

COLLIN COLLEGE COURSE SYLLABUS

COURSE INFORMATION

Course Number: MATH 0314

Course Title: College Algebra Support

Course Description: This course is a support for students enrolled in College Algebra. It will assist in the study of functions and equations.

Course Credit Hours: 3
Lecture Hours: 3

Prerequisite: Math 0305 or MATH 0406; or meet TSI standard or placement for MATH 0310; or equivalent.

Co-requisite: MATH 1314

Student Learning Outcomes: Upon successful completion of this course, students will:

1. Define, represent, and perform operations on real and complex numbers.
2. Recognize, understand, and analyze features of a function.
3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
4. Identify and solve absolute value, polynomial, radical, and rational equations.
5. Identify and solve absolute value and linear inequalities.
6. Model, interpret and justify mathematical ideas and concepts using multiple representations.
7. Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines.

Withdrawal Policy: “See the current *Collin Registration Guide* for the last day to withdraw.”

Collin College Academic Policies: “See the current *Collin Student Handbook*.”

Americans with Disabilities Act: Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required affording equal opportunity. It is the student’s responsibility to contact the ACCESS office to arrange for appropriate accommodations. (CPC: B-335 or 972.548.6816, PRC: F-144 or 972.881.5950, SCC: D-140 or 972.881.5898 (V/TTD: 972.881.5950)) See the current *Collin Student Handbook* for additional information.

(<https://rainier.accessiblelearning.com/Collin/ApplicationStudent.aspx>)

Note: Instructors will provide reasonable accommodations only to students who present a Course Accessibility Letter issued by the ACCESS Office.

CougarAlert: When an emergency occurs, the CougarAlert system can send email, text messages and voice messages to students and employees in as little as 90 seconds.

Visit the following website to sign-up! <https://www.collin.edu/cougaralert.html>

INSTRUCTOR INFORMATION

Instructor's Information:

Instructor's Name: **Ivy Langford**

Office Number: **LH125 located in Suite LH117 (Frisco Campus)**

Office Hours: **Monday & Wednesday 12:00 – 1:00 PM**
Tuesday & Thursday 9:20 – 9:50 AM
1:00 – 2:00 PM
2:00 – 2:30 PM (Online Class ONLY)

Others by appointment

Contact Information:

Phone: **(972)377-1535**

Email: **yjlangford@collin.edu**

Email is checked periodically throughout the day. However, during non-business hours or weekends it could take 24-48 hours to respond to your email. Please utilize your CougarMail account for all electronic communication. You must include your **first and last name** and **course/section number** (ie. MATH0314.P03) in the subject line. Check your college email daily (**return my email in a timely manner.**)

Website: <http://faculty.collin.edu/yjlangford>

In case of emergency, contact the Instruction Office (PRC LH158) at (972) 377-1554 or contact your instructor by email as listed above.

Class Information:

Section Number: **P14**

Meeting Times: **TR 10:00 – 11:15 AM**

Meeting Location: **LH240 (Frisco Campus)**

Netiquette Expectations: All correspondence, public and private, should be conducted in a professional manner. Always use your **CougarMail** account when emailing your instructor and include your full name and course section. Emails from other domains may not be answered.

This class is paired with Math 1314. All students enrolled in Math 0314 are required to be enrolled in the paired section of Math 1314 and are expected to attend both classes.

Course Resources: The College provides group tutoring and a Math Lab at no charge on each campus to support student success in this class. The Math Lab locations are below:

- McKinney Campus: C220 Phone: 972.548.6896
- Frisco Campus: F148 Phone: 972.377.1639
- Plano Campus: D203 Phone: 972.881.5921

Please visit <http://www.collin.edu/collegesurvival/> for a list of available college support resources.

