Applied Math for Aerospace Technology
Math 201-602

Ponderation: 3-2-3

Credits: 2 2/3

Prerequisite: Math 536

Text: Washington, *Basic Technical Mathematics with Calculus* Approximately $ 120 . This text is also used for 103 and 203 Aircraft.

Methods: This course meets 3 times a week for a total of 5 hours. I teach using a combination of lecturing, discussion, and problem solving. Homework is important. If you have difficulty with any topic see me in my office or after class.

Attendance: Missing six classes is grounds for automatic failure in a math course but I will not enfrce this policy. Nor will I require any participation in Special Activities for Student Success (SASS).

Evaluation: The Class mark will be based on a total of 100 questions given over the semester. The number of questions answered correctly will be the Class Mark. The Final Exam will be written and marked by the instructor.

The Final Grade will be the better of 50% Class Mark and 50% Final Exam OR 25% Class Mark and 75% Final Exam.

Students choosing not to write the Final Exam will recieve a Final Grade of 50% or their their Class Mark, whichever is less.

Course Costs: Text about $120. Scientific calculator about $25.

Department Policy on Academic Dishonesty: Cheating and plagiarism are unacceptable to John Abbott College. Students are expected to conduct themselves accordingly and must be responsible for their actions. For more information on Cheating and Plagiarism students should consult the Institutional Policy on the Evaluation of Student Achievement (IPESA) which is reprinted in the College Calendar and Student Agenda.

Mid-Semester Assessment: Students in their first or second semester have the right to feedback on basic skills in the first weeks of the semester so that they can seek help if necessary.

Notes to Students: It is the responsibility of students to keep all assessed material for at least one month past the grade review deadline in the event that they would request a grade review. Students can learn more about their rights and responsibilities by reading the IPESA.

Course Content

	Matrices and Statistics	Problems
5.5	Solve 2 equations in 2 unknowns using determinants	1-32
5.6	Solve 3 equations in 3 unknowns algebraically	1-14
5.7	Solve 3 equations in 3 unknowns using determinants	1-28
16.3	Matrix Addition	8-26
16.4	Matrix Multiplication	1-16, 34
16.5	Inverse Matrices	1-24
16.6	Matrices and linear equations	1-23, 26
22.1	Histograms	10, 13, 21, 25, 26
22.2	Mean, Median, Mode	1-33
22.3	Standard Deviation	1-20
	Ratio, Vriation, Length, Area, and Volume	
18.1	Ratio and Proportion	1-40
18.2	Variation	1-38
2.1	Lines and Angles	17-24
2.2	Triangles	5-35
2.3	Qudrilaterals	1-25
2.4	Circles	1-12, 21-30
2.6	Solid Geometry	1-24
8.4	Applications of Radian Measure	1-40
	Trigonometry and Vectors	
4.4	Right Triangles	5-28
4.5	Applications of Right Triangles	1-28
9.1	Introduction to Vectors	1-31
9.2	Components	1-24
9.3	Vector Addition	1-20
9.5	Law of Sines	1-32
9.6	Law of Cosines	1-31
10.2	Sine and Cosine Curves	1-39
10.3	Phase Angle	1-24
10.5	Simple Harmonic Motion	3-8
	Algebra, Exponential and Log Functions	
Ch. 6	Factoring and Fractions (Review)	1-71 (odd)
Ch. 7	Quadratic Equations (Review)	13-36
Ch. 11	Exponents and Radicals (Review)	1-50
14.4	Radical Equations	1-28
13.2	Exponential Fuctions	1-16
13.3	Rules for Logarithms	1-12
13.4	Common Logarithms	1-20
13.5	Natural Logarithms	1-36
13.6	Exponential and Logarithmic Equations	1-36