

SYLLABUS

Topics in Mathematics MGF 1106 / 3 credit hours Fall 2015

Instructor: Hady (Parham) Ahmady Phoulady

Course Meeting Days and Times: T/TH 9:30 AM – 10:45 AM

Effective Dates: August 18 – December 8, 2015

Office Location: BADM 217

Office hours: T/TH 9:15 AM – 9:30 AM

Phone: (813) 817- 5784

Email Address (preferred contact method): hahmadyphoulady@hccfl.edu

MvMathLab Course ID: ahmadyphoulady86021

The best way to contact me is by email. You can expect the instructor to respond to your emails within 24 hours of receiving your email, except on weekends and holidays.

Other office hours are available by appointment only.

For the slides, visit: http://www.cse.usf.edu/~hady/courses/mgf1106/fa15/index.html

Course Description:

Topics include finite and infinite sets, logic, deductive and inductive reasoning, and geometry, counting methods, probability and statistics. Studying these topics will develop a broader base of mathematical knowledge. This course may be used to satisfy part of the mathematics general education requirement for the A.A. degree.

Prerequisite:

MAT 1033 with a grade of at least "C" or a required score on the HCC Placement test.

Required Materials:

MyMathLab Student Access Code which will include the following:

- Access to MyMathLab Homework
- E-book of THINKING MATHEMATICALLY" by BLITZER (6th edition).

Optionally, the student may wish to purchase the bundled package which includes a MyMathLab access code and a physical copy of the textbook

Additional materials needed:

- 1. Pencils (to be used on all tests and quizzes).
- 2. Calculator Each student should have his or her own scientific or graphing calculator (**no symbolic calculator, such as TI 89 or 92**). Calculators may be used on all tests and quizzes.

GRADING SYSTEM:

Testing:

Five tests will be administered as outlined on the tentative class schedule. Tests cannot be made up. A cumulative **mandatory** final will be given at the end of the term. If a student takes all the tests and scores higher on the final exam than on one or more of the tests, the lowest test grade will be replaced by the final exam score. If a student misses one test, the grade for that test will be the grade from the final exam. If a student misses more than one test, the first zero score will be replaced with the grade from the final exam and all other grades will remain zeros. **Tests will not be made –up.**

Group Activities:

There will be 5 group activities as indicated on the lecture schedule. These will consist of questions given out to groups of 3 or 4. Each person is responsible for his or her own questions but may get help from others in their group. You may use your notes and/or book to do these activities. There will be a time limit for completing these activities. Be aware that if you have not completed the homework, then you will have trouble completing the activity in the time allowed. You will be allowed to miss one group activity during the semester without penalty. After that you will receive a 0 for each group activity missed. **Activities will not be made –up.**

Ouizzes:

Five online quizzes will be given throughout the term as shown in the class schedule. The 4 highest scores will be counted. **Quizzes will not be made-up**. One quiz missed will count as the quiz grade to be dropped. If more than one quiz is missed, the first zero score will be dropped and all other zero scores will remain. Students must show all their work for the in-class quiz in order to receive full credit. Students will have two attempts at each online quiz and only 75 minutes to complete each attempt. **The deadline for each online quiz is at midnight of the due date.**

Homework:

The homework consists of assignments on the MyMathLab website (also called Course Compass). All assignments will be graded by the computer for credit. See the Assignment Due Date Handout for details. If students miss a homework deadline, they can complete the late assignment up until 11:59 PM the night before the final exam for 75 percent credit.

Every student gets a free 17 day grace period to use MyMathLab so it is very important that students register themselves in their MyMathLab course within the first 2 days of class. Refer to the last page for directions on how to register.

Students should see their instructor or call the toll free Product Support services number (1-800-677-6337) if they have any questions or problems. If any student has any difficulty with his or her home computer, he or she may go to any Brandon Campus computer lab, the Math Lab (BLRC 200) or Student Success Center (BACA 207) and use the school computers to do the online homework.

SUGGESTION: As the students work through the online homework questions, they should write down the directions and problems neatly and keep the work organized so they have this to refer to when studying for quizzes and tests.

