# MAT092 10:00 - 10:50 a.m. SYLLABUS

#### **COURSE**

MAT092 - Introductory Algebra - Section 17702 - Spring 2013

#### **INSTRUCTOR**

Brian Bird - MA 179 - (623) 845-3149 - brian.bird@gccaz.edu

#### TIME and LOCATION

Mondays and Wednesdays 10:00 – 10:50 a.m. January 14<sup>th</sup> – May 1<sup>st</sup> GCC Main HT2 159

**Note:** No class on January 21<sup>st</sup> due to MLK Day

No class on February 18<sup>th</sup> due to Presidents' Day No class on March 11<sup>th</sup> and 13<sup>th</sup> due to Spring Break

# **COURSE DESCRIPTION**

Linear behavior; linear equations and inequalities in one and two variables; graphs; systems of equations in two variables; function notation, graphs, and data tables; operations on polynomials; properties of exponents; applications. Prerequisites: Grade of "C" or better in MAT082, or MAT102, or equivalent, or satisfactory score on District Placement exam. May receive credit for only one of the following: MAT090, MAT091, MAT092, or MAT 093.

Note: Meeting the prerequisites does <u>not</u> guarantee your success in this class. You will need to bring arithmetic skills (including fractions and negative numbers) and a strong work ethic to the class in order to be successful.

# REQUIRED MATERIAL

You will be required have access to MyMathLab (MML) via the Internet. You can purchase access through the Internet (see handout). You can also purchase it through the bookstore -- you can purchase just the access kit which includes an electronic copy of the book, or the access kit with the physical book and the student solution manual. The book is *Elementary and Intermediate Algebra Concepts and Applications by* Bittinger, Ellenbogen and Johnson, 5<sup>th</sup> edition. Please see the instructor if you have any questions.

### RECOMMENDED CALCULATOR

A scientific calculator is strongly recommended. They can be purchased almost anywhere for under \$20 and have keys such as  $^{1}/_{x}$ ,  $x^{2}$ , and sin. If you plan to continue your math career, a TI-83 Plus graphing calculator (or equivalent) would be of great benefit. They cost approximately \$90 and have a large screen. It would help you considerably in MAT12x and is generally required in MAT15x. Cell phones calculators are not allowed. Please see the instructor if you have any questions.

#### **OBJECTIVES**

Specifically, students will be able to:

- 1. review and master prerequisites from arithmetic
- 2. solve equations and inequalities in one variable
- 3. graph and manipulate linear equations in two variables
- 4. perform operations with polynomials
- 5. factor polynomials
- 7. understand function and identify domain and range
- 8. solve systems of linear equations in two variables
- 9. graph linear inequalities in two variables

### Generally, students will:

- 1. review and master prerequisites of arithmetic (chapter 1)
- 2. become gods of solving linear equations, graphing linear equations, and factoring (chapters 2, 3 and 5)
- 3. be proficient at solving problems involving polynomials (chapters 4)
- 4. be introduced to linear systems and linear inequalities in two variables (chapters 8 and 9)
- 5. gain understanding of functions (chapter 7)
- 6. become accustomed to using calculators and recognizing their potential
- 7. achieve the math skills and confidence necessary to progress to MAT12x

# ATTENDANCE POLICY

Attendance is important – especially in the beginning of the semester. If you are unable to make class, please e-mail me (in advance if possible). If you have excessive absences (based on my discretion), you will be withdrawn with a "Y".

**Note:** Coming in late or leaving early counts as an absence

Missing the Final is considered excessive

#### **GRADING**

#### **HOMEWORK 20%**

Chapter homework will be assigned via MML and is mandatory. You will need to achieve an 80% or higher on the homework to take the chapter quiz. You will have unlimited attempts at the homework and it is not timed. Homework must be submitted prior to the due date (typically Fridays). There will be **no** makeup homework.

#### **OUIZZES 10%**

After completing the chapter homework with an 80% or higher, you will take the chapter quiz via MML. You will have one attempt and it will be timed. The chapter quiz will automatically create a personalized study plan based on your performance. The chapter quiz must be submitted prior to the due date (typically Saturdays). There will be **no** makeup quizzes.

#### STUDY PLANS 0%

The chapter quiz will automatically create a personalized study plan for your chapter test which you should work on prior to taking the chapter test.

#### TESTS 50%

The chapter tests via MML will consist of problems similar to those encountered previously on the homework, quizzes, and study plans. The tests must be submitted prior to the due date (typically Sundays). Test 3 will be taken in the Testing Center (ICB2 Room 6) under strict proctoring. The Testing Center hours are available via <a href="http://www.gccaz.edu/calendar/testing/">http://www.gccaz.edu/calendar/testing/</a>. There will be **no** makeup tests.

