

Syllabus

Intermediate Algebra with Geometry

Math 99 DE – Fall 2016

Course Title	Intermediate Algebra with Geometry
Credit Hours	5
Length of Course	16 weeks
Prerequisites	Grade of C or better in Mathematics 110 or Mathematics 98, or placement test, or consent of department chair.
Section Classes	99 DE (section number: 61299) Monday, Wednesday, 12:30 PM – 2:50 PM in Room 3150
Instructor	Marta Hidegkuti e-mail: mhidegkuti@ccc.edu Office: Room 3812
Office Hours	Monday, Wednesday, 8:30 AM – 9:00 AM in Room 3812 Monday, Wednesday 3:30 PM – 5:00 PM in Room 3812 Tuesday, Thursday 12:00 PM – 1:30 PM in Room 3812 or by appointment Some office hours might be cancelled or re-scheduled due to meetings.

Web Sites All handouts and announcements will be available on the class's web site, at http://www.teaching.martahidegkuti.com/Math99/math99_fa16/Math99.html
In case the web site is down, check at Blackboard. Please e-mail to mhidegkuti@ccc.edu if you notice broken links.

Textbook **Due to price consideration, students are welcome to use previous editions of the official textbook, which is** the 4th edition of Introductory and Intermediate Algebra for College Students by Robert Blitzer, Pearson, 2013.
Most topics will be also covered by handouts posted on the course's web site.

Calculator Policy

The use of a scientific calculator is strongly recommended. Students are expected to bring the calculator to class. The optimal calculator is **TI-30X II S**. The price of this model is between \$15 and \$20. Do NOT purchase a different calculator if it is significantly more expensive. Any calculator different from TI-30X II S has to be approved by the instructor first. If a calculator is able to compute symbolically, (f.e. that $\sqrt{12} = 2\sqrt{3}$), then it is not allowed to be used during quizzes and exams. **During quizzes and exams, students are not allowed to use a graphing calculator. Students are not allowed to use a cell phone as a calculator any time during class.**

Supplements

Mandatory: Homework will be assigned on MyOpenMath. The use of MyOpenMath is mandatory but it is completely free. Students can log in at www.myopenmath.com and enroll using the course ID **12397** and enrollment key **Math99DE_fa16**.

Optional: The official textbook is bundled with MyMathLab. The use of MyMathLab is not part of the course. For students who are accustomed to the use of MyMathLab as a resource, a course has been made available on MyMathLab. The course ID of this class is **hidegkuti22106**.

Important Dates

First class: Monday, August 29	Exam 3: Wednesday, November 16
Holiday, no class: Monday, September 5	Last Day for Student Initiated Withdrawal: Monday, November 21
Exam 1: Wednesday, September 28	Exam 4 (same as the Final Exam): Wednesday, December 14
Exam 2: Wednesday, October 19	End of Semester: Saturday, December 17

Attendance Policy

Attendance is an essential part of the course. Regular attendance is expected of all students in the course. Attendance will be taken each class period. Students are expected to be on time and to attend the entire session. Please make every effort to arrive to class on time. If you are absent, you are responsible for all work and assignments covered in lecture that day.

No-Show Withdrawal (NSW)

Students who do not attend the first two class sessions will be withdrawn from the class by the instructor and issued an NSW.

Administrative Withdrawal (ADW)

Students will be administratively withdrawn at midterm if at least two of the following apply:

- 1 Less than 70% of quizzes and tests up to the midterm (October 26) have been attempted.
- 2 Less than 70% of assignments (homework) up to the midterm (October 26) have been attempted.
- 2 Less than 70% of class sessions up to the midterm (October 26) have been attended.
- 3 Student missed 4 consecutive classes by October 26.

Withdrawal from the course

Not attending classes does not constitute withdrawal from the course. After midterm, instructors can no longer drop students from the course. If students stop attending classes after the midterm, the instructor can only assign a grade of F. **If you no longer attend classes, it is essential that you stop by at the registrar's office and officially withdraw from the course to protect your average.** The last day for student initiated withdrawal is Monday, November 21. Before withdrawing from the course, students are encouraged to consult the instructor.

