Queens College
The City University of New York
Fall 2016 MATH 119 Syllabus

Instructor: Athar Abdul-Quader
Email: aabdulquader@gradcenter.cuny.edu
Office Hours: TBD

Description: The main focus of this course is to develop awareness of occurrences, structures and uses of mathematics. Problem-solving techniques will be emphasized both in small group and in large group settings. Implications for the classroom teacher will be discussed. Techniques and uses of writing in the mathematics classroom will be studied. Particular attention should be paid to clarify some topics for the Common Core Standards that the students will have to start using in real teaching assignments.

Text: Mathematics for Elementary School Teachers (Queens College Mat 119). Custom Edition based on (Bennet, Burton and Nelson National Edition) ISBN-10: 1308222289, ISBN-13: 9781308222288, McGraw Hill.

Specific Objectives:
By the end of this course, students will

1. Develop a repertoire of problem-solving techniques.
2. Solve problems presented within the context of the following content areas:
   - Sets, Functions, and Reasoning
   - Elementary Number Theory (e.g., Factors; Primes; GCF; LCM).
   - Integers and Fractions
   - Elementary Statistics and Probability
   - Elementary Geometry, Measurements
3. Have an understanding of how to connect and be able to access Common Core Standards information.

Principal focus for the material is covered on the chapters 1, 2, 4, 5, 7, 8, 10.

Grading Policy: There will be **one** in-class exam and **one** final at the end of the semester. The final will be cumulative. In addition, homework is assigned frequently. There may also be (announced or unannounced) quizzes throughout the semester. If time permits, we will likely also have a group project with a presentation component during this semester as well.

Collaboration Policy: You are encouraged to **discuss** homework assignments with other students. You must complete the assignment on your own, however. There is a clear difference between copying someone else's work and discussing a problem with another person. The latter is encouraged. Plagiarising another student's work can lead to academic sanctions as per CUNY's Academic Integrity Policy.

Please note: when collaborating with other students, all students should write the names of all collaborators on their papers. Unless otherwise noted, collaboration will be allowed on any homework assignment, and will **not** be allowed on an exam.

Late Homework Policy: Assignments that are not turned in the day that they are due are considered late. Note: this remains the case **even if you cannot come to class** (due to illness or other emergency) the day that the work is due (or the day it is assigned). If you cannot make it to class, you may email the work to me (scanned or just by taking pictures with your phone) and bring in the hard copy the next class meeting. In that case, I will count the homework as on-time. I reserve the right to not accept late homeworks in the case of a student consistently missing assignments.

Grading Rubric:

35% Final Examination
25% In-class Exam
25% Homework
15% Quizzes, Projects, and class participation

Tentative Pacing Scale:

Week	Topic(s)	Textbook Chapters
1 (8/30 - 9/1)	Common Core Practice Standards and Problem Solving Strategies	1
2 (9/6 - 9/8)	Sets and Venn Diagrams	2
3	Logical Reasoning and Fallacies	2

(9/13 - 9/15)		
4 (9/20 - 9/22)	Elementary Number Theory	4
5 (9/27 - 9/29)	Elementary Number Theory; Integers	4-5
6 (10/13 - 10/18)	Integers and Fractions	5
7 (10/20 - **10/25**)	Review and **Midterm**	All of the above
8 (10/27 - 11/1)	Statistics	7
9 (11/3 - 11/8)	Statistics	7
10 (11/10 - 11/15)	Probability	8
11 (11/17 - 11/22)	Counting, Permutations and Combinations	8
12-13 (11/29 - 12/6)	Geometry	10
14 (12/8 - 12/13)	Review for Final	All of the above
15 (12/20)	**Final**	