#### FINAL 20%

The Final via MML will be cumulative and will consist of problems similar to those previously encountered on the homework, chapter quizzes, study plans and tests. The Final will be taken in the Testing Center (ICB2 Room 6) under strict proctoring. The Testing Center hours are available via <a href="http://www.gccaz.edu/calendar/testing/">http://www.gccaz.edu/calendar/testing/</a>. The Final must be submitted on or before Tuesday May 7<sup>th</sup>. There will be <a href="mailto:no makeup">no makeup</a> Final.

# SEMESTER GRADE

The following scale can be used to determine your grade:

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

NOTE: Your semester grade can be no higher than one letter grade above your final exam grade. For example, if you have a 90% going into the Final and score a 50% on the Final, your semester average calculates to 82%. However, since your Final was an "F", you would earn a "D" in the class.

# NOTES and DISCUSSION ITEMS

- 1. Course content may vary from this outline to meet the needs of this particular group
- 2. Syllabus may be changed at any time at the discretion of the instructor with verbal notice
- 3. Withdrawals are not automatic see instructor. You will be withdrawn with a "Y" (withdrawn failing which is counted as an "F" toward your GPA) after the deadline (last day to withdraw without the instructor's signature) if you don't reach an agreement with the instructor
- 4. College Catalog and Student Handbook Policies
- 5. Food, Drink and Tobacco Policy
- Grievance (i.e. complaining) Policy
- 7. Behavior Policy (respect, one person talking at a time, cell phones quiet and away, etc.). If you are disrupting the learning environment (based on my discretion), you may be asked to leave class and be reported to the appropriate Dean. Due to the time limited nature of this class, there can be no disruptions (talking, getting up, etc.) during the mini-lectures. During this time you should be in your seat, paying close attention, and taking good notes.
- 8. Classroom Atmosphere Policy (engage, ask questions, share ideas, etc.)
- 9. Cheating and Plagiarism Policy (1<sup>st</sup> offense assessment failure, 2<sup>nd</sup> offense course failure)
- 10. Special Needs if you have any special needs, please see the instructor as soon as possible
- 11. Getting Help

NOTE: The instructor has the ability to monitor your computer activity electronically while in class. If you don't want me to post "I love math!" on your Facebook page or play your solitaire hand for you, stay on task and don't surf the web during class time!

# <u>OUTLINE</u>

Monday	Wednesday	Wednesday		
1/14	1/16			
Syllabus Review	Start Chap 1			
Introductions				
Happy MLK Day!	1/23			
1/28	1/30			
2/4	2/6			
Start Chap 2				
2/11	2/13			
Happy Presidents' Day!	2/20			
2/25 Start Chap 3	2/27			
3/4	3/6			
Spring Break	Spring Break			
3/18	3/20			
0.00	0/07/14 P. J. D.			
3/25 Start Chap 4	3/27 (My B-day!)			
4/1	4/3			
4/8 Stort Chan F	4/10			
Start Chap 5				
4/15	4/17	4/17		
4/22	4/24			
Start Chap 7/8/9				
4/29	5/1	5/1		
5/6				
No class				
Continue Taking Practice Final				

Note: The last day to submit the Final is Tuesday May  $7^{\text{th}}$ 

# **BRIAN BIRD'S SCHEDULE**

Time	Monday	Tuesday	Wednesday	Thursday	Friday
7:00					
7:30					
8:00					
0.20		3.5.4 mad a		3.5.4.5504.0	
8:30		<b>MAT212</b> 17829		<b>MAT212</b> 17829	
0.00	NA A 75102	MA 120	N/A/D102	MA 120	N / A / E 1 0 2
9:00	<b>MAT182</b> 17818		<b>MAT182</b> 17818		<b>MAT182</b> 17818
9:30	MA 120		MA 120		MA 120
7.30			1		
10:00	MAT092	MAT212 &	MAT092	MAT212 &	Office Hours*
1000	17702	MAT212H	17702	MAT212H	The Math Solution
10:30	HT2 159	17830 &	HT2 159	17830 &	
		17831		17831	
11:00	MAT092	MA 120	MAT092	MA 120	
	17703	Office Hours*	17703	Office Hours*	
11:30	HT2 159	MA 179	HT2 159	MA 179	
12:00	Office Hours*		Office Hours*		
	MA 179		MA 179		
12:30					
1.00					
1:00		Office Hours*		Office Hours*	
1:30		MA 179		MA 179	
1.30		1111 1//		111111/	
2:00					

<sup>\*</sup> Additional Office Hours Available by Appointment

# \*\*\* CAUTION \*\*\*

- This is not a traditional math class.
- You need to be very comfortable with technology.
- You will need frequent, fast, and reliable access to the Internet.
- You need to be an independent learner.
- You will need to devote many hours outside the classroom.
- You need to come to class with arithmetic skills (including fractions and negative numbers).

<sup>\*\*\*</sup> If any of these statements scare you, please consider withdrawing from this course and enrolling in a traditional Introductory Algebra course (MAT090 or MAT091) \*\*\*