Textbook: *College Algebra*, Julie Miller, 2nd Edition, McGraw Hill

ConnectMath Access Code for online assignments (free; provided by the instructor)

ALEKS Prep Access Code (free; provided by the instructor)

Supplies: Textbook (above), pencil(s), color markers/pens, notebook paper, a three-hole binder with page dividers in which to organize materials. A graphing calculator is required. The TI 83, TI 83 Plus, or TI 84 is preferred. Calculators with a computer algebra system (CAS) will not be permitted on exams unless prior approval is obtained from the instructor. **Cell phones will also not be permitted as a calculating device in class.** It is expected that all supplies, including the graphing calculator, will be brought to each class.

Attendance Policy: Students are expected to attend all class sessions regularly and **punctually**. When an absence from class is unavoidable, it is the student's responsibility for all material and assignment, and to determine whether announcements relevant to the course were missed during the absence.

Two (2) absences or less during the regular semester will receive an addition of **two points** to MATH 1314 final semester grade. More than two but no more than **three (3)** absences will receive an addition of **one point** to MATH 1314 final semester grade. **Two (2)** tardies will be counted as one absence. Students arriving late and/or leaving early will be considered tardy. A tardy or early departure of **thirty (30)** minutes or more will be considered an absence. An absence is anytime you are not present.

Attendance will be taken each class period. It is the student's responsibility to ensure that the roll is signed before leaving class. **Failure to sign-in will be considered an absence.**
YOU CANNOT SIGN-IN FOR SOMEONE ELSE.

Electronic Devices Policy: As per the *Collin Student Handbook*, Student Code of Conduct, with the exception of a calculator, all electronic devices are to be switched OFF and stored out of sight during class, unless an exception is obtained from the instructor in advance. Students who are using any electronic devices for text message, IM, email, and etc. during the class time will be asked to leave the class without returning for the remaining day, considered absent for that class meeting. Students will also be reported to the Dean of Students Office (DOS) at the second offence.

Course Requirements: Attend class as scheduled and complete the required tests, lab assignments, and final examination, and any other assignments required by the instructor.

Method of Evaluation: Only AD, BD, CD, FD or I can be awarded in this class.

Semester grade will be calculated as the HIGHER of the following two options:

- Average of first 4 tests
- Semester average in Math 1314

Students who earn a D in Math 1314 will receive a grade of "CD" in Math 0314.

Test/Makeup Policy:

There will be **NO make-up class work, labs, and tests** for ANY REASON. Excessive absences will affect your class work grades. If unavoidable circumstances cause you to miss a test, you can replace that TEST GRADE with the FINAL EXAM GRADE. Subsequent missed tests will be recorded as zeros. If a student takes all tests, the lowest test grade will be replaced by the final exam grade, provided the final exam has a higher grade.

Student Responsibilities:

1. Attend class and be aware of announcements made in class.
2. **Inform instructor of late arrival at the conclusion of that class and be sure it is noted.**
3. Understand the syllabus, especially attendance, grading, test, and cell phone policies.
4. Take care of personal needs before or after class.
5. Arrange for appropriate child care when needed—children are not allowed in class.
6. Show all your work on quizzes and class work. Partial credit may be given for correct work shown.

Additional Information:

- For the first four tests given in the **Testing Center (F209)**, you **must have a Collin College Student ID**.
- Please complete all work in pencil. The work will not be graded if it is not in pencil.
- College rules do not permit you to eat, drink, or use tobacco in the classroom.
- **Hints for success:**
 1. Be on time for class.
 2. Read the sections **BEFORE** we discuss them in class.
 3. Do all your homework as soon as you can after class.
 4. Plan to spend at least **6 – 9 hours per week outside of class** studying, completing Labs and homework, and preparing for tests.
 5. Always **SHOW YOUR WORK** on Labs, homework, and tests.
 6. If you don't understand a topic, get help ASAP.
- **Getting Help:**
 1. **Math Lab (F148)**, phone # 972-377-1639): free tutoring and computer access
 2. **ACCESS Office (F144)**, phone # 972-881-5950): free group tutoring and online tutoring available
 3. **Instructor (LH125)**, phone # 972-377-1535): I am available during my office hours or other times by appointment.
 4. **Graphing Calculator assistance:**
 - Useful websites: http://www.prenhall.com/divisions/esm/app/calc_v2/
<http://mathbits.com/MathBits/TISection/Openpage.htm>

Collin College Academic Policies: Please refer to the current *Collin Student Handbook*.

