



Course Outline

COLLEGE PREPARATION PROGRAM

MATH 10C F
Mathematics 10C
Fall, 2012

6 CREDITS
6 HOURS PER WEEK

Maureen Clarke, Instructor

Date

Reviewed and approved by:

Margo Vermillion, Chair

Date

Guy Harmer, Dean

Date

Instructor: Maureen Clarke

Office Hours: Monday 2:00 – 2:50
Tuesday 2:00 – 2:50

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Course Hours: Monday 8:30 – 9:20
Tuesday 8:30 – 9:20 9:30 – 10:20
Wednesday 8:30 – 9:20
Thursday 8:30 – 9:20
Friday 8:30 – 9:20

Classroom: Room 114

Hours of Instruction: 6 50-minutes classes per week

Prerequisite: AFM 009 or permission of the Program Chair Pending Approval

Text: Mathematics 10; Bonifacio, Fogarty, et al; McGraw-Hill
Ryerson, Toronto
ISBN-13: 978-0-07-012733-3

Important Dates for Academic Schedule:

- Sept. 3 College closed – Labor Day
- Sept . 4 Orientation Day
- Sept. 5 First day of class
- Sept. 11 Last day to add classes
- Sept. 12 Late fee if all fees are not paid in full
- Sept. 18 Last day to drop course(s) for academics
- Oct. 8 College closed - Thanksgiving
- Oct. 12 Last day to withdraw from course(s) with 50% refund of tuition fees
- Oct. 26 Last day to withdraw from course(s) without academic penalty
- Nov. 12 College closed – for Remembrance Day
- Dec. 13 Last day of class
- Dec. 14-18 Final Exams

Course Description:

Topics studied include: linear measurement, surface area and volume of 3-D objects using the SI and imperial measurement systems; apply exponent laws to expressions involving powers with integral and rational exponents; determine square roots and cube roots and solve problems involving square roots and cube roots; convert between powers with rational exponents and radicals, and mixed radicals and entire radicals; multiply and factor polynomial expressions; graph functions and relations in a number of ways, including with technology; use three different ways of writing linear equations; distinguish between a function and a relation; identify the solution to a system of linear equations on a graph and use algebraic manipulation to solve a linear system

Course Outcomes:

At the completion of the course, students will be able to:

- Develop spatial sense and proportional reasoning
- Solve problems that involve linear measurement using SI and imperial units of measure
- Describe characteristics of 3-D objects and 2-D shapes and analyze relationships among them
- Determine surface area and volume of 3-D objects, including right cones, right prisms, spheres, right cylinders, and right pyramids
- Demonstrate an understanding of powers with integral and rational exponents
- Apply the primary trigonometric ratios (sine, cosine, tangent) to solve problems that involve right triangles
- Demonstrate an understanding of factors of whole numbers by determining the prime factors, greatest common factor, least common multiple, square root, and cube root
- Demonstrate an understanding of irrational numbers by representing, identifying and simplifying irrational numbers and ordering irrational numbers
- Demonstrate an understanding of powers with integral and rational exponents
- Factor trinomial expressions
- Interpret and explain relationships among data, graphs and situations
- Demonstrate an understanding of relations and functions
- Describe and represent linear relations using words, ordered pairs, tables of values, graphs, and equations
- Use function notation
- Determine characteristics of graphs of linear relations, including the intercepts, slope, domain and range
- Determine the equation of a linear relation
- Solve problems that involve systems of linear equations in two variables, graphically and algebraically

Course Content:

UNIT 1 Sept. 5 - 26

Chapter 1	Measurement Systems	pp. 1-19
Chapter 2	Surface Area and Volume	pp. 20-38
Chapter 3	Right Angle Trigonometry	pp. 39-57

Unit Test 1

UNIT 2 Sept. 29 – Oct. 22

Chapter 4	Exponents and Radicals	pp. 62-85
Chapter 5	Polynomials	pp. 86-109

Unit Test 2

MIDTERM EXAM

UNIT 3 Oct. 23 – Nov. 16

Chapter 6	Linear Relations and Functions	pp. 114-141
Chapter 7	Linear Relations and Graphs	pp. 142-165

Unit Test 3

Unit 4 Nov. 19 – Dec. 10

Chapter 8	Solving Systems of Linear Equations Graphically	pp. 170-190
Chapter 9	Solving Systems of Equations Algebraically	pp. 191-210

Unit Test 4

REVIEW Dec. 11 - 13

FINAL EXAMINATION TBA

Evaluation:	Attendance	5%
	Assignments	35%
	Tests & Quizzes	15%
	Midterm	20%
	Final Exam	25%
	Total	100%

Grade Point

Descriptor	Alpha Grade	4.0 Scale	Percentage
Excellent	A+	4.0	91 – 100
	A	3.8	85 – 90
	A-	3.7	80 – 84
Good	B+	2.7	76 – 79
	B	3.0	73 – 75
	B-	2.7	70 – 72
Satisfactory	C+	2.3	67 – 69
	C	2.0	64 – 66
PROGRESSION PASS	C-	1.7	60 – 63
Poor	D+	1.3	57 – 59
Minimum Pass	D	1.0	50 – 56
Failure	F	0.0	0 – 49

Overall Expectations:

Please turn off cell phones, MP3 players, and any other electronic devices during class time.

Assignments: Assignments must be dated and submitted to the instructor no later than 4:00 pm on the day on which the assignment is due. Late assignments will be accepted but marks will be docked 2% per day to a maximum of 10%. Exemptions for assignments may be granted in exceptional circumstances beyond the control of the student. A 5% bonus mark will be given to all assignments that are turned in on time.

Punctuality: Punctuality is important. Students are expected to be ready to begin work when the class is scheduled to begin. Therefore, students are encouraged to arrive at class a minute or two early so that they may organize their working materials by starting time. Late arrival is detrimental to the student and inconsiderate of the instructor and other students. Arrival in good time is associated with success and is considerate of the instructor and other students.

Attendance: Students are expected to attend all classes. Should a student miss a class for any reason it is his/her responsibility to cover the work missed and be ready for the next class.

If you want to be assured of success in this course the following three things will most often grant that to you.

1. Attend every day and get involved in the class. When you can't attend, cover the work done anyway.
2. Ask a question when you do not understand the work and keep asking until you get an explanation you can understand. Feel free to ask for help from the Skill Center, your peers, and the instructor. Remember that the Skill Center is for "support", not to "teach" you course content due to lack of attendance.
3. Do all of the daily work given or give it your very best effort and get help with the parts you are unable to complete.

Student Rights and Responsibilities:

Students should be aware of their rights and responsibilities as laid out in the Keyano College Credit Calendar 2012 - 2013. In order to "refrain from unduly disturbing, disrupting or otherwise interfering with studies..." (KCC C, 2012-2013, p. 38) students should turn cell phones and pagers off when they come to class, and refrain from bringing children or other visitors to class.



Learner Assistance Program (LAP)

If you have been diagnosed with a Learning Disability in the past, or you feel that you would benefit from some assistance from a Disabilities Counsellor, please call our office 780-792-5608 to book an appointment. Services and accommodations are intended to assist you in your course, while maintaining the academic standards of Keyano College. We can be of assistance to you in disclosing your disability to your instructor, receiving accommodations, and your overall a success at Keyano College.

HAVE A GREAT SEMESTER!!