CAMOSUN COLLEGE
School of Arts & Science
Department of Mathematics & Statistics

MATH-107-001
Applied Precalculus
Summer 2020

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/math.html

Ω *Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.*

1. Instructor Information

(a)	Instructor	**Tom Thompson**
(b)	Office hours	**To Be Announced On D2L**
(c)	Location	**Discussed In "Course Content and Schedule"**
(d)	Phone **NA**		**Alternative:**
(e)	E-mail	**ThompsonT@camosun.bc.ca**
(f)	Website	**D2L: online.camosun.ca**

2. Intended Learning Outcomes

Upon completion of this course a student will be able to:

1. Demonstrate proficiency in the fundamental concepts of Intermediate Algebra necessary to analyze and interpret single variable functions. This includes but is not limited to: factorization of polynomials and expressions with rational exponents, simplification of rational expressions, complex fractions and radicals, solving subsequent polynomial, radical, and rational equations, and single variable linear and quadratic inequalities.

2. Demonstrate the ability to understand and interpret visual 2-D representation of single variable relationships. This includes working with the basic concepts of graphing in the co-ordinate plane with an emphasis on linear equations, circles, and ellipses.

3. Work with analytic representations of single variable relationships and connect basic models to their visual representations. This includes building a foundation of understanding of terminology and notation for functions, including basic definitions and examples.

4. Work with more advanced functions to enable more complex modelling and analysis in follow-on courses. Examples include: quadratic, polynomial, rational, exponential, trigonometric and inverse trigonometric functions.

5. Solve word problems involving arithmetic and geometric sequences and series.

3. Required Materials

(a) Course Pack: Materials for a course pack – including notes and review problems – will be posted on D2L. It is highly recommended you find a way to print off this course pack at the start of the course. Companies like Staples are still running printing services. The missing text from the course pack will be filled in through the video lectures.

(b) Textbook: Algebra and Trigonometry, Sullivan, 10th edition (optional)

(c) Calculator: Sharp EL – 531. Only this calculator is approved for use on term tests and the final exam.

4. Course Content and Schedule

The list below shows the chapters we cover in the order that we cover them. Not all sections in each chapter are covered. Refer to the course pack to determine which topics are covered.

Chapter R: Review
Chapter 1: Equations and Inequalities
Chapter 2: Graphs
Chapter 11: Analytic Geometry
Chapter 3: Functions and Their Graphs
Chapter 4: Linear and Quadratic Functions
Chapter 5: Polynomial and Rational Functions
Chapter 6: Exponential and Logarithmic Functions
Chapter 7: Trigonometric Functions
Chapter 8: Analytic Geometry
Chapter 13: Sequences, Induction, and the Binomial Theorem

In this seven week course the current schedule (subject to change) is

Week 1: Review, Chapter 1
Week 2: Chapter 2, Chapter 11
Week 3: Chapter 3, Chapter 4
Week 4: Chapter 5
Week 5: Chapter 6
Week 6: Chapter 7
Week 7: Chapter 8, Chapter 13

The delivery of lectures will be asynchronous video lectures on YouTube provided by the following link:

https://www.youtube.com/watch?v=IE8mfmUcO8g&list=PLY7geoV7-OK7zD2pOQJp84-YbrR9YsEAj

If the college reopens classrooms to students we will move to an in-person delivery method, scheduled as:

Monday through Friday: 9:30am – 11:20am, Ewing Building Room 348

5. Basis of Student Assessment (Weighting)

(a) **Assignments:** There will be a total of <u>seven</u> assignments assigned at the end of each week. The material covered in each assignment will be based on the material covered during this week. The due dates of these assignments will be due two days later on Sunday. It is highly recommended you do practice problems throughout the week to prepare for the assignment as means to completing it more efficiently in a two day time frame. Late assignments will be accepted up to two days later with 10% reduction on the first day and 25% on the second day. After such, no late assignments will be accepted.

To submit an assignment, you will upload it to a dropbox on D2L. Instructions on what the file submissions must look like (format, layout, etc) will be given on D2L.

(b) **Tests:** There will be three tests for this course (May 19th, June 1st, June 15th). Each of these tests will be written at 10am and you will have 50 minutes to complete it. Late tests will not be accepted. I will be checking email continuously during this period to see if there are are questions you have that don't assist in the solving of a problem.

To submit a test, you will upload it to a dropbox on D2L. Instructions on what the file submissions must look like (format, layout, etc) will be given on D2L. Time will be given to write the test and a short grace period for file submission will be given. If you have technical issues with D2L, email me the test as a last resort.