Grading Policies

Students who register late are responsible for all course work they missed due to their absence. **All assessments (quizzes and exams) will be cumulative.**

Grading Scale

Grading of all assignments, quizzes, and exams will be based on the following scale.

90-100: A 80-89: B 70-79: C 60-69: D 0-59: F

Midterm Grade

The midterm grade will be the weighted average of the grades shown below with their weights.

Exam 1: 30% Exam 2: 35% Quizzes: 30% Homework: 5%

Before determining the grade given for quizzes, the lowest quiz score will be dropped.

Final Grade

The final grade will be the weighted average of the grades shown below with their weights.

Exam 1: 10% Exam 2: 15% Exam 3: 20% Exam 4: 25% Quizzes: 25% Homework: 5%

Before determining the grade given for quizzes, the lowest two quiz scores will be dropped.

Please retain all class-related material until you receive your final grade for the course. The final exams will not be distributed. They will be kept by the instructor for a calendar year after the course and then they will be destroyed.

Makeup Policy

Without exception, there will be no making up quizzes. Permission to make-up an exam is subject to the discretion of the instructor, and will be granted only in cases of emergency. If an absence is anticipated, the student should notify his/her instructor prior to the absence. Students need to present written documentation to make-up an exam. Without exception, students can only make up one exam in the course. All make-up exams will take place on Friday, December 9.

Academic Integrity

The CCC has no tolerance for violations of academic integrity. Plagiarism and cheating of any kind are serious violations of these standards and will result, minimally, in the grade of F. All course work will be checked for academic integrity. In this course, the first violation will result in an F for the assignment; the second violation will result in course failure. Make-ups and revisions are not available after an infraction of academic integrity. For further information, please refer to the [student policy manual](#).

General Information

Class Room Etiquette

At all times, please treat the instructor, other students, and their opinions with respect. Before arriving to class, please **turn off all cell phones, pagers, and other loud devices. Please make every effort to arrive on time for class.** Please refrain from talking while the instructor is lecturing. If you need an extensive review (for example, due to absence) of material presented in class, please see the instructor during office hours. Valuable class time can not be spent on assisting one or a few students to the detriment of the entire class. Office hours are designated to address these problems.

Eating and chewing gum are not allowed in the class rooms. Students are allowed to eat only in designated areas such as the cafeteria or student lounge. Writing or drawing on the tables or otherwise marking them are prohibited.

Repeated noises such as sniffing, moaning or sighing are generally normal behavior but are very distracting during quizzes and exams. Students are to refrain from making such noises during quizzes and exams. If there is a medical reason making that impossible, the instructor must be notified in advance so that arrangements can be made for a separate room for that student.

Writing on or otherwise marking tables and other CCC property is prohibited. Please use paper for computations or notes.

Office Hours

Arrive to office hours prepared. If you have missed a class, be sure to obtain and read all class-related material (handouts, text book section, and class notes). Have a list of specific questions. If you need help with a problem, bring your work on the problem with you. After your questions are answered, please leave so that the next student can enter. Please do not bring food to the instructor's office.

Contact

At all times, email is the fastest and most efficient method to contact the instructor. If you wish to contact the instructor about grades or attendance or other administrative issues via email, please use your CCC student account. FERPA (Family Educational Rights and Privacy Act) is a federal law that protects the privacy of student educational records: www.ed.gov/policy/gen/guid/fpco/ferpa/index.html. Faculty cannot reveal information about students, or discuss student records over the phone or unsecure e-mail. CCC student e-mail meets FERPA requirements.

If a student wants to receive class-related information via e-mail to an e-mail address different from the student ccc account, they must first complete a release form posted at <http://www.teaching.martahidegkuti.com/shared/resources/ferpa.pdf>.

Academic Support Services

The Math Center is located in Room 1776 and is a place where students can do their homework, study for tests, and participate in group study sessions to gain a better understanding of the course material. The Math Center also serves credit level math classes during specific block times during the week. Visit the Math Center for more information.