Academic Ethics: Every member of the Collin College community is expected to maintain the highest standards of academic integrity. Collin College may initiate disciplinary proceedings against a student accused of scholastic dishonesty. Scholastic dishonesty includes, but is not limited to, statements, acts, or omissions related to applications for enrollment or the award of a degree, and/or the submission of one's own work material that is not one's own. Scholastic dishonesty may involve, but is not limited to, one or more of the following acts: cheating, plagiarism, collusion, use of annotated texts or teacher's editions, use of information about exams posted on the Internet or electronic medium, and/or falsifying academic records. While specific examples are listed below, this is not an exhaustive list and scholastic dishonesty may encompass other conduct, including any conduct through electronic or computerized means:

Plagiarism is the use of an author's words or ideas as if they were one's own without giving credit to the source, including, but not limited to, failure to acknowledge a direct quotation.

Cheating is the willful giving or receiving of information in an unauthorized manner during an examination; collaborating with another student during an examination without authority; using, buying, selling, soliciting, stealing, or otherwise obtaining course assignments and/or examination questions in advance, copying computer or Internet files, using someone else's work for assignments as if it were one's own; or any other dishonest means of attempting to fulfill the requirements of a course. **If a determination of cheating is made by the Dean of Students Office:**

1. A grade of zero will be assigned for the first offense.
2. A course grade of "FD" will be assigned for the second offense.

Collusion is intentionally or unintentionally aiding or attempting to aid another in an act of scholastic dishonesty, including but not limited to, failing to secure academic work; providing a paper or project to another student; providing an inappropriate level of assistance; communicating answers to a classmate about an examination or any other course assignment; removing tests or answer sheets from a test site, and allowing a classmate to copy answers.

See the current *Collin Student Handbook* for additional information.

- Notes:**
- (1) The instructor reserves the right to make changes to this syllabus during the semester. Changes will be provided in writing during class hours.
 - (2) With the exception of a calculator, all electronic devices are to be switched off during class, unless an exception is obtained from the instructor in advance.
 - (3) Please see: <http://www.collin.edu/collegesurvival/> for a listing of available college support resources.

Expectation: Maintaining a positive learning environment

As your instructor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. Your instructor takes this responsibility very seriously and will inform members of the class if their behavior makes it difficult for him/her to carry out this task. As a fellow learner, you are asked to respect the learning needs of your classmates and assist your instructor achieve this critical goal.

Creating Opportunities for Learning

As your instructor, it is my responsibility to present learning opportunities through the course syllabus, lectures, labs, in-class and out-of-class exercises and assignments.

It is your responsibility to do the learning by completing the readings, by attending class and by participating in the class discussions and assessment/lab exercises.

Tracking Your Success at Learning

Your instructor will conduct quizzes, exams and assessments that you can use to determine how successful you are at achieving the course learning outcomes (mastery of course content and skills) outlined in the syllabus. If you find you are not mastering the material and skills, you are encouraged to reflect on how you study and prepare for each class. Your instructor welcomes a dialogue on what you discover and may be able to assist you in finding resources on campus that will improve your performance.

