

8580 16th Ave., Burnaby, B.C. V3N 1S6

<http://online.sd41.bc.ca>

Telephone: (604)664-2526 Toll free 1-888-479-8882 Email:

Information online.info@sd41.bc.ca

Fax: (604)664-2527

Registration register.online@sd41.bc.ca

Course:	Workplace and Apprenticeship Math 10	Course Length: 10 months (approx 120 hours)
Teacher:		
Email:		
Phone:		
IM:		

Course Description: This course is designed to start you on a path towards direct entry into a trades program or into the workforce. The topics you'll cover include measurement, geometry, algebra and consumer decisions. As much as you can, you should focus on developing your critical-thinking skills and apply those skills when you face new problems.

You'll build on what you learned in previous math courses while you explore a range of new topics. Take charge of your own learning, and decide how much further you want to explore each topic. "Did You Know?" excerpts are intended to pique your interest while the course website offers a number of related external websites for you to explore.

Resources: No textbook required for this course.

Topic	Module
Measurement Systems	1
Measurement in Action	2
Geometry and Trigonometry	3
Money Matters	4

Each of the four modules is divided into sections.

Each sections features:

Lessons

Each lesson is designed to take you between 40 and 75 minutes depending on the content covered and activities involved. Lessons have a combination of reading and hands-on activities to give you a chance to process the material while being an active learner. Each lesson is made up of the following parts:

Essential Questions

Essential questions are based on the main concepts in each lesson. This activity will help you organize information and reflect on your learning.

Focus

This is a brief introduction to the lesson.

Get Started

This is a quick refresher of the key information and skills you will need to be successful in the lesson.

Activities

Throughout the lesson you will see three types of activities:

- Try This activities are hands-on, exploratory activities.
- Self-Check activities provide practice with the skills and concepts recently taught.

8580 16th Ave., Burnaby, B.C. V3N 1S6

<http://online.sd41.bc.ca>

Telephone: (604)664-2526 Toll free 1-888-479-8882 Email:

Information online.info@sd41.bc.ca

Fax: (604)664-2527

Registration register.online@sd41.bc.ca

- Mastering Concepts activities extend and apply the skills you learned in the lesson.

(These activities are not sent in for marks)

Explore

Here you will explore new concepts, make predictions, and discover patterns.

Bringing Ideas Together

This is the main teaching part of the lesson. Here, you will build on the ideas from the Get Started and the Explore. You will expand your knowledge and practice your new skills.

Lesson Summary

This is a brief summary of the lesson content as well as some instructions on what to do next.

Assignments

These are the exercises that are sent to your teacher for evaluation. You will be prompted, within each lesson, to complete certain parts of your section assignment.

Module Test

At the end of each module there will be a module exam. These exams are to be written under the supervision of teachers at Burnaby Online. The module exam will be similar in format to the Apprenticeship and Workplace Mathematics 10 Provincial Exam but the module exams will also include written response questions for which you must show your work. You will be able to use your AWM 10 Data Pages as a resource while you write the test. Please contact your teacher for more information.

Provincial exam

This is Provincially Examinable course. Provincial Exams are set by the Ministry of Education and are scheduled through out the school year.

How will your mark be calculated?

Engagement Unit	5%						
Balance of Course	95%						
<table border="1"> <tr> <td>Assignments</td> <td>25%</td> </tr> <tr> <td>Quiz</td> <td>25%</td> </tr> <tr> <td>Module Exam</td> <td>50%</td> </tr> </table>	Assignments	25%	Quiz	25%	Module Exam	50%	
Assignments	25%						
Quiz	25%						
Module Exam	50%						

Your final mark will be calculated as follows:

School Mark: 80%

Provincial Exam Mark: 20%

Learning Outcomes:

It is expected that students will:

MEASUREMENT

A1. Demonstrate an understanding of the Système International (SI) by:

- describing the relationships of the units for length, area, volume, capacity, mass and temperature
- applying strategies to convert SI units to imperial units

A2. Demonstrate an understanding of the imperial system by:

- describing the relationships of the units for length, area, volume, capacity, mass and temperature
- comparing the American and British imperial units for capacity
- applying strategies to convert imperial units to SI units.

A3. Solve and verify problems that involve SI and imperial linear measurements, including decimal and fractional measurements

A4. Solve problems that involve SI and imperial area measurements of regular, composite and irregular 2-D shapes and 3-D objects, including decimal and fractional measurements, and verify the solutions.

GEOMETRY

B1. Analyze puzzles and games that involve spatial reasoning, using problem-solving strategies.

B2. Demonstrate an understanding of the Pythagorean theorem by:

- identifying situations that involve right triangles
- verifying the formula
- applying the formula
- solving problems.

B3. Demonstrate an understanding of similarity of convex polygons, including regular and irregular polygons.

B4. Demonstrate an understanding of primary trigonometric ratios (sine, cosine, tangent) by:

- applying similarity to right triangles
- generalizing patterns from similar right triangles
- applying the primary trigonometric ratios
- solving problems.

B5. Solve problems that involve parallel, perpendicular and transversal lines, and pairs of angles formed between them.

B6. Demonstrate an understanding of angles, including acute, right, obtuse, straight and reflex, by:

- drawing
- replicating and constructing
- bisecting
- solving problems.



Burnaby Online Program

8580 16th Ave., Burnaby, B.C. V3N 1S6

Telephone: (604)664-2526 Toll free 1-888-479-8882 Email:

Fax: (604)664-2527

<http://online.sd41.bc.ca>

Information online.info@sd41.bc.ca

Registration register.online@sd41.bc.ca

NUMBERS

C1. Solve problems that involve unit pricing and currency exchange, using proportional reasoning.

C2. Demonstrate an understanding of income, including:

- wages
- salary
- contracts
- commissions
- piecework

to calculate gross pay and net pay.

ALGEBRA

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

- perimeter
- area
- the Pythagorean theorem
- primary trigonometric ratios
- income.

Student Expectations

Students are expected to:

- contact the teacher by instant messaging, email or phone when help is needed or questions arise
- be actively engaged and submitting work on a regular basis
- inform the teacher when they will be inactive for two or more weeks.
- be aware that if they are inactive in a course for four or more weeks they may be removed from that course
- check their email at least twice a week
- create and submit completed solutions for all activities in the unit/chapter before requesting a test.
- cite all sources properly
- answer in their own words
- check that their work and tests have been marked.
- make time available to come in to Burnaby Online to write tests.
- make appointments to write tests at least 2 school days in advance.