Spring 2017 Semester: January 9th - May 8th

Instructor: Hady (Parham) Ahmady Phoulady
Course Meeting Days and Times: T/TR 5:30 PM – 6:45 PM (Humanities Building, Room 205)
Office Location: BADM 217
Office hours: T/TR 5:15 PM - 5:30 PM
Instructor's Email: hahmadyphoulady@hccfl.edu

MyMathLab Course ID: ahmadyphoulady03699

For the slides, visit: http://www.cse.usf.edu/~hady/courses/mgf1106/sp17/index.html

Required Materials:
1. Textbook "Thinking Mathematically", Blitzer, 6th edition
2. My Math Lab student access kit
Textbook & access kit available as a package or purchased online with e-text access
3. Student's solution manual
4. Calculator, scientific or graphing
Warning: No symbolic calculators, such as TI-89 or TI-92; no Wi-Fi accessible devices, such as cell phones

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

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.

Course Objectives:
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.

8. 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.

Classroom Etiquette:

1. Be on time, do not leave until the instructor is finished; late arrivals & early departures sit near the door

2. Late arrivals will not approach the front of the room during lecture

3. Electronic devices are on silent or turned off completely; no ear phones. Refrain from sending or receiving text messages during class

4. No food or drink in the classroom; water is acceptable

5. Keep side conversations while the instructor is lecturing to a minimum and only related to instructor's lesson

Grading System:

Tests: Five chapter tests will be administered as outlined on the tentative class schedule. A **mandatory** cumulative final test will be given at the end of the term. A missed test will count as a score of zero. Tests will not be made-up. 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.

Quizzes: Five online quizzes will be given throughout the term; the lowest quiz score will be dropped. Students have two attempts at each quiz and 75 minutes to complete each attempt. The deadline for each online quiz is at 11:59pm on the due date. Quizzes will not be made-up.
Warning: A quiz must be finished within 75 minutes of starting; if your computer crashes, log back in immediately because the quiz time continues to count down. Do not attempt to open any other windows or pages during the online quiz; this action will end the online quiz and issue an automatic score of zero.

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Calculators may be used on all assessments.

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Homework: The homework consists of assignments on the MyMathLab website (accessible with MyLab & Mastering link on Canvas). All assignments will be graded by the computer for credit. 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. **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.

Every student gets a free 14 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 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.

Final Grade Summary	Rounding is at the discretion of the instructor.
EVENT	**PERCENTAGE**
Tests	60%
Quizzes	10%
Homework	15%
Cumulative Final Test	15%

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

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

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Policy & Procedures:

Class Attendance: Attendance will be taken every class. You are required to attend class regularly and punctually. If you miss class, regardless of the cause, your opportunity for learning and academic success will be adversely affected. There are no excused absences; however, a student may miss three classes without penalty. After the third absence, five percent will be deducted from the grade for each class missed. Also, these absences will result in veterans being reported to the VA. It is extremely important to be on time 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. In the case of an absence, the student is expected to learn the missed sections using the textbook, e-textbook, and DVD videos. Whenever a student is late or leaves before class is dismissed TWO times, it will count as one absence.

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: Withdraw deadline listed on tentative class schedule. Additional information regarding the withdrawal policy can be found in the HCC Catalog.

Incomplete: Before an incomplete grade is give, 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.

Academic Success Center (Math Lab): The Math Lab is located in BLRC 200. Its hours are posted on the door and on the website. It will be closed on Sunday and all college holidays. The phone number is (813) 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 SmarThinking, a 24/7 online tutoring service provided free to students at Hillsborough Community College; for more information visit https://smarthinking.hccfl.edu/index.php or use the link on Canvas.

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.

Brandon Campus Test Center (BSSB 203): A student must email the test center to make the appointment to test AT LEAST 24 HOURS in advance of taking the test. The student will receive an Automatic reply: Appointment -

APPROVAL confirmation. The Brandon Test Center email address is: brtesting@hccfl.edu . Within the message of the email the student must provide the following information: Student's name, Instructor's name, Course Name, Test Number, as well as, Date and Time student wishes to take the test (hours are posted on their website)

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: It is not permissible to share class lectures or materials, electronically or otherwise, with anyone not registered for the same course section. Further, without express authorization, students shall not make or receive any recording of any class, co-curricular meeting, organizational meeting, or meeting with instructors.

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, (813) 253-7911.