



COURSE OUTLINE

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Course Name: Math 12 - Part 2

Department Head/Coordinator: Costa Karavas/Peter Herd **Effective Date:** September 2014

| | | | |
|--------------------------------------------------|-----------|----------------------------------------------|-----------|
| School or Centre: | | Department: | |
| School of Arts and Science | | CF Mathematics and College and Career Access | |
| Course History: | | Year of Study: | |
| Revised Course | | ABE Provincial Level (Grade 12) | |
| Name of Replacing Course (if applicable): | MATH 0993 | Course Number: | MATH 0993 |
| | | Number of Credits: | N/A |

Course Pre-requisites (if applicable):

VCC MATH 0983 with a C-, or Foundations of Mathematics 12 with a C.

Course Co-requisites (if applicable):

PLAR (Prior Learning Assessment & Recognition)

No Yes (details below):

MATH 0993 Challenge Exam with a C-

Course Description:

MATH 0993 is the second half of ABE Provincial Level Algebra and Trigonometry Mathematics and provides students with the algebra and trigonometry skills needed for entering post-secondary programs requiring Mathematics 12. Students are introduced to trigonometric functions and their inverses, graphs of circular functions, trigonometric identities and equations, solving triangles using sine and cosine laws, systems of equations, conic sections, sequences and series.

Both MATH 0983 and MATH 0993 are required for completion of ABE Provincial Level Algebra and Trigonometry Mathematics.

Note to instructors: An instructional strategy is an approach that an instructor uses to achieve the learning outcomes (e.g., lecture, case study, video, group work).

Instructional Strategies:

Option 1: Class-based - uses a lecture-based model. Class time is also used for group work, activities, concept-development and problem solving.

Option 2: Self-paced - uses an individualized, one-one model with personalized attention and continuous intake.

Course Learning Outcomes:

Students will meet the competencies for ABE Provincial Level Algebra and Trigonometry Mathematics as stated in the 2013-2014 Articulation Handbook at <http://www.aved.gov.bc.ca/abe/docs/handbook.pdf>

Program Learning Outcomes:

N/A

Evaluation/Grading System *(Click on drop down box arrows to see list of options)*

| Grading System | Specify if 'Other': | Specify Passing Grade: |
|----------------|---------------------|------------------------|
| Letter Grades | | D |

Components and Weighting of the Assessment/Evaluation Plan: *(Click on drop down box arrows to see list of options)*

| Type | Percentage | Evaluation Plan (provide a brief explanation for each component especially if value exceeds 35%): |
|---------------|------------|------------------------------------------------------------------------------------------------------|
| | | Class-based Option |
| Quizzes/Tests | 70 | Combination of tests, quizzes, assignments and/or midterms |
| Final Exam | 30 | |
| | | OR Self-paced Option |
| Quizzes/Tests | | 75%: 5 unit tests at 15% each |
| Final Exam | | 25% |
| Total | | 100 |

Learning Environment/Type *(Select all that are used within the course)*

| Instruction Type | Hours Per Instruction Type | Comments |
|--------------------------|----------------------------|-------------------------------------|
| L - Classroom | 60 | Option 1: College Foundations |
| E - Seminar | 30 | |
| | | OR |
| S - Self-paced | 90 | Option 2: College and Career Access |
| | | |
| Enter Total Hours | 90 | |

Resource Material(s):

Resources are items in addition to tuition that the student is responsible for purchasing. Course resource information will be supplied by the department/instructor.

Course Topics and Sequence Covered:

1. Trigonometric Functions
2. Identities, Inverse Functions and Equations
3. Sequences and Series
4. Applications of Trigonometry
5. Systems of Equations
6. Conic Sections

VCC Education and Education Support Policies

There are a number of **Education** and **Education Support** policies that govern your educational experience at VCC, please familiarize yourself with them.

The policies are located on the VCC web site at:

<http://www.vcc.ca/about/governance--policies/policies/>

To find out how this course transfers, visit the BC Transfer Guide at www.bctransferguide.ca.

FOR COMMITTEE USE ONLY

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|--------------------------------------------|--|----------------------------------------------------|--|
| Date Approved by Education Council: | | Date Approved by VCC Board (if applicable): | |
|--------------------------------------------|--|----------------------------------------------------|--|