The Tutoring Center is located in Room 177 in the Larry McKeon Administrative Building. Students are encouraged to seek help and guidance during the course. Students have already paid for this service as part of tuition fees. Please note: in order to receive tutoring, students need to sign up in advance. (773) 907- 4785
web site: <http://www.ccc.edu/colleges/truman/departments/Pages/Tutoring.aspx>

Disability Access Center is located in Room 1435. The Center verifies needs pursuant to the American Disabilities Act (ADA), determines student academic accommodations, and issues accommodation letters. Registration is required at the start of each semester. (773) 907 - 4725, web site: <http://www.ccc.edu/colleges/truman/departments/Pages/Disability-Access-Center.aspx>

The Wellness Center is located in room 162 in the Larry McKeon Building. Services include: Personal, individual counseling, support groups, stress and time management coaching, referrals to community resources, special support for victims of relationship violence and sexual assault includes one-on-one counseling; safety planning; and referrals to medical care, legal services, and emergency child care. Contact: (773) 907-4786 for an appointment or information. Web site: <http://www.ccc.edu/colleges/truman/departments/Pages/Wellness-Center.aspx>

GradesFirst is a student support system that will be used by faculty, advisors and tutors to help students achieve success in their classes. Use GradesFirst to schedule tutoring or advising appointments, or to see communications about your course progress generated by me or your other professors.

Calendar of Events

Please note that the Calendar of Events is subject to change. Last revised: May 30, 2016.

	Monday	Wednesday
Week 1	Class 1 – August 29	Class 2 – August 31
Week 2	September 5 – No Class	Class 3 – September 7 Quiz 1
Week 3	Class 4 – September 12	Class 5 – September 14 Quiz 2
Week 4	Class 6 – September 19	Class 7 – September 21 Quiz 3
Week 5	Class 8 – September 26	Class 9 – September 28 Exam 1
Week 6	Class 10 – October 3	Class 11 – October 5
Week 7	Class 12 – October 10	Class 13 – October 12 Quiz 4
Week 8	Class 14 – October 17	Class 15 – October 19 Exam 2
Week 9	Class 16 – October 24	Class 17 – October 26 Quiz 5
Week 10	Class 18 – October 31	Class 19 – November 2 Quiz 6
Week 11	Class 20 – November 7	Class 21 – November 9 Quiz 7
Week 12	Class 22 – November 14	Class 23 – November 16 Exam 3
Week 13	Class 24 – November 21	Class 25 – November 23
Week 14	Class 26 – November 28	Class 27 – November 30 Quiz 8
Week 15	Class 28 – December 5	Class 29 – December 7 Quiz 9
Week 16	Class 30 – December 12	Class 31 – December 14 Exam 4
End of Semester: Saturday, December 17		

Last day for student initiated withdrawal: Monday, November 21

Course Information

Course Description: Derivatives of trigonometric and inverse trigonometric functions, logarithmic, and exponential functions. Catalogue Description: Algebraic topics include: rational exponents; scientific notation; radical and rational expressions; linear, quadratic, quadratic in form, rational, radical, and absolute value equations; compound linear inequalities; literal equations; systems of linear equations in two and three variables; systems of linear inequalities; and introduction to functions. Geometric topics include: perimeter; area; volume; Pythagorean Theorem; and similarity and proportions. Students should be exposed to graphing calculator technology and/or computer algebra systems. Writing assignments, as appropriate to the discipline, are part of the course.

Course Objectives:

- Develop the algebraic skills necessary for problem solving.
- Develop the ability to model linear, quadratic, and other nonlinear relations, including the use of the graphing techniques and geometrical principles as tools, for the purpose of solving contextual (real-world) problems.
- Manipulate and apply literal equations for the purposes of solving contextual (real-world) problems.
- Writing and communicating the results of problem solving appropriately.
- Use technology as one aide for the purposes of solving contextual (real-world) problems.

Truman College General Education Goal(s): Upon successful completion of this course, students will demonstrate the ability to think critically, abstractly, and logically.

