

# MAT102, Intermediate Algebra Department of International Management and Math, Fall 2018

### I. COURSE INFORMATION

Instructor: Nadia Bernasconi Instructor's Email: nbernasconi@fus.edu Office Hours: Tuesday and Friday 10:00-11:30 MV8 Class location: Kaletsch Classroom 4 Class meeting times: Tuesday and Friday 11:30-12:45

### **II. COURSE DESCRIPTION**

This course reviews basic concepts and attempts to enhance competency in problem solving. Topics include linear equations and inequalities, polynomials, factoring, exponents and radicals, fractional expressions and equations, and quadratic equations.

### **III. SPECIFIC LEARNING OUTCOMES**

Upon completion of this class, students should

- have a clear understanding of the most basic concepts and methods in Algebra,
- be able to simplify simple algebraic expressions, solve simple equations, and graph simple (i.e. linear) equations,
- be able to formulate word problems in mathematical terms and solve the corresponding equations,
- be able to participate in MAT103 or MAT107 successfully.

### **IV. REQUIRED TEXTS AND MATERIALS**

**College Algebra with Trigonometry**, by R.A. Barnett, M.R. Ziegler, K.E. Byleen, Sobecki, McGraw-Hill International ed.

### **V. ASSESSMENT OVERVIEW**

At the end of the semester, you will receive a score from 0 to 100%, based on the				
following:				
participation:	15%			
quizzes:	35%			
midterm:	20%			
final:	30%			

Nonattendance may lower your score as will be described below



## **VI. ASSESSMENT DETAILS**

#### Tests:

There will be five 15-minute quizzes. Only the best four count. There will be one midterm. There will be a final exam, which will be cumulative.

No make-up quizzes/exams are given, unless there is documented evidence of a medical (or other serious) problem.

### **Class participation:**

The participation score will reflect your participation during class.

### Attendance:

Since this is a progressive class, each chapter building upon the previous one, regular attendance is extremely important other than required. Experience shows that students who do not attend on a regular basis, do poorly. If you are late or leave early you are regarded as non-attendant. You may loose points counting towards your total grade according to the followings scheme:

- 0 4 classes missed: no change.
- for each further class missed: subtract 5% from your score

### **VII. GRADING POLICIES AND EXPECTATIONS**

Final grades will be determined as follows

	A: 93 - 100 %	A-: 90 - 92.9 %
B+: 87 - 89.9 %	B: 83 - 86.9 %	B-: 80 - 82.9 %
C+: 77 - 79.9 %	C: 73 - 76.9 %	C-: 70 - 72.9 %
D+: 67 -69.9 %	D: 63 - 66.9 %	D-: 60 - 62.9 %
F: below 60 %		

### VIII. HOW TO DO WELL IN THIS COURSE (POLICIES / REQUIREMENTS)

During classes: attend class, participate, ask questions, or answer them, if you can. Contact me as soon as problems occur. If you miss a class, you are responsible to find out which material was covered and which announcements were made during class.

During exams, the use of cell phones I-phones, ... is strictly forbidden. Bring your own calculator. Sharing calculators during exams is not allowed.

### IX. ACADEMIC INTEGRITY: STATEMENT ON CHEATING AND PLAGIARISM

A student whose actions are deemed by the University to be out of sympathy with the ideals, objectives or the spirit of good conduct as fostered by the University and Swiss community, may be placed on Disciplinary Probation or become subject to dismissal from the University. Cheating is a dishonest action out of sympathy with the ideals, objectives and spirit of the University. Furthermore, cheating reflects



negatively on one's personal integrity and is unjust to those students who have studied.

See the Academic Catalog for full statement (page 215): https://www.fus.edu/images/pdf/FUS\_ACADEMIC\_CATALOG\_2016\_2018\_web.pdf

## X. TENTATIVE COURSE SCHEDULE

THECDAY		
TUESDAY	FRIDAY	
28 Aug: Review of Arithmetic	<b>31 Aug:</b> Algebraic expressions	R.1
<b>4 Sep</b> : Operations on real numbers,	7 Sep: Linear equations in one	R.1, 1.1
properties of real numbers	variable	
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<b>11 Sep</b> : Linear equations and	14 Sep: Linear inequalities	1.1, 1.2
applications: problem solving		24.22
<b>18 Sep</b> : Cartesian Coordinate Systems:	<b>21 Sep</b> : Distance in the plane	2.1, 2.2
graphing equations		
Quiz #2		2.2
25 Sep: Graphing linear equations	28 Sep: The slope of a line	2.3
<b>2 Oct</b> : Equations of lines	5 Oct: Equations of lines	2.3
Quiz #3		
9 Oct: REVIEW	12 Oct: <mark>Midterm</mark>	
16 Oct: Solving systems of linear	<b>19 Oct:</b> Solving systems of linear	10.1
equations	equations	
23 Oct: Academic Travel	26 Oct: Academic Travel	
30 Oct: Academic Travel	2 Nov: Academic Travel	
6 Nov: Exponents	9 Nov: Radicals	R.2
<b>13 Nov</b> : Polynomials: basic operations	16 Nov: Polynomials factoring	R.3
	Quiz #4	
20 Nov: Quadratic Equations and	23 Nov: Thanksgiving Break	1.5
Applications		
27 Nov: Quadratic Equations and	<b>30 Nov:</b> Rational expressions: basic	1.5 <i>,</i> R.4
Applications	operations	
	Quiz #5	
4 Dec: Rational expressions: basic	7 Dec: Last day of classes	R.4
operations	REVIEW	

#### XI. FINAL EXAM

Tuesday, Dec. the 11<sup>th</sup>, 11:00-13:00