MATH 0314/1314
Tentative Class Schedule

Week	Date	Sections	HW/Labs Due	Notes
1	1/22	Introduction Syllabus IA R3, R4 Order of Operations & Simplifying Algebraic Expressions IA 1.1 Linear Equations in One Variable	<u>2 ConnectMath</u> & <u>1 ALEKS</u> Registrations (1/23)	Bring a TI 83/84 calculator to <u>each</u> class meeting
1	1/24	IA 1.2 Applications of Linear Equations in One Variable IA 1.3 Applications to Geometry and Linear Equations IA 1.4 Inequalities and Interval Notation	ALEKS (Initial Assessment) HW IA <u>R3, R4, 1.1</u> (1/25) HW IA 1.2, 1.3 (1/27)	
2	1/29	IA 2.1, 2.2 Graphing Linear Equations in Two Variables & Slope IA 2.3 Equations of a Line IA 2.5, 2.6 & CA 2.3, 2.4 Functions, Domain, and Range	HW IA 1.4, <u>2.1, 2.2</u> (1/30)	<u>Printed Syllabus</u> due at beginning of class
2	1/31	IA 2.5, 2.6 & CA 2.3, 2.4 Functions, Domain, and Range IA 4.1 Properties of Exponents	HW IA <u>2.3, 2.5, 2.6, CA 2.3, 2.4</u> (2/3)	
3	2/5	Module 1 Test - Linear Expressions, Equations, and Functions IA 4.2 Addition and Subtraction of Polynomials IA 4.3 Multiplication of Polynomials IA 4.5 Greatest Common Factor and Factoring by Grouping	HW IA 4.1 (2/5) Lab 1 (2/5) - 80% or higher HW IA 4.2 (2/6)	Module 1 Test by Thur, 2/7 Census Date (2/4)
3	2/7	IA 4.5 Greatest Common Factor and Factoring by Grouping IA 4.6 Factoring Trinomials IA 4.7 Factoring Binomials	HW IA 4.3, 4.5, 4.6 (2/10)	
4	2/12	IA 6.1 Radical Expressions IA 6.2 Rational Exponents IA 6.3 Simplifying Radical Expressions	HW IA 4.7, 6.1 (2/13)	Module 1 Test Extra Credit due
4	2/14	IA 6.3 Simplifying Radical Expressions IA 6.4 Addition and Subtraction of Radicals IA 6.5 Multiplication of Radicals	HW IA <u>6.2, 6.3, 6.4</u> (2/17)	

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5	2/19	IA 6.6 Division of Radicals IA 6.8 Complex Numbers Module 2 Test - Quadratic and Radical Equations IA 4.8 Solving Equations by Factoring	HW IA 6.5, 6.6, 6.8 (2/20)	Module 2 Test by Sat, 2/23
5	2/21	IA 4.8 Solving Equations by Factoring IA 7.1 Square Root Property IA 7.2 Quadratic Formula	Lab 2 (2/21) - 80% or higher HW IA 4.8, 7.1 (2/24)	
6	2/26	IA 6.7 Solving Radical Equations CA 3.1 & 2.6 Quadratic Functions and Applications	HW IA 7.2, 6.7 (2/27)	Module 2 Test Extra Credit due
6	2/28	CA 3.1 & 2.6 Quadratic Functions and Applications	HW CA 3.1, 2.6 (3/2) Lab 3 (3/4) - 80% or higher	
7	3/5	CA 2.3 Functions (Domain & Graphs ONLY) Module 3 Test - Quadratic and Radical Equations and Functions CA 3.2 Introduction to Polynomial Functions	HW CA 2.3 (3/6)	Module 3 Test by Thur, 3/7
7	3/7	CA 3.2 Introduction to Polynomial Functions CA 3.3 Division of Polynomials and the Remainder and Factor Theorems	HW CA 3.2 (3/9)	Module 3 Test Extra Credit due
	3/12	Spring Break (NO CLASSES)		
	3/14	Spring Break (NO CLASSES)		
8	3/19	CA 3.4 Zeros of Polynomials IA 5.1 Rational Expressions and Rational Functions IA 5.2 Multiplication and Division of Rational Expressions	HW CA 3.3 (3/20)	
8	3/21	IA 5.2 Multiplication and Division of Rational Expressions IA 5.3 Addition and Subtraction of Rational Expressions IA 5.4 Complex Fractions	HW CA 3.4, IA 5.1, 5.2 (3/24)	Last Day to Withdraw (3/22)
9	3/26	IA 5.5, 5.6 Solving Rational Equations and Applications CA 3.5 Rational Functions	HW IA 5.3, 5.4 (3/27)	
9	3/28	CA 3.5 Rational Functions Module 4 Test - Polynomial and Rational Functions IA 1.6, 2.7 & CA 2.3 Absolute Value Equations and Functions	HW IA 5.5, 5.6 (3/28) HW CA 3.5 (3/29)	Module 4 Test by Mon, 4/1