Student Learning Outcomes: Upon satisfactory completion of the course, students will be able to:

- Simplify expressions containing rational exponents.
- Perform operations on and simplify radicals.
- Perform operations on and simplify rational expressions.
- Solve quadratic equations with real solutions, including the use of the quadratic formula.
- Solve rational equations.
- Solve absolute value equations of the form $lax + b=c$.
- Solve radical equations of the form: $\text{square root}(ax + b) = c$.
- Solve compound linear inequalities.
- Solve systems of linear inequalities in two variables.
- Solve systems of linear equations in two and three variables.
- Formulate and apply an equation, inequality or system of linear equations to a contextual situation.
- Solve and evaluate literal equations, including nonlinear equations.
- Formulate and apply nonlinear literal equations to a contextual (real-world) situation.
- Graph linear and quadratic equations.
- Determine equations of lines, including parallel and perpendicular lines.
- Determine whether given relationships represented in multiple forms are functions.
- Determine domain and range from the graph of a function.
- Formulate and apply the concept of a function to a contextual (real-world) situation.
- Interpret slope in a linear model as a rate of change.
- Apply formulas of perimeter, area, and volume to basic 2- and 3-dimensional figures in a contextual (real-world) situation.
- Apply the Pythagorean Theorem to various contextual (real-world) situations.
- Apply the concepts of similarity and congruency of triangles to a contextual (real-world) situation.

Projected Course Outline

Please note that the Course Outline is subject to change. Last revised: May 30, 2016
The class's web site will contain a Course Outline that is updated after each class.

Week 1

Course Information, [The Real Number System](#) (1.4), [Order of Operations](#) (1.8), [Factors of a Natural Number](#),
Definition of Square Root (10.1)

Week 2

[Integers](#) (1.3), [Evaluating Algebraic Expressions](#) (1.1), [Simplifying Algebraic Expressions](#) (1.4), [Division by Zero](#),
Absolute Value of a Number (1.3)

Week 3

Fractions, [Solutions of Equations](#) (1.1), Identities, Contradictions and Conditional Equations (2.3)

Week 4

[Radical Expressions - Part 1](#) (10.1, 10.3), [Solving Linear Equations](#) (2.1, 2.2, 2.3), Perimeter and Area (2.4), [Graph of an Equation](#)

Week 5

[Exponents 1](#) (5.2), [Graphing Straight Lines](#) (3.1, 3.2), Exam 1

Week 6

Factoring out the GCF or -1 (6.1), The Zero Product Rule (6.6), [Linear Word Problems 1](#) (2.4, 2.5, 2.6),
[Solving Systems of Equations by Substitution](#) (4.2)

Week 7

[The Difference of Squares Theorem](#) (6.4), [Integer Exponents](#) (5.7), [Radical Expressions - Part 2](#) (10.4, 10.5), Factoring by
[Completing the Square - Part 4](#) (11.1), [Solving Systems of Equations by Elimination](#) (4.3)

Week 8

Factoring by Completing the Square - [Part 1](#) and [Part 2](#) (11.1),
[Simplifying, Multiplying, and Adding Rational Expressions](#) (7.1, 7.2, 7.3, 7.4)

Week 9

[Investment Problems](#) (4.4), [Graphing a Parabola – Part1](#) (11.3), Exam 2

Week 10

[Factoring by Completing the Square - Part 3](#) (11.1), [Factoring by Grouping](#) (6.1), [Graphing a Parabola 2](#) (11.3),
Equations With Absolute Values (9.3), [Fractions and Decimals](#)

Week 11

[Rational Exponents](#) (10.2), [Mixture Problems](#) (4.4), [Writing Equations of Lines](#) (3.4, 3.5), [Linear Inequalities](#) (2.7),

Week 12

[Functions and their Domains](#) (8.1, 8.2), Exam 3

Week 13

[Motion Problems](#) (4.4, 7.7), [The Pythagorean Theorem](#) (11.1),

Week 14

Compound Inequalities (9.2), Rational Equations (7.6, 7.7), [Radical Equations](#) (10.6), [Complex Numbers](#) (10.7)

Week 15

[The Quadratic Formula](#) (11.1), Final Review

Week 16

Final Review and Final Exam (same as Exam 4)