



Cambrian College
School of Community & Corporate Learning
Course Outline

Course Title	Teaching Math Strategies				
Course Code:	TEA1001	Credit Value:	2	Credit Hours:	30
Programs:	CNED				
Equivalencies		Prerequisites		Corequisites	

This course may be delivered in a variety of different formats: 100% in-class, 100% online (or a blend of both), videoconferencing, distributed learning or off-campus. Please confirm with your faculty member which format will be used for your section of this course.

General Education Course:

Eligible for PLAR:

COURSE DESCRIPTION

In this course, students will gain an understanding and apply the skills that can lead to success at learning mathematics. Throughout the course students will examine their strengths and weaknesses, learning preferences and identify which learning strategies work best for their academic success with mathematics. Students will examine why math is different and determine how to assess math learning strengths, reduce math and math test anxiety, create a positive study environment, understand and improve memory, improve note-taking and listening skills, improve reading and homework techniques for math, improve math test-taking skills, increase motivation to learn math, and develop skills to work with students with disabilities to help them to learn math.

Date: February 14, 2013

Prepared By: Marlene Mcintosh

Approved by: *Louise Turcotte*
 Louise Turcotte
 Chair, School Of Community & Corporate Learning

Effective: Spring 2013

RELATIONSHIP TO PROGRAM VOCATIONAL OUTCOMES

PROGRAM LEVEL
This course contributes to your program by allowing you to demonstrate the following vocational outcomes:

COURSE CURRICULUM**Topics/Concepts Covered in This Course**

- Math is different
- Math learning strengths
- Math anxiety and math test anxiety
- Creating a positive study environment
- The learning process for math
- Note-taking for math
- Reading math textbooks
- Motivation to learn math
- Helping students with disabilities to learn math

COURSE LEVEL: Learning Outcomes and Objectives	
To earn credit for this course, you must reliably demonstrate your ability to:	
Learning Outcome	Objectives
1. Identify differences in math versus other school subjects	1.1 Describe differences between high school and college math 1.2 Discuss why math is similar to learning music or sports 1.3 Assess attitudes towards learning math
2. Identify math learning strengths	2.1 Describe several characteristics that affect one's ability to learn math 2.2 Identify characteristics of math instruction that affect a student's performance 2.3 Discuss ways to enhance math knowledge before beginning a math course 2.4 Identify barriers that affect a student's ability to do well in math
3. Identify ways to reduce math anxiety and math test anxiety	3.1 Discuss how math anxiety develops 3.2 Describe how test anxiety interferes with a student's ability to do well on a test 3.3 Describe techniques that can be used to reduce and control math and test anxiety
4. Use strategies to create a positive study environment and manage time	4.1 Describe and give examples of how to create a good study environment 4.2 Describe ways to motivate and manage time in order to do math homework and to study math

Learning Outcome	Objectives
5. Make the connection between the learning process and how math is learned depending on the student's learning preference	5.1 Describe how math information is processed through each stage of memory 5.2 Identify learning styles and modalities that are beneficial in the memory process for math 5.3 Describe a system of strategies that help improve math learning
6. Identify ways to improve note-taking and listening skills for math	6.1 Describe how to create notes and study books for math 6.2 Identify methods that can be used to listen effectively and identify important information in an instructor's lecture
7. Use strategies to read math textbooks and to do math homework	7.1 Describe a math textbook reading strategy 7.2 Describe the purpose of math homework
8. Identify ways to improve math test-taking	8.1 Describe ways to approach a math test 8.2 Describe ways to use a math test after it has been returned in order to improve
9. Identify ways to improve motivation to learn math	9.1 Describe strategies to develop an internal locus of control 9.2 Define learned helplessness 9.3 Describe ways to overcome procrastination and to improve self-esteem and self-efficacy
10. Identify ways to help students with disabilities to learn math	10.1 Define learning disability 10.2 Describe ways that learning disabilities interfere with the learning process and how that can interfere with a student's ability to learn math 10.3 Discuss math accommodations that may be useful for students with learning disabilities, traumatic brain injuries, and ADHD

Essential Employability Skills

Communication

- reading
- writing
- visual literacy

Information Management

- gathering and managing information
- internet skills

Numeracy

- understanding and applying math concepts and reasoning
- analyzing and using numerical data
- conceptualizing

Interpersonal

- not applicable

Critical Thinking and Problem Solving

- analyzing
- synthesizing
- evaluating
- decision making
- creative and innovative thinking

Personal

- managing self
- demonstrating personal responsibility

General Education Themes

- Personal understanding

Delivery Method

- Online: course content will be delivered online

Learning Activities

- Research
- Self-Directed Learning
- Presentations
- Reflective Writing
- eLearning Components

Resources Required

Additional Supplies

Textbook

Nolting, Paul. (2008). Winning at math: CS3 (5th ed.) Bradenton, FL: Academic Success Press. 9780940287402

Evaluation Plan

Grading Scheme

A	80% - 100%
B	70% - 79%
C	60% - 69%
D	50% - 59%
F	0% - 49%

Evaluation Method	Value (%)
Assignments	100.00%
Ten assignments, each worth 10%	
**NOTE: Students must complete all 10 assignments in order to pass the course.	

ADDITIONAL INFORMATION

College

Academic Policies

Students must adhere to the following policies (available on AcadNet): Attendance Policy, Cheating Policy, Code of Conduct, Procedures for Student Misconduct, and Students' Rights and Responsibilities.

Student with a Disability

If you are a student with a disability, we encourage you to identify yourself by going in person to our Glenn Crombie Centre for disability services (Room 2504); by calling (705) 566-8101, Ext. 7420; or by e-mailing disabilityservices@cambrianc.on.ca so that support services may be arranged for you.

If you require alternative format for any course material due to a disabling condition, please make your request as soon as possible to your Disability Advisor at The Glenn Crombie Centre.

Out-of-Office Assistance

The teacher shall inform his/her students of availability for out-of-office assistance in keeping with the academic needs of the students.

Evaluation Protocol

Cambrian College reserves the right to alter the "Evaluation" factors in any course under exceptional circumstances (e.g., pandemic events, force majeure, unplanned College closures, labour interruptions, unplanned faculty staffing changes). Professors will notify students regarding any resulting changes to the "Evaluation" criteria. Students will be responsible for obtaining this information from the faculty.

Prior Learning Assessment and Recognition (PLAR)

Students may discuss PLAR with their faculty member or program coordinator, or contact:

Student Success Advisor

Phone: (705)566-8101 x 7584

Toll Free in Ontario: 1-800-461-7145 x 7584

Email: PLAR@cambriancollege.ca

Transfer Credit

Students wishing to have courses from other programs or institutions assessed for equivalency and transfer credit should arrange a meeting with the program/subject coordinator to discuss eligibility and required documentation within the first two weeks of the course.

Electronic Devices

Non-approved electronic devices, including cell phones, are not to be turned on while in class or during evaluations.

Indigenous, Aboriginal, First Nations, Metis, Inuit Students

We encourage you to come to Wabnode, Centre for Aboriginal Services, Room 2133, to access the student services and other available resources.

College Evacuation

In the case that Cambrian College needs to be evacuated during a scheduled graded activity, the faculty member responsible for the assessment will determine if the activity has been compromised. The faculty member will be responsible for determining the most appropriate and reasonable response to meet the course requirements and will communicate that response to learners.

College Sanctioned Events

As per the College's Attendance Policy, students should not be penalized for being absent due to a College sanctioned event (e.g., varsity sports, field trips, placements); however, they must notify the instructor prior to taking part in any such event.