

Foundations of Mathematics 110



COURSE SYLLABUS 2019-20

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COURSE INFORMATION: This course is a pre-requisite for the pre-calculus pathway. It is also a pre-requisite for Foundations of Mathematics 120, providing a pathway designed for entry into post-secondary academic programs *not* requiring pre-calculus.

COURSE CONTENT:

Financial Mathematics (Chapters 8 & 9)	Trigonometry (Chapters 3 & 4)
Inductive & Deductive Reasoning (Chapter 1)	Quadratic Functions & Equations (Chapter 6)
Properties of Angles & Triangles (Chapter 2)	Systems of Linear Inequalities (Chapter 5)

Note: Please see the back of this sheet for a summary of the curriculum outcomes for this course.

EVALUATION:

40%	Tests
30%	Other Assessments
30%	Exam

If you are unsuccessful under the above distribution, then you will be re-evaluated by the following distribution, with a maximum overall grade of 60%.

20%	Tests
20%	Other Assessments
60%	Exam

Note: Test retakes are not offered in Foundations of Math 110

REQUIRED MATERIALS: Textbook, binder with loose leaf and graph paper, pencils, eraser, scientific calculator (Note: Calculators used in this course must be approved by your teacher. Approved calculators include, but are not limited to, the following: TI-30Xa, Sharp EL-501x, Sharp EL-531W, Canon F0715SG)

WORKLOAD / ATTENDANCE: Homework will be assigned to reinforce the concepts covered in class and is a critical part of gaining understanding and mastery of the topics taught in this course. You will be expected to complete all homework, including questions assigned on days when you are absent from class. You will be assessed regularly via in-class assignments (which will be based on recently assigned classwork/homework), and tests. Remember, **this is an elective course**. It is expected that the motivation to keep up with in-class work, as well as homework, will be maintained **throughout the semester**. Regular attendance is necessary to be successful in this course. If you are absent on any given day, then it is **your** responsibility to catch up on the notes and work that you missed.

EXTRA HELP: Please make arrangements to get extra help should you need it. Please seek assistance on the *first* day that you discover that you are experiencing difficulty, otherwise the work can become overwhelming.

MATH DEPARTMENT POLICY FOR MISSED EVALUATIONS: Students should be prepared to write any missed evaluations upon their return to class. Unexcused absences will result in the student receiving 60% of the grade obtained.

I look forward to teaching you this semester and hope that you will have a happy and successful year!

Please detach and return this part to me as soon as possible

I have read this document and understand the procedures of Mr. Graham's class. I am also aware that it is my right to request a meeting at any time during the school year to discuss these procedures or any other class related issue.

Student's name (please print) _____

Signature _____

Parent / Guardian(s) name(s) _____

Textbook #: _____

Signature(s) _____

Summary of Curriculum Outcomes:

Logical Reasoning

General Outcome: Develop logical reasoning.

Specific Outcomes:

LR1: Analyze and prove conjectures using logical reasoning, to solve problems.

LR2: Analyze puzzles and games that involve numerical reasoning, using problem-solving strategies.

Geometry

General Outcome: Develop spatial sense.

Specific Outcomes:

G1: Derive proofs that involve the properties of angles and triangles.

G2: Solve problems that involve the properties of angles and triangles.

G3: Solve problems that involve the cosine law and the sine law, including the ambiguous case.

Relations and Functions

General Outcome: Develop algebraic and graphical reasoning through the study of relations.

Specific Outcomes:

RF1: Model and solve problems that involve systems of linear inequalities in two variables.

RF2: Demonstrate an understanding of the characteristics of quadratic functions, including vertex, intercepts, domain and range, axis of symmetry.

Number

General Outcome: Develop number sense in financial applications.

Specific Outcomes:

N1: Analyze costs and benefits of renting, leasing and buying.

N2: Analyze an investment portfolio in terms of interest rate, rate of return, total return.

N3: Solve problems that involve personal budgets (optional).