FINAL GRADE SUMMARY				
	EVENT	POINTS	PERCENTAGE	
1.	Five Tests	500	70%	
2.	Five Quizzes (lowest score dropped)	400	5%	
3.	Five Activities (lowest score dropped)	400	5%	
4.	Homework	Computer generated	10%	
5.	Final Exam	100	10%	

GRADING SCALE		
90 – 100 %	A	
80 – 89 %	В	
70 – 79 %	С	
60 – 69 %	D	
0 – 59 %	F	

Final grades may be viewed via WebAdvisor at the end of each term (www.facts.org).

Class Attendance:

Attendance will be taken every class. Absences in excess of 10% of the total class meetings may result in a failing grade. Also, these absences will result in veterans being reported to the VA. It is extremely important to be on time to class. All early departures should be discussed and cleared with the instructor prior to class. Students are always responsible for letting the instructor know they are present if they arrive in the classroom after the instructor has taken the attendance.

Religious Observances:

HCC will reasonably accommodate the religious observances, practices, and beliefs of students in its admissions, class attendance and examination policies, and work assignments. Students must notify instructors in writing one week prior to a religious observance.

Withdrawal:

The last day for the students to withdraw from the course is **Friday**, October 30th, 2015. Additional information regarding the withdrawal policy can be found in the HCC Catalog, 2015 - 2016.

Incomplete:

Before an incomplete grade is given, all of the following requirements must be satisfied:

- 1. You must have completed more than two-third of the course.
- 2. You must have at least a "C" average.
- 3. You must provide written documentation justifying the request.

INCOMPLETE GRADES MUST BE APPROVED BY THE INSTRUCTOR AND CONFIRMED BY THE ACADEMIC DEAN. Additional information regarding the incomplete policy can be found in the HCC Catalog, 2015 - 2016.

Academic Success Center (Math Lab):

The Math Lab is located in BLRC 200. It is open Monday – Thursday from 9:00 AM to 7:30 PM and Friday from 9:00 AM to 1:00 PM. It will be closed on Saturday, Sunday and all college holidays. The phone number is 259-6598. All services are free to HCC students! The Math Lab will be open to all students on a walk-in basis, but each student will need to sign in every time they enter the lab. In order for students to receive consistent instruction, students need to bring their class notes with them when requesting assistance. For more information, please see: http://www.hccfl.edu/br/student-services/academic-success-center/asc-frontpage.aspx

Also available to students is <u>SmarThinking</u>: a 24/7 online tutoring service provided free to students at Hillsborough Community College. For more information, go here: https://smarthinking.hccfl.edu/index.php

Academic Dishonesty Policy:

Cheating is a serious offense. The cheating policy is described in the HCC Student Handbook. Anyone caught cheating on any work that contributes to the grade in this course will be given an automatic zero for that assignment. If cheating occurs on a test the grade of that test will not be replaced with a higher grade on the final exam and if cheating occurs on a quiz the grade of that quiz will not be dropped.

Request for accommodation:

Any student whose disability falls within the American Disabilities Act (ADA) and requires accommodations should contact the Office of Services for Students with Disabilities. The Brandon office is located in the Student Service Building Room 109. You may also reach the office by phone at (813) 253-7914. Requests for accommodations should be submitted to the instructor within the first two weeks of the course. Accommodations cannot be applied retroactively. With that in mind, you are encouraged to seek assistance from the Disabilities Office as soon as possible, and to present the accommodations memo to your instructor immediately upon receiving it. Presenting a memo after the fact will not entitle you to redo work or retake exams with accommodations.

Test center information:

After discussing testing in the test center with his/her instructor, a student must email the test center to make the appointment to test AT LEAST 24 HOURS in advance of taking the test. The Brandon Test Center email address is: brtesting@hccfl.edu. Within the message of the email, the student must provide the following information:

- 1. Student's name
- 2. Instructor's name
- 3. Course Name
- 4. Test Number
- 5. Date and time student wishes to take the test (Hours are: Monday & Tuesday 8:00 5:30, Wednesday & Thursday 8:30 3:00, and Friday 8:30 10:30)

The student will receive an Automatic reply: Appointment - APPROVAL confirmation. The Brandon test center is located in BSSB 203.

