

Online Flexible-Paced

Course Name	Apprenticeship & Workplace Mathematics 11, Flexible-Paced
Teacher	Ms. Jennifer Wong
Contact Information	jewong@sd43.bc.ca Cell Phone: 604-788-9983
Location	Online
Course Site	http://sd43.knowplace.ca/course/view.php?id=221 (username/password required)
Course Resources	<p>All are on the course site.</p> <p>The following are also required for the course:</p> <ul style="list-style-type: none"> • Scientific calculator <i>(Please see the following website regarding the Ministry of Education's calculator policy:</i> http://www.bced.gov.bc.ca/exams/calculators/) • Ruler with cm/mm and inches (1/16ths) • Compass (will be used in Unit 5)

Online Flexible-Paced –There are no scheduled classes in flex-paced courses. In a flex-paced course, a student has a maximum of 10 months to complete a course, which means students are not eligible to be enrolled in this course at any other school while completing the course with Coquitlam Open Learning. This is **not** an "at your own pace" course. You are given [due dates](#) and are required to submit assignments regularly as well as regularly communicating with the teacher and other online students. The 'flexibility' comes in the time of day and the location you work on the course.

The **aim of Apprenticeship & Workplace Mathematics 11** is for students to use communication in order to learn and express their understanding, make connections among mathematical ideas, other concepts in math, everyday experiences and other disciplines, demonstrate fluency with mental math and estimation, develop and apply new mathematical knowledge through problem solving, develop mathematical reasoning, select and use technology as a tool for learning and solving problems, develop visualization skills to assist in processing information, making connections and solving problems.

Taken from:

http://www.bced.gov.bc.ca/irp/pdfs/mathematics/WNCPmath1012/2008math1012wncp_ccf.pdf

Apprenticeship & Workplace Mathematics 11:

- ✓ Students will develop spatial sense through direct and indirect measurement
- ✓ Students will develop spatial sense
- ✓ Students will develop number sense and critical thinking skills
- ✓ Students will develop algebraic reasoning
- ✓ Students will develop statistical reasoning

Taken from:

http://www.bced.gov.bc.ca/irp/pdfs/mathematics/WNCPmath1012/2008math1012wncp_ccf.pdf

Apprenticeship & Workplace Mathematics 11 Online consists of **seven units** organized into **four modules**.

<u>Areas of Study</u>	<u>Modules</u>
<ul style="list-style-type: none"> ▪ Unit 1: Trigonometry ▪ Unit 2: Rate of Change 	Module 1
<ul style="list-style-type: none"> ▪ Unit 3: Displaying Numerical Data on Graphs ▪ Unit 4: Surface Area and Volume 	Module 2
<ul style="list-style-type: none"> ▪ Unit 5: Scale Representations 	Module 3
<ul style="list-style-type: none"> ▪ Unit 6: Banking ▪ Unit 7: Budgets 	Module 4

Evaluation

Send In Assignments (7 Assignments)	45%
Module Tests (4 Module tests)	55%

There will also be access to the student's grades on the course Moodle site: <http://sd43.bcln.ca>. The student should check to ensure that all scores are correct and up-to-date

Assignment Marks

There is a unit send in assignment at the end of each unit. You will also be able to check your assignment marks in Moodle. The criterion for grading is found on the course website along with the description for each assignment.

E-mail communications

Staying in touch is essential in an online course. I will be in contact with you via e-mail almost on a daily basis. Be sure to check your e-mail every day so as not to miss any important announcements.

Course Log On Information

To login to the course, you will need your Moodle ID and password. These are created and distributed on a yearly basis. I will distribute your login information via email. To access the course go to <http://sd43.knowplace.ca/login/index.php> and click on Course Login.

Assignment Submissions

Please submit your assignments electronically in the course Moodle site. You will need to print a paper copy of the assignment, write down your work, and scan the assignments as a PDF, or as images inserted into a Word or a similar document. You will submit the assignment directly in the course Moodle site. If you need help with this, please ask. With each assignment submission **always include your full name in the document. Please name your scanned assignment as: LastName_FirstName_MA11AW_unit X assignment**

Computer Requirements

You will need to have access to a computer from either school or home. A home computer is preferred as this will allow you greater flexibility when organizing your study time.

Windows PC and Macintosh minimum requirements:

- Windows 2000 or XP or MacOS X
- 64 MB RAM
- Internet connectivity
- Sound card and speakers
- Microsoft Office 2000 or XP or Microsoft Office X
- A printer

Computer Skills

Although I am available to help you it is recommended that you are able to:

- Use a scanner to scan your work as a PDF file or as images
- Insert scanned images into a Word document
- open applications
- send/receive e-mail
- send attachments in an e-mail
- save and locate files

If you need assistance in any of these areas, please contact me.

Plagiarism and Cheating

Any students that plagiarize any portion of an assignment will receive a zero and a possible comment on their report card. The problem will also be referred to administration. For your own protection, keep all drafts of all work until the end of the school year.

