MAT172   11:00 a.m. SYLLABUS

COURSE
MAT172 – Finite Mathematics – Section 17557 – Fall 2011

INSTRUCTOR
Brian Bird – MA 179 – (623)845–3149 – brian.bird@gcmail.maricopa.edu

TIME and LOCATION
Mondays, Wednesdays and Fridays   11:00 – 11:50 a.m.   August 22nd – December 9th   GCC Main MA 120

Note: No class on September 5th due to Labor Day
              No class on November 11th due to Veterans' Day
              No class on November 25th due to Thanksgiving

COURSE DESCRIPTION
An introduction to the mathematics required for the study of social and behavioral sciences. Includes combinatorics, probability, descriptive statistics, matrix algebra, linear programming and mathematics of finance. Includes applications of technology in problem-solving. Prerequisites: Grade of "C" or better in MAT150, or MAT151, or MAT152, or MAT187 or equivalent, or satisfactory score on District placement exam.

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

REQUIRED BOOK
Finite Mathematics and Calculus with Applications by Lial, Greenwell and Ritchey, 8th edition

REQUIRED TECHNOLOGY
Technology is required. You will need to use Excel and/or a graphing calculator. A TI-83 Plus (or equivalent) is strongly recommended. They cost approximately $90. A limited number of graphing calculators is available for lease from the college. Cell phone calculators are not permitted. Please see the instructor if you have any questions.

OBJECTIVES
Specifically, students will be able to:
7. solve probability problems
8. solve counting problems and apply counting to probability
9. utilize basic statistics to determine the best measure for center and spread given a data set
5. solve problems of finance
2. solve systems of linear equations using various techniques including matrices
3. solve linear programming problems using the graphing method
4. solve linear programming problems using the simplex method

Generally, students will:
1. learn about probability and statistics (chapters 7, 8 and 9)
2. learn about the mathematics of finance (chapter 5)
3. solve systems of linear equations and solve linear programming problems (chapters 2, 3 and 4)
4. become gods of the graphing calculator and Excel
5. achieve the skills and confidence necessary to apply mathematics in future courses and the real world

ATTENDANCE POLICY
Attendance is very important. Quiz, test and final questions will be based on what we cover in class. If you are unable to make class, please e-mail or call 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.

<u>GRADING</u>

HOMEWORK/QUIZZES/GROUP WORK 15%
Various homework will be suggested during class. Homework will usually not be collected; however, it is <u>highly recommended</u> to complete the homework. Occasionally, quizzes will be given to assess important topics. Quiz problems will be similar to problems presented in class and homework assignments. The will be a strong correlation between quiz frequency/difficulty and student effort/attitude. Occasionally, there will be group work assignments. There will be <u>no</u> makeup homework or quizzes.

TESTS 65%
There will be three tests consisting of problems similar to problems presented in class, quizzes and homework assignments. Test 1 will cover chapters 7, 8 and 9. Test 2 will cover chapter 5. Test 3 will cover chapters 2, 3 and 4. Tests will require the use of technology. There will be <u>no</u> makeup tests.

FINAL or ONLINE HOMEWORK 20%
The Final will be Wednesday December 14th 11:00 a.m. – 12:50 p.m. There will be <u>no</u> makeup Final. The Final will be cumulative consisting of problems similar to test problems. In lieu of the Final, students may have their Online Homework score count provided that it is higher than 78% and their Test Average is higher than 66%. This will be discussed in detail during the first day of class.

INDIVIDUAL PROBLEMS
Typically, problems will be graded as follows:
       5 points – entirely correct
       4 points – correct with a minor mistake
       3 points – main idea correct
       2 points – somewhat correct
       1 point – very little correct
       0 points – blank/no clue

Note: Show <u>all</u> work and units!

FINAL GRADE
The following scale can be used to determine your grade:

                A = 90 – 100%
                B = 78 – 89%
                C = 66 – 77%
                D = 50 – 65%
                F =   0 – 49%

<u>NOTES and DISCUSSION ITEMS</u>
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 Friday October 7th if you don't reach an agreement with the instructor
4. College Catalog and Student Handbook Policies
5. Food and Drink Policy
6. 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.
8. Classroom Atmosphere Policy (engage, ask questions, share ideas, etc.)
9. Cheating and Plagiarism Policy (1st offense assessment failure, 2nd offense course failure)
10. Special Needs – if you have any special needs, please see the instructor as soon as possible
11. Getting Help

<u>OUTLINE</u>

Monday	Wednesday	Friday
8/22 Syllabus Review Introductions	8/24 Start Chap 7/8/9	8/26
8/29	8/31	9/2
Happy Labor Day!	9/7	9/9
9/12	9/14	9/16
9/19	9/21	9/23
9/26	9/28	9/30
10/3*	10/5 Start Chap 5	10/7
10/10	10/12	10/14
10/17	10/19	10/21
10/24	10/26	10/28*
10/31 Start Chap 2/3/4 Happy Halloween!	11/2	11/4
11/7	11/9	Happy Veterans' Day
11/14	11/16	11/18
11/21	11/23	Happy Thanksgiving!
11/28	11/30	12/2
12/5*	12/7 Review – Study!!!	12/9 Review – Study!!!
	12/14* Final 11:00a.m. – 12:50 p.m. Good Luck!!!	

* indicates planned test day

BRIAN BIRD'S SCHEDULE

Time	Monday	Tuesday	Wednesday	Thursday	Friday
7:00					
7:30					
8:00					
8:30		**MAT212** *17569* *MA 120*		**MAT212** *17569* *MA 120*	
9:00	**MAT092** *17465* *MA 100*		**MAT092** *17465* *MA 100*		
9:30					
10:00	**MAT092** *17462* *MA 100*	**MAT212** *17655* *MA 120*	**MAT092** *17462* *MA 100*	**MAT212** *17655* *MA 120*	**Office Hours*** *Math Solution*
10:30					
11:00	**MAT172** *17557* *MA 120*	**Office Hours*** *MA 179*	**MAT172** *17557* *MA 120*	**Office Hours*** *MA 179*	**MAT172** *17557* *MA 120*
11:30					
12:00	**Office Hours*** *MA 179*		**Office Hours*** *MA 179*		
12:30					
1:00					
		Office Hours* *MA 179*		**Office Hours*** *MA 179*	
1:30					
2:00					

* Additional Office Hours Available by Appointment