

University Of New York In Prague

Course	College Algebra
Lectures	Friday 9-12 AM
Lecture room	E (Legerova 72)
Instructor	RNDr. Vaclav Novak, Ph.D.
Office Hours	by appointment only
E-mail	vnovak@faculty.unyp.cz
Web Site	http://ufal.mff.cuni.cz/~novak/

Description

The course consists of the study of basic concepts and techniques of Algebra, Geometry and Real Analysis. *Prerequisite:* None.

Course Purpose

The purpose of the course is to provide students with the elementary skills of Algebra, Geometry and Real Analysis. Emphasis will be on practical aspects and "common sense" usage in solving Math problems. Upon completion of this course the student should be able to

- Create mathematical models for common problems
- Understand the algebraic principles and notation
- Find and discuss solutions to formalized problems

Contents of the Course

- 1. Numbers, sets and logical operators (main definitions)
- 2. Simplification of algebraic expressions
- 3. Equations and inequalities, modeling with equations
- 4. Coordinates and graphs
- 5. Functions
- 6. Logarithms and Exponentials
- 7. Simultaneous equations and inequalities
- 8. Matrices and determinants
- 9. Point, line, parabola, circle, hyperbola, ellipse; distances
- 10. Sequences and series, Financial applications

Textbook

J. Stewart, L. Redlin, S. Watson (2004). <u>College Algebra</u>, 4th edition. Pacific Grove: Brooks/Cole.

Course Requirements

- Students are obliged to observe the UNYP Student Honor Code. It will be strictly enforced.
- Each student is responsible for attending every class meeting and completing all assignments (if any) before the due date.
- In situations where a student is unable to attend a class meeting, he or she is responsible for all class materials and assignments.
- There will be 10 12 quizzes during the semester. The total credit for these quizzes is worth 50% of the grade. Each of the quizzes will cover the material of the previous class meeting. A quiz that was administered during a missed class cannot be made up. For the tests missed before the midterm/final exam, the grade of the midterm/final exam will substitute the expected grade of the missed test(s), respectively. This is also true for every quiz with score below the midterm/final exam score. There will be no exceptions.
- There is no make up for a missed midterm or final exam. In this case any emerging problems are solved individually. Missing a midterm or a final exam might lead to a course failure.
- There will be also homework assignments, but they will be neither collected nor graded. Instead, we will discuss them on demand in classes.

Participation	10%	
Quizzes*	50%	
Midterm	20%	
Final	20%	

Criteria for Determination of Grade

Letter Grade	Percent (%)	Generally Accepted Meaning
А	96-100	Outstanding work
A-	90-95	Outstanding work
B+	87-89	
В	83-86	Good work, distinctly above average
В-	80-82	
C+	77-79	
С	73-76	Acceptable work
C-	70-72	
D+	67-69	
D	63-66	Work that is significantly below average
D-	60-62	
F	0-59	Work that does not meet minimum standards for
		passing the course

Grading Scale

Note

Students are advised to bring calculators. Laptops and cell phones will not be allowed during tests and the final!

^{*} Attending a quiz can not make your overall grade worse, see the quiz grading policy above