

# CAMOSUN COLLEGE School of Access Academic and Career Foundations Department

MATH 059 X01 Intermediate Math for Ship Stability

Winter 2012 (January 3, 2012 to January 19, 2012)

#### **COURSE OUTLINE**

The Approved Course Description is available on the College website http://www.camosun.bc.ca/learn/calendar/index.html

 $\Omega$  Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records.

#### 1. Instructor Information

(a) Instructor: Rusekampunzi Augustin

(b) Office hours:14:30 to 15:00 Monday to Thursday(CBA 110)

(c) Help Centre hours: Not Applicable

(d) Location: Interurban Campus (Tech 260)

(e) Phone: 250\_370 3945 (Voice Mail Only)

(f) E-mail: ruse@camosun.bc.ca

### 2. Intended Learning Outcomes

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

- 1. Demonstrate knowledge of the language, principles, and operations of basic algebra, geometry and trigonometry.
- 2. Apply a variety of strategies in solving math-related problems.
- 3. Apply knowledge and skills in basic algebra, geometry and trigonometry to solve problems related to study in the Nautical Program.
- 4. Use knowledge of algebra, geometry and trigonometry as a basis for further study in the Nautical Program.

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## 3. Required Materials

- a) Course pack available from instructor
- b) scientific calculator (Sharp EL531W for MATH 072)

#### **Supplementary Materials**

- a) textbook: *Developmental Mathematics*, 6<sup>th</sup>/7<sup>th</sup>/8<sup>th</sup> edition, Marvin Bittinger/Judith Beecher
- b) module: Trigonometry (ABE Intermediate Mathematics module 14), British Columbia

#### 4. Course Content

Unit 1	<ul> <li>Introduction</li> <li>Exponents and Roots</li> <li>Order of Operations</li> <li>Substituting Data into Formulae</li> </ul>
Unit 2	<ul><li>Introduction to Algebra</li><li>Solving Algebraic Equations</li></ul>
Unit 3	Manipulating Formulae
Unit 4	<ul> <li>Nautical Formulae</li> <li>Area Formulae excluding the Trapezoid Rule and Simpson's Rule</li> </ul>
Unit 5	<ul><li>Trapezoid Rule and Simpson's Rule</li><li>Volume and Surface Area</li></ul>
Unit 6	<ul> <li>Density and Specific Gravity</li> <li>Metric Units</li> <li>Conversions</li> <li>Pythagorean Theorem</li> </ul>
Unit 7	<ul><li>Trigonometry with Applied Problems</li><li>Graphs</li></ul>
Unit 8	<ul> <li>Linear Interpolation of Tables</li> <li>Moments</li> </ul>

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#### 6. Grading System

Competency based grading system

Grade	Description
COM	The student has met 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.

# 7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

#### LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, Registration, or on the College website <a href="http://camosun.ca/services/">http://camosun.ca/services/</a>

#### **ACADEMIC CONDUCT POLICY**

It is the student's responsibility to become familiar with the content of the Academic Conduct Policy. The policy is available in each School Administration Office, Registration, and on the College website <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf</a>

#### **ACADEMIC PROGRESS POLICY**

The Academic Progress Policy designed to enhance a learner's likelihood of success. Students should become familiar with the content of this policy, The policy is available in each School Administration Office, Registration, and on the College website <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-&-instruction/e-1.1.pdf</a>