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10	4/2	CA 2.6 Transformations of Graphs CA 2.7 Analyzing Graphs of Functions and Piecewise-Defined Functions	Lab 4 (4/2)* HW IA 1.6, 2.7 & CA 2.3 (4/3)	Module 4 Test Extra Credit due
10	4/4	CA 2.7 Analyzing Graphs of Functions and Piecewise-Defined Functions CA 2.8 Algebra of Functions and Function Composition	HW CA 2.6, 2.7 (4/7)	
11	4/9	CA 4.1 Inverse Functions Module 5 Test - Common Functions CA 4.2 Exponential Functions	HW CA 2.8 (4/9) HW CA 4.1 (4/10)	Module 5 Test by Sat, 4/13
11	4/11	CA 4.2 Exponential Functions CA 4.3 Logarithmic Functions	HW CA 4.2 (4/14)	
12	4/16	CA 4.4 Properties of Logarithms	Lab 5 (4/16)* HW CA 4.3 (4/17)	Module 5 Test Extra Credit due
12	4/18	CA 4.5 Exponential and Logarithmic Equations	HW CA 4.4 (4/21)	
13	4/23	CA 4.6 Modeling with Exponential and Logarithmic Functions Module 6 Test - Exp. & Log Expressions, Equations, and Functions IA 3.1 System of Equations in Two Variables	HW CA 4.5 (4/23) HW CA 4.6 (4/24)	Module 6 Test by Sat, 4/27
13	4/25	IA 3.1 System of Equations in Two Variables IA 3.2 Solving by Substitution IA 3.3 Solving by Elimination IA 3.4 Solving Applied Problems: Two Equations CA 6.1 Solving Systems of Linear Equations Using Matrices	HW IA 3.1 (4/28)	
14	4/30	CA 6.1 Solving Systems of Linear Equations Using Matrices CA 6.2 Inconsistent Systems and Dependent Equations	Lab 6 (4/30)* HW IA 3.2, 3.3, 3.4, CA 6.1 (5/1)	Module 6 Test Extra Credit due
14	5/2	CA 8.1 Sequences and Series CA 8.2 Arithmetic Sequences and Series	HW CA 6.2, 8.1 (5/5)	

Spring 2019
Tue. / Thur.

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Prof. Langford
Office: LH125 PRC

15	5/7	CA 8.3 Geometric Sequences and Series Module 7 Test - Systems, Sequences & Series	HW CA 8.2, 8.3 (5/8)	Module 7 Test by Fri, 5/10
15	5/9	Review for Final Exam	Lab 7 (5/9)* SI/T Log (5/9)*	Module 7 Test Extra Credit due
16	5/14	NO CLASS		
16	5/16	Comprehensive Final Exam for Math 1314.P10 (11:30AM - 1:30PM)		In-class Final

Lab #	Sections
Lab 1	Module 1 (ALEKS)
Lab 2	Module 2 (ALEKS)
Lab 3	Module 3 (ALEKS)
Lab 4	Module 4 (Canvas) due at beginning of class*
Lab 5	Module 5 (Canvas) due at beginning of class*
Lab 6	Module 6 (Canvas) due at beginning of class*
Lab 7	Module 7 (Canvas) due at beginning of class*
Lab 8	SI/T Log due at beginning of class*