



PSW PATHWAY TO PN

COURSE NAME: MATHEMATICS
COURSE CODE: MATH 1004
CREDIT HOURS: 28 hours
PREREQUISITES: NONE
COREQUISITES: NONE
EFFECTIVE DATE: January, 2009
PROFESSOR: Laura Bulmer
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PLAR ELIGIBLE: YES () NO (x)

NOTE TO STUDENTS: Academic Departments at George Brown College will NOT retain historical copies of Course Outlines. We urge you to retain this Course Outline for your future reference.

FOR OFFICE USE ONLY	
ORIGINATOR	Laura Bulmer (January, 2007)
CHAIR:	_____
	SIGNATURE
	DATE
DATE OF REVISION:	_____

EQUITY STATEMENT: George Brown College values the talents and contributions of its students, staff and community partners and seeks to create a welcoming environment where equity, diversity and safety of all groups are fundamental. Language or activities which are inconsistent with this philosophy violate the College policy on the Prevention of Discrimination and Harassment and will not be tolerated. The commitment and cooperation of all students and staff are required to maintain this environment. Information and assistance are available through your Chair, Student Affairs, the Student Association or the Human Rights Advisor.

STUDENT RESPONSIBILITIES: Students should obtain a copy of the *Student Handbook* and refer to it for additional information regarding the grading system, withdrawals, exemptions, class assignments, missed tests and exams, supplemental privileges, and academic dishonesty. Students are required to apply themselves diligently to the course of study, and to prepare class and homework assignments as given. Regular attendance, though not a requirement, is strongly advised. Past student performance shows a strong relationship between regular attendance and success.

COURSE DESCRIPTION:

This course provides a review of fundamental mathematical skills required for the Practical Nursing program. Specifically, MATH 1104 (Mathematics for Practical Nurses). Concepts covered include: calculations with whole numbers, fractions, decimals, percentages, ratio and proportion. Focus will be put on solving problems accurately. An introduction into the Apothecary & Household and SI system of measurements will be provided as well.

ESSENTIAL EMPLOYABILITY SKILLS:

As mandated by the Ministry of Training, Colleges and Universities, essential employability skills (EES) will be addressed throughout all programs of study. Students will have the opportunity to learn (L) specific skills, to practice (P) these skills, and/or be evaluated (E) on the EES outcomes in a variety of courses. The EES include communication, numeracy, critical thinking and problem solving, information management, interpersonal and personal skills. The faculty for this course has indicated which of the EES is; learned (L), Practiced (P) or Evaluated (E) in this course:

Skill	T	P	E	Skill	T	P	E
To communicate clearly, concisely and correction in written, spoken and visual form that fulfills the purpose and meets the needs of the audience	X	X	X	To locate, select, organize and document information using appropriate technology and information sources	X	X	X
To respond to written, spoken or visual messages in a manner that ensures effective communication	X	X	X	To show respect for the diverse opinions, values, belief systems and contributions of others	X	X	X
To execute mathematical operations accurately	X	X	X	To interact with others in groups or in teams in ways that contribute to effective working relationships and the achievement of goals	X	X	X
To apply a systematic approach to solve problems	X	X	X	To manage the use of time and other resources to complete projects	X	X	X
To use a variety of thinking skills to anticipate and solve problems	X	X	X	Adapt to new situations and demands	X	X	X
To analyze, evaluate and apply relevant information from a variety of sources	X	X	X	Assess own skills, knowledge and experience	X	X	X
				To take responsibility for my actions, decisions and consequences	X	X	X

COURSE OUTCOMES:

Upon completion of this course, students will be able to:

1. Describe how the application of accurate mathematics relates to nursing practice.
2. Calculate basic mathematical problems accurately. (including addition, subtraction, division and multiplication)
3. Solve problems involving ratio, percentages and proportion.
4. Solve equations involving whole numbers, fractions, decimals and percentages.
5. Calculate and convert within the SI system of measurement
6. Calculate and convert within the apothecary and household system of measurement.

DELIVERY METHODS:

Concepts will be introduced and reviewed in a lecture format.

Following the lecture practice time will be provided within class time (and with Professor support). Take home exercises will be provided for additional learning.

LIST OF TEXTBOOKS AND OTHER TEACHING AIDS:

1. Handouts from Professor (Textbook TBA)
2. Niblett, Vicki. **A Nurse's Guide to Dosage Calculation Giving Medication Safely**, Lippincott, Williams and Wilkins, 2006. (optional)

TESTING POLICY:

A student who is absent from any Pathway program course on a day when a test (examination) is to be written, an assignment is due, a presentation is to be given, or any evaluation activity is scheduled, **MUST** notify the course Professor by leaving a message in the Professor's voice mail **PRIOR** to the scheduled evaluation activity.

Voice messages **MUST** include:

- a) The student's full name and the phone number where she/he can be reached that day
- b) The date and time of the call
- c) The evaluation activity that will be missed

The Professor will then return the call to make alternate arrangements. A deferred test/exam privilege may be granted for circumstances arising on compassionate grounds (i.e. death in the family) a student who misses a scheduled test may be permitted to write a make up test at the end of the course at the discretion of the course Professor. The value of the make up activity will be equivalent to the evaluation activity missed. The status of students who do not follow the above process will be reviewed by the Promotions Committee at semester end and may result in a grade of "F" for fail. (See Promotion Policies and Procedures and Student Handbook)

TESTING POLICY (continued)

NOTE: throughout the course, no calculators or mechanical devices will be permitted to assist in the calculation process during class work or testing

EVALUATION SYSTEM:

During the first class, students will be given an assessment quiz. This will help to identify strengths and weakness for both the student and Professor. The mark from this quiz will not be applied to the student's final grade. It is meant for assessment purposes only.

Students are expected to attend all classes and must assume responsibility for any class materials missed.

Test or Quiz	% of Final Grade
Quiz 1	20
Quiz 2	20
Quiz 3	20
FINAL Comprehensive exam	40

GRADING SYSTEM:

Students must attain a minimum grade of 80% to pass MATH 1004.

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A+/A 86-100	B+ 77-79	C+ 67-69	D+ 57-59	Below 50	F
A- 80-85	B 73-76	C 63-66	D 50-56		
	B- 70-72	C- 60-62			

Excerpt from the College Policy on Academic Dishonesty:

The *minimal* consequence for submitting a plagiarized, purchased, contracted, or in any manner inappropriately negotiated or falsified assignment, test, essay, project, or any evaluated material will be a grade of zero on that material.

TOPICAL OUTLINE:

Week	TOPIC	OUTCOME	CONTENT
One	Introduction Assessment Quiz	1	Course review History of Math Assessment Quiz
Two/Three	Basic Mathematics	1,2	Addition, Subtraction, Multiplication and Division
Four/Five	Week 4: Quiz 1 Decimals	2,3	Definitions Rules Rounding
Six/Seven	Fractions	2,3	Definitions Types of Improper fractions Mixed numbers
Eight	Quiz 2 Percentages	2,3,4	Different forms of
Nine/ten	Ratios	2,3,4	Ratio: expressing ratios as fractions, decimal numbers and percents
Eleven/twelve	Week 11: Quiz 3 Proportion	2,3,4	Introduction
thirteen	Apothecary and Household Management system SI System of Measurement	2,5	Introduction
Thirteen/fourteen	Measurement continued Review for Final	2,6	Practice Review
Fourteen	Final Exam	1,2,3,4,5,6	Comprehensive Content from week 2-9