(c) **Trigonometric Proofs Quiz:** There will be one quiz on June 19th (the final day of classes) at 10am with 50 minutes to complete it. This quiz is based on performing trigonometric proofs. The style of assessment of these will be similar to tests as well as submission.

(d) **Final Exam:** A comprehensive, 3-hour final exam will take place during the final exam period of June 22nd – June 24th. The specific time of this exam will be announced later. The exam is currently expected to be done on campus. If circumstances remain as they are, they will be moved to an online assessment like the tests. This will be announced as the course progresses.

If the college reopens its classrooms to students then all tests, the quiz and homework submissions will be done in person in lecture. The tests and quiz will instead be scheduled at the start of class, 9:30am.

Academic Integrity: As the assessments are currently planned to be online, it is heavily suggested you read up on Camosun's policies of <u>Academic Integrity</u>.

http://camosun.ca/learn/school/arts-science/images/Arts%20and%20Science%20Academic%20Honesty%20Guidelines.pdf

Do not violate these guidelines as the resulting punishment is not worth the crime.

Missing an Assessment Component: Missing an assignment will not result in a reweighting of your grade amongst other components. If you miss a test or quiz for a legitimate reason such as illness, accident or family affliction, you should notify me as soon as possible. There will be no "make-up" tests. In the event of an excused absence for a test, the mark from the relevant portions of the final exam, will replace your test mark. If you miss the quiz a rewrite will be scheduled as soon as possible provided there is a legitimate reason for the excuse. If you miss either of these without a legitimate reason you will be

given a mark of zero for that component. If you miss two or more tests, you should notify me as soon as possible as pulling your replacement grade for it from the exam will not be an option.

Weighting of Course Material: The components listed above will be weighted as follows

Assignments: 14% (2% for each assignment)
Term Tests: 45% (15% for each test)
Quiz: 6%
Final Exam: 35%

6. Grading System

| X | Standard Grading System (GPA) |

| | Competency Based Grading System |

7. Recommended Materials to Assist Students to Succeed Throughout the Course

A&S Math Lab (Ewing 224): Provided the campus opens up again you can visit this drop-in centre. It is freely available for your use to work on math homework and seek help from the instructional assistant. Hours are posted on the door or online at http://camosun.ca/services/help-centres/#MATH.

Attending Office Hours: Although the course is currently taught online (and might continue to be) you can, and are highly recommended to, attend online office hours. I can offer assistance on problems and any other course related concerns that you have. The method of how to attend these office hours will initially be done through Skype with contact information posted online. If you are worried about privacy issues, you can set up an alternate account with no personal details on Skype to contact me. As Microsoft Teams becomes available to students we will make this transition at that time. My contact information will be posted on D2L.

Estimated out-of-class hours: As this course is condensed it comes to little surprise That you will be working quite frequently on problems in this course. It is highly recommended you do the problems from the Course Pack often. It is estimated that in a full 4-month course that you spend 10 hours per week studying. Thus in a condensed class it is estimated you will need to spend 20 per week studying.

8. College Supports, Services and Policies

Immediate, Urgent, or Emergency Support
If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ http://camosun.ca/about/mental-health/emergency.html or http://camosun.ca/services/sexual-violence/get-support.html#urgent

College Services
Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at http://camosun.ca/

College Policies
Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with

the content of College policies. Policies are available on the College website at
http://camosun.ca/about/policies/. Education and academic policies include, but are not limited to,
Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary
Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate
Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student
Conduct, and Student Penalties and Fines.

A. GRADING SYSTEMS *http://camosun.ca/about/policies/index.html*

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+	Technically superior, showing mastery, and going beyond course expectations. Obtained by a minority of students.	9
85-89	A	Technically superior and showing mastery.	8
80-84	A-	Technically superior and showing mastery.	7
77-79	B+	Good comprehension of course material, a good command of the skills needed to work with the material, and a more complex understanding and application of the course material.	6
73-76	B	Good comprehension of course material and a good command of the skills needed to work with the material.	5
70-72	B-	Good comprehension of course material and a good command of the skills needed to work with the material.	4
65-69	C+	Work that indicates and adequate comprehension of the course material and skills.	3
60-64	C	Work that indicates and adequate comprehension of the course material and skills.	2
50-59	D	Work that indicates minimal command of the course materials and minimal participation.	1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful
completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. **Temporary Grades**

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at http://camosun.ca/about/policies/index.html for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	*Incomplete*: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	*In progress*: A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	*Compulsory Withdrawal*: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.