Apprenticeship & Workplace Math 11 Mark Breakdown

****denotes what are needed for substantive assignment and refund**

Module	Unit	Topic	Lesson	Marks	% of course	
Module 1	Unit 1 Trigonometry	Using Trig Ratios to Solve Right Triangles	Lesson 1			
		Problems Involving Right Triangles	Lesson 2			
		Problems Involving Two Right Triangles	Lesson 3			
		Unit 1 Send In Assignment		Lessons 1-3	100	6.43%
	Unit 2 Rate of Change	Slope	Lesson 1			
		Calculating Grade	Lesson 2			
		Calculating Slope on a Grid	Lesson 3			
	Unit 2 Send In Assignment		Lessons 1-3	100	6.43%	
	Module 1 TEST		Covers units 1 & 2	100	13.75%	
Module 2	Unit 3 Displaying Numerical Data on Graphs	Line Graphs	Lesson 1			
		Bar Graphs & Histograms	Lesson 2			
		Circle or Pie Graphs	Lesson 3			
		Unit 3 Send In Assignment	Lessons 1- 3			100
	Unit 4 Surface Area & Volume	Surface Area of Prisms	Lesson 1			
		Surface Area of Pyramids, Cylinders, and Cones	Lesson 2			
		Surface Area of Right Prisms and Cylinders	Lesson 3			
		Surface Area of Spheres, Cones and Pyramids	Lesson 4			
		Volume of Right Cylinders and Right Pyramids	Lesson 5			
		Volume of Cones and Spheres	Lesson 6			
		Unit 4 Send in assignment		Lessons 1-6	100	6.43%
	Module 2 TEST		Covers units 3 and 4		13.75%	
		Scale Models	Lesson 1			

Module 3	Unit 5 Scale Representations	Two Dimensional Scale Drawing	Lesson 2		
		Three Dimensional Scale Drawing	Lesson 3		
		Unit 5 Send in Assignment	Lessons 1 - 3	100	6.43%
		Module 3 Test	Covers unit 3	100	13.75%
Module 4	Unit 6 Banking				
		Type of Bank Accounts	Lesson 1		
		Simple and Compounds Interest	Lesson 2		
		Type of Credit Cards	Lesson 3		
		Loans, Lines of Credit, and Overdraft Protection	Lesson 4		
		Unit 6 Send in Assignment	Lessons 1 - 4	100	6.43%
	Unit 7 Budgets				
		Organizing a Budget	Lesson 1		
		Making a Budget	Lesson 2		
		Monitoring a Budget	Lesson 3		
			Unit 7 Send in Assignment	Lessons 1 - 3	100
	Module 4 TEST	Covers unit 6 and 7	100	13.75%	

You have 10 months from the date of registration to complete this course. You must progress a minimum of 10% to be considered on track and up-to-date. At reporting times, grades will be given to students who are up-to-date. An “I” (incomplete/in progress) report will be given to any student not up-to-date. This is of particular importance for Grade 12 students submitting marks to PSIs. We report in November, January, April and June.

<p><u>LETTER GRADES AND DEFINITIONS</u></p> <p>A (86-100%) Excellent or Outstanding Performance in relation the learning outcomes.</p> <p>B (73-85%) Very Good Performance in relation to learning outcomes.</p> <p>C+ (67-72%) Good Performance in relation to learning outcomes.</p> <p>C(60-66%) Satisfactory Performance in relation to learning outcomes.</p> <p>C- (50-59%) Minimally Acceptable Performance in relation to learning outcomes.</p> <p>I No demonstration of minimally acceptable performance in relation to learning outcomes in this reporting period.</p>
--

FINAL LETTER GRADES

F No demonstration of minimally acceptable performance in relation to the learning outcomes for the course.

W Student has withdrawn from the course.

SG Standing Granted. Acceptable level of performance though normal requirements not completed.

TS Transfer Granted. Standing is granted based on records from an institution other than a school.

Apprenticeship and Workplace Mathematics 11
Prescribed Learning Outcomes

The following document is taken from

https://www.bced.gov.bc.ca/irp/pdfs/mathematics/WNCPmath1012/2008math_app_wor_k11.pdf

[C] Communication

[PS] Problem Solving

[CN] Connections

[R] Reasoning

[ME] Mental Mathematics and Estimation

[T] Technology

[V] Visualization

Measurement

General Outcome: Develop spatial sense through direct and indirect measurement.

Specific Outcomes:

A1. Solve problems that involve SI and imperial units in surface area measurements and verify the solutions.

[C, CN, ME, PS, V]

A2. Solve problems that involve SI and imperial units in volume and capacity measurements.

[C, CN, ME, PS, V]

Geometry

General Outcome: Develop spatial sense.

Specific Outcomes:

B1. Solve problems that involve two and three right triangles

[CN, PS, T, V]

B2. Solve problems that involve scale
[PS, R, T, V]

B3. Model and draw 3-D objects and their views
[CN, R, V]

B4. Draw and describe exploded views, components parts and scale diagrams of simple 3-D objects
[CN, V]

Number

General Outcome: Develop number sense and critical thinking skills.

Specific Outcomes:

C1. Analyze puzzles and games that involve numerical reasoning, using problem-solving strategies.
[C, CN, PS, R]

C2. Solve problems that involve personal budgets
[CN, PS, R, T]

C3. Demonstrate an understanding of compound interest
[CN, ME, PS, T]

C4. Demonstrate an understanding of financial institution services used to access and manage finances
[C, CN, R, T]

C5. Demonstrate an understanding of credit options, including:

- credit cards
- loans

[CN, ME, PS, R]

Algebra

General Outcome: Develop algebraic reasoning

Specific Outcomes:

D1. Solve problems that require the manipulation and application of formulas related to:

- volume and capacity
- surface area
- slope and rate of change
- simple interest
- finance charges

[CN, PS, R]

D2. Demonstrate an understanding of slope:

- as rise over run
- as rate of change
- by solving problems

[C, CN, PS, V]

D3. Solve problems by applying proportional reasoning and unit analysis

[C, CN, PS, R]

Statistics

General Outcome: Develop statistical reasoning

Specific Outcomes:

E1. Solve problems that involve creating and interpreting graphs, including:

- bar graphs
- histograms
- line graphs
- circle graphs

[C, CN, PS, R, T, V]

For a list of curriculum outcomes, please visit the Ministry of Education website:

<http://www.bced.gov.bc.ca/irp/>