STUDENTS WHO TEST IN THE TESTING CENTER MUST COMPLETE THE TEST ON OR BEFORE THE SCHEDULED IN CLASS TEST DAY.

Email:

One of the personal tools offered to students is an official HCC student email address. Students are expected to use this email as the primary means of communicating with their instructor outside of class.

Recording of Class Sessions:

A student shall not, without my express authorization, make or receive any recording, including but not limited to audio and video recordings, of any class, co-curricular meeting, organizational meeting, or meeting with me. Further, it is not permissible to post my class lectures/course materials on the web.

Equity/Equal Access Policy:

Hillsborough Community College is an equal access/equal opportunity employer that makes employment and education-related decisions without regard to race, color, gender, religion, national origin, age, disability, sexual orientation, marital status or any other bias that is or may be prohibited by laws. In addition, the college does not discriminate in employment practices or in the admission and treatment of students. HCC is committed to equitable treatment for all students and employees and to learning and working environment free of discrimination and harassment for current as well as future students and employees. The college provides equal educational opportunities for qualified individuals with disabilities and complies with, as well as, supports the Americans with Disabilities Act. HCC's Equity Officer ensures compliance with federal and state laws prohibiting discrimination and sexual harassment. Employees and students who believe they have been a victim of discrimination or sexual harassment should contact: Dr. Joan B. Holmes, Special Assistant to the President for Equity and Special Programs. Her telephone number and email are: 813-253-7043, jholmes16@hccfl.edu

Safety and Security:

Students who notice situations that represent potential or real safety or security problems should notify the local campus Public Safety Office:

• 253-7911 •

CLASSROOM ETIQUETTE:

- 1.) Please be on time to class and do not leave until the instructor is finished. It is very disruptive to the other students in the class when students are coming in and going out.
- 2.) If you do come in late or have to leave early sit near the door.
- 3.) Please <u>do not</u> come up to the desk to get any papers when you come in late. The instructor will give them to you at the end of the class.
- 4.) Please put all electronic equipment (cell phones, ipods, etc.) other than your calculator on vibrate mode or turned off completely. Laptops should be closed and put away. Ear phones should not be worn.
- 5.) Students are not allowed to receive or send text messages during class.
- 6.) Please do not bring <u>food or drink</u> into the room except for water.
- 7.) Keep talking to a minimum and only related to this class while the instructor is lecturing.

REMEMBER:



$\frac{\text{MGF } 1106 \text{ OBJECTIVES}}{\text{BLITZER } 6^{\text{th}} \text{ Ed.}}$ (Fall 2015)

I. Sets

- 1. Deduce facts of set inclusion or set non-inclusion from a diagram.
- 2. Use set operations, including union, intersection, complement, and set difference.
- 3. Demonstrate knowledge of infinite sets and their characteristics as contrasted with finite sets.
- 4. Solve problems using Venn diagrams.
- 5. Solve problems involving the application of sets.

II. Logic

- 1. Identify statements.
- 2. Create truth tables.
- 3. Solve problems involving the conditional.
- 4. Identify statements equivalent to the negations of simple and compound statements.
- 5. Determine equivalence or nonequivalence of statements.
- 6. Draw logical conclusions from data.
- 7. Recognize that an argument may not be valid even though its conclusion is true.
- Recognize valid reasoning patterns as illustrated by valid arguments in everyday language.
- 9. Select applicable rules for transforming statements without affecting their meanings.
- 10. Draw logical conclusions from a list of premises.
- 11. Use Euler Diagrams and truth tables to determine validity of an argument.

III. Geometry

- 1. Calculate distances, areas, and volumes.
- 2. Identify and use relationships between angle measures to find missing angles.
- 3. Classify simple plane figures by recognizing their properties.
- 4. Recognize and use similar triangles and their properties to find missing information.
- 5. Identify appropriate units of measurement for geometric objects.
- 6. Infer formulas for measuring geometric figures.
- 7. Select applicable formulas for computing measures of geometric figures.
- 8. Solve real-world problems involving perimeters, areas, and volumes of geometric figures.
- 9. Solve real-world problems involving the Pythagorean Theorem.

