30-15	Exam IV (Chapter 9 – Chapter 10)		<p>All Textbook homework is due TODAY, at the BEGINNING of class. NO LATE HOMEWORK will be accepted</p>
12-2-15	Review for Final Exam	<p>STUDY!</p>	
Week of 12-7-15	Final Exam (We will follow the CCSJ final exam schedule, to be released at a later date)		<p>All Textbook homework is due TODAY, at the BEGINNING of class. NO LATE HOMEWORK will be accepted</p> <p>Congrats! You have finished the semester!</p>