DEPARTMENT OF POWER ENGINEERING

COURSE OUTLINE – FALL 2011

POF 412 – Math / Mechanics / Thermodynamics

INSTRUCTOR: Augustine Ebinu **PHONE:** 780-835-6692
OFFICE: PS 130 **E-MAIL:** AEbinu@GPRC.ab.ca

OFFICE HOURS: 8:00 am – 4:30 pm

PREREQUISITE(S)/COREQUISITE: 50% In English 30-1 or English 30-2 or equivalent, 50% in Pure Math 20 or Applied Math 20 or equivalent, Science 20 or Physics 20 or equivalent, Career Investigation Report, Mature Students (if approved by Lead Instructor & Student Services)

REQUIRED TEXT/RESOURCE MATERIALS:

Material Required:
PE4A Book 1, units 1-3
PE4A Workbook, Book 1
PE3 Section 1 Chapter 1 & 3
PE Book of Formula
Material Suggested:
Reeds Math for Engineers
PE Math and Physical Sciences Work book

CALENDAR DESCRIPTION:

Review of basic mathematics. Mensuration using S.I. units. Introduction of elementary trigonometry. Basic Principles of physics and mechanics, including stress and strain, friction, force work power and energy, and power transmission. Introduction to the application of thermodynamics to power plants, designed to acquaint students with topics such as heat and temperature, thermal expansion of solids, liquids and gases, specific, sensible and latent heat, properties of steam and basic chemical

and physical properties.

CREDIT/CONTACT HOURS: 91 hours

DELIVERY MODE(S): Fairview Campus only

OBJECTIVES:

To ensure student is knowledgeable and competent in basic mathematics as it applies to Power Engineering.

TRANSFERABILITY: As per ABSA requirements

GRADING CRITERIA:

Method	Percentage	Minimum
Course assignments/workbooks	15%	50%
CML quizzes	15%	50%
Unit Exams	30%	50%
Final Exam	40%	50%
	100%	50%
		65% average, with no mark below 50%

EXAMINATIONS: As per Power Engineering Student Manual

STUDENT RESPONSIBILITIES: As per Power Engineering Student Manual

STATEMENT ON PLAGIARISM AND CHEATING:

Please refer to pages 49-50 of the College calendar regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

COURSE SCHEDULE/TENTATIVE TIMELINE:

Aug 30-Nov. 12, 2010
Monday- Thursday – 0830-1020
Monday – Thursday - 1230-1430