IV. Counting Methods and Probability

- 1. Use counting methods to count by systematic listing.
- 2. Use permutations and combinations.
- 3. Use the fundamental counting principle.
- 4. Identify the probability of a specific outcome in an experiment.
- 5. Identify and list a sample space for an experiment and compute the probability of a specific outcome.
- 6. Identify independent and mutually exclusive events.
- 7. Solve problems using the addition and multiplication rules of probability.
- 8. Solve problems using the complement formula for probability.
- 9. Determine the odds in favor of or against an event.
- 10. Determine conditional probability.
- 11. Calculate mathematical expectation.

V. Statistics

- 1. Identify information contained in bar, line, and circle graphs.
- 2. Determine the mean, median, and mode of a set of numbers.
- 3. Recognize properties and interrelationships involving the mean, median, and mode in a variety of distributions.
- 4. Solve problems dealing with range and standard deviation in a variety of distributions.
- 5. Infer relationships and make accurate predictions by studying statistical data.
- 6. Interpret real-world data involving frequency and cumulative frequency tables.
- 7. Use the normal curve to solve problems.
- 8. Understand the idea of correlation.



Student Registration for MyMathLab

Website Description

MyMathLab is a website you can use to assess your math skills, do homework, take quizzes, view videos, get live tutorial help, and more! Access to this website is with a MyMathLab Student kit that comes with your **new** textbook. For more information about this website, including system requirements, go to www.mymathlab.com. You can find helpful video tutorials on registration under the Tours and Training tab at the MyMathLab website.

On-line Registration

You'll need:

- Your access code found in your student access kit.
- A valid email address
- Your Professor's Course ID Number: ahmadyphoulady86021
- Your school zip code: 33619
- 1. Go to www.pearsonmylab.com.
- 2. Click on the Register button below Students
- 3. Review the Before You Start information to ensure you have everything you need to register; Click Next.
- 4. Enter your Course ID from your instructor and click Find Course.
- 5. Under Enrollment Options click on Access code if you have one or click buy now if you need to purchase online. Enter you access code in the boxes and click **Next**.
- 6. Read the Privacy Policy and License Agreement screen and click "I Accept" to continue.
- 7. If you have previously taken a course in Pearson MyLabs or MathXL course, click **Yes**, and enter your username and password. If you are not sure, click on Not Sure and enter your email address. The system will try and look you up. If you have never had a Pearson account click on **No**, to create your login and password.
- 8. Fill in all required Personal Information, select your school from the drop-down list, then create your own personal login name & password for this site. Your password must have at least eight characters and include at least one number and one letter. Do not use the login name for the password. We recommend using your email address as your login name.
- 9. Choose 1 of 4 security questions (for use if you forget your password) & type the answer. Click Next.
- 10. Your **Confirmation & Summary** screen appears; write down your confirmed login/password (a confirmation email will be sent to you. If you use a Spam email blocker, be sure to allow emails from Pearsoned.com). Click the MyMathLab **Log In Now** button and use the log in name & password you just created to enter MyMathLab. In the future, you will enter your MyMathLab course from this site, www.pearsonmylab.com, so it's a good idea to bookmark this page. You will not have to register again for this course.
- 11. Under Courses you are taking, click on the Course name to access your professor's web material.

Important: You MUST install all required software plugins to use this website from a home or work computer. A link to the Installation Wizard is located from a button within the MyMathLab website --run the MyMathLab Installation Wizard. AOL users must minimize that browser and use Internet Explorer. You must also disable any pop-up blockers for this site only. Safari and Firefox can also be used as browsers.

Inside MyMathLab

Once you are in your MyMathLab course, you will see a series of buttons on the left. Use these to access your online homework, take sample quizzes, and work your Study Plan. Textbook material (videos, worked examples, Tools for Success, etc.) is found under Chapter Contents. Your professor may have customized this website, so features & button names may vary. For Technical Support go to http://247.support.pearsoned.com/; you can send an email or use chat from this site. You may also call Toll Free 1-800-677-6337, Monday through Friday 8AM – 8PM, Sun. 5-PM-12AM EST.