

This is a template syllabus. This file contains course specific information, such as catalog description, goals and objectives, which does not change. The parts highlighted in yellow are to be determined by the individual instructors. The official syllabus for each section will be provided by the instructor in the beginning of the semester.

### **SYLLABUS 20\*\***

The University of Iowa  
The College of Liberal Arts and Sciences  
Department of Mathematics  
14 Mac Lean Hall

#### **MATH:0100 Basic Algebra**

**Lectures: Time and Place**

Some of the policies relating to this course (such as the drop deadline) are governed by its administrative home, the College of Liberal Arts and Sciences, 120 Schaeffer Hall.

**Prerequisites:** none

**Recommendations:** it is strongly recommended that students whose math placement score is older than one year retake the math placement test for accurate placement and success in the course.

**Registration Information** MATH 0100 Does not count toward total credit required for graduation. Contact Cynthia Farthing, [cynthia-farthing@uiowa.edu](mailto:cynthia-farthing@uiowa.edu), to override restriction. More information about duplication and regression in mathematics courses is available at <http://www.math.uiowa.edu/undergraduate-program/course-information/duplication-regression>.

**Not Approved for GE: MATH 0100 is a developmental course.**

**Instructor:**

Office hours: and by appointment

Math Lab hours:

Course Supervisor: Dr. Olga Sokratova

Office hours: TBA

Office location: 325 J MLH

Phone: 319-335-3873

E-mail: [olga-sokratova@uiowa.edu](mailto:olga-sokratova@uiowa.edu)

**DEO Contact Information:** Professor Maggy Tomova, 14 MLH, [maggy-tomova@uiowa.edu](mailto:maggy-tomova@uiowa.edu)

**Catalog Description of Course:**

This course introduces students to basic algebraic techniques, in particular, as they apply to the solution of equations and systems of equations. Topics include algebraic operations, linear and quadratic equations, simultaneous equations, inequalities, polynomials, rational expressions, factorization, exponents, and radicals. Emphasis is placed on the solutions of verbal problems. The course is intended

to remediate weakness in a student's high school math background. **Does not count toward total credit required for graduation.**

### **Objectives and Goals of the Course:**

The goal of this course is to prepare students for more advanced Mathematics Courses. The students must develop fluency in working with algebraic and rational expressions and solving linear and quadratic equations. The students are taught to use correct mathematical notation.

The main objectives: order of operations, working with negative numbers and fractions, solving linear equations and inequalities, graphing linear equations in two variables, modeling with linear equations, solving systems of linear equations, applying linear systems to solving mixture problems and distance, rate, and time problems, integer exponents, operation on polynomials, factorization, operations on rational expressions, operations on radicals, solving radical equations, solving quadratic equations.

**Required text:** (Check the current textbook from Department Webpage)

<https://math.uiowa.edu/undergraduate-program/course-information/book-list>

For 2018-2019: Lial, Hornsby and McGinnis. *Beginning Algebra*. 12th ed. Pearson, Addison Wesley ISBN 978-0-321-96933-0 (hardbound) or ISBN 978-0-321-96947-7 (loose-leaf)

**Purchasing options:** In some semesters, Digital Access-ICON Direct textbooks may be available.

**Optional Materials:** Lial, Margaret et al. *Beginning Algebra Student's Solutions Manual*. 12th ed. This manual provides worked-out, step-by-step solutions to the odd-numbered problems in the text. This gives you the information for you to understand how these problems are solved.

**Material to be covered from the Text:** We'll cover all chapters from the textbook except for Sections 3.6, 3.7, 4.5, 7.8.

**If the textbook changes, then still every topic in the "Goals and the Objectives" will be covered.**

### **Tentative lecture schedule:**

Chapter R – 1 week  
Chapter 1 – 1 week  
Chapter 2 – 2 weeks  
Chapter 3 – 1 week  
Chapter 4 – 1 week  
Chapter 5 – 1-2 weeks  
Chapter 6 – 2 weeks  
Chapter 7 – 2 weeks  
Chapter 8 – 2 weeks  
Chapter 9 – 1-2 weeks

### **ICON (<https://icon.uiowa.edu/>)**

Class announcements, due dates, and information pertaining to homework, quizzes, and tests will be posted regularly on ICON. It is recommended to check it daily.

**Calculation of Grade:** The grade is based on homework, weekly quizzes, 3 midterms, final exam, and attendance. Each instructor determines the weights.

**Grading:** For each course, the instructor chooses a grading strategy appropriate to departmental and college guidelines, and the related discipline. Some of the recommended options include (but not limited to) the following:

With **criterion-reference grading**, students receive grades based on the quality of their work in relation to the criteria defined by the instructor and by the rubrics or models specifying the qualities of each grade. Some instructors may choose to adjust the scale (criteria) if a need arises.

**Norm-based grading** is used in the course which is based on how others in the class perform. This method is generally used in large lecture courses or coordinated multi-section courses. The distribution of grades may be based on CLAS recommendations.

**Adjustable criterion-referenced grading is a combination of having some minimum expectations for each letter grade (scale) and use some limited curving** if a need arises. The scale can be adjusted only to improve the letter grades of the students, that is, the scale will never go up during the semester.

Note that no A+ will be given in this course.

**Examinations:** There will be three 50-minute midterm exams and a cumulative final exam.

Midterm Exam I:

Date:

Coverage: Chapters R, 1, and 2.

Midterm Exam II:

Date:

Chapters 3, 4, 5, and 6.

Midterm Exam III:

Date:

Coverage: Chapters 7 and 8.

Final Exam:

Date and Classrooms: TBA

Coverage: comprehensive

All exams are closed-book, closed-notes.

**A Word about the Date and Time of the Final Exam:** The date and time of every final examination is announced by the Registrar generally by the fifth week of the classes. **No exams of any kind are allowed during the last week of classes.** All students should plan on being at the UI through the final examination period. Once the Registrar has announced the date, time, and location of each final exam, the complete schedule will be published on the Registrar's web site and will be shared with instructors and students. It is the student's responsibility to know the date, time, and place of the final exam.

**Homework:** Homework will be assigned after each class and will be due by the next class period.

**Quizzes:** Quizzes will be given every week. Quizzes will be based on the homework.

**Course Policies:**

*Quiz and Exam make-ups: As stated in CLAS webpage:*

*<https://clas.uiowa.edu/faculty/student-attendance-and-absences>: University policy requires that students be permitted to make up examinations missed because of illness, mandatory religious obligations, authorized UI activities, or unavoidable circumstances. An unavoidable circumstance is defined as an event beyond the student's control and often involves a serious and unexpected hospitalization, a family tragedy, or a related incident. Such circumstances **do not include** attendance at a wedding, a family vacation, obligations related to work or other such matters. The instructor of a student participating in an authorized UI activity is sent a statement generally by email from the UI official in charge of the event before the absence occurs; this statement will include the specific date and time that the student will miss class. Activities related to employment, fraternities or sororities, or volunteer activities are not UI authorized activities.*

*Attendance:* Attendance will be taken regularly. Absences will only be excused for medical or family emergency reasons, a university-sanctioned field trip or the observance of a religious holiday. If you miss a class due to illness, you should submit the [absence form](#) through the Registrar website. If you miss more than five days of classes you should be able to provide a record of appointments or documentation from a health care provider. If you miss a class, you are still responsible for the material discussed in class and for all the announcements made in class.

*Participation in class discussions:* I highly recommend that students make use of opportunities to ask questions in class or present problems at the board when offered.

*Calculators:* Unless otherwise indicated, no calculators or other hand-held electronic devices are allowed on exams or quizzes. Exams and quizzes are written in such a way that a calculator is not necessary.

*Other Expectations of Student Performance:* Expect to spend at least 6 hours weekly outside of the classroom doing the assignments. More time may be needed to prepare for exams.

*Classroom behavior:* I expect that you will behave with respect to the other students in the class and to me. In particular, this means turning off (or silencing) your cell phone. You should not be sending text messages, browsing internet, or listening to your iPod during class.

*Student Collaboration:* Student collaboration is NOT permitted on exams. Any attempt to collaborate during exams will result in a 0 score on that test. **The instructors will specify if collaboration is allowed on assignments and, if so, the expectations for a student's individual performance.**

The homework for this course is designed to help you master your knowledge related to the topics covered during lecture. As such, you may work on the homework problems with others or use online resources. However, please be aware that to master the skills needed for this class, practice is

required and that to do well on the final exam you will need to work many of these problems multiple times without help. Be sure to test your knowledge by doing much of the homework on your own. All other graded work for this class (quizzes and tests) must be completed individually and any form of cheating will be reported. **Please read the student collaboration rules above.**

### **Resources for Students**

Students will find the Writing Center and the Speaking Center very useful for this course:

Writing Center: <http://www.uiowa.edu/~writingc/>

Speaking Center: <http://clas.uiowa.edu/rhetoric/for-students/speaking-center>

Math Tutorial Lab: 125 MLH <http://www.math.uiowa.edu/math-tutorial-lab>

Math Tutorial Lab: The Math Tutorial Lab offers free tutorial services for the course material. Participation is optional, but strongly recommended. It is located in 125 MLH and it is staffed by teaching assistants from the Department of Mathematics.

### **Notes to the Students:**

1. All students in the College have specific rights and responsibilities. You have the right to adjudication of any complaints you have about classroom activities or instructor actions. Information on these procedures and your responsibilities is available in the Schedule of Courses and on-line in the College's Student Academic Handbook, (<https://clas.uiowa.edu/students/handbook>) In summary, first see the person you wish to complain about, and then see his/her immediate supervisor. The chain is: graduate or undergraduate assistants, then **Prof. XX**, then the Chairman of the Department of Mathematics **Prof. YY**, and then an appropriate Dean. The Department of Mathematics has offices in 14 MLH (MacLean Hall). To make an appointment to talk to the chairman of the department call 335-0714 or contact the departmental secretary in 14 MLH.
2. We would like to hear from anyone who has a disability which may require some modification of seating, testing, or other class requirements so that appropriate arrangements may be made. Please contact your lecturer during his office hours, in the beginning of the semester and far in advance of the exams. You should notify the Office of Student Disability Services, SDS and obtain the form(s) needed. The necessary modifications will be made available to you after the SDS processes and approves your request.
3. We are planning to use ICON for posting grades and other course material. Also, some announcements may be e-mailed through ICON to your UI e-mail. Check ICON and your UI e-mail regularly, and make sure that UI has your correct e-mail address.
4. This course plan may be modified during the semester. All changes will be announced in class in advance. It is solely the student's responsibility to be informed of such announced changes.

### **CLAS Teaching Policies & Resources — Syllabus Insert**

<https://clas.uiowa.edu/faculty/teaching-policies-resources-syllabus-insert>