

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](mailto:Information.online.info@sd41.bc.ca)

Fax: (604)664-2527

Registration [register.online@sd41.bc.ca](mailto:register.online@sd41.bc.ca)

Course:	Apprenticeship and Workplace Ma 11	Course Length: 10 months (approx 120 hours)
Teacher:		
Email:		
Phone:		
IM:		

**Course Description:** This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into the majority of trades and for direct entry into the work force. Topics include algebra, geometry, measurement, number and statistics. The seven mathematical process (communication, connections, mental mathematics and estimation, problem solving, technology and visualization) are interwoven throughout the mathematical topics.

**Resources:** There is no textbook required for this course.

### Course Layout

Module	Unit	Topic
1	1	Trigonometry
	2	Slope
2	3	Representing Data Graphically
	4	Surface Area and Volume
3	5	Scale and Scale Drawing
	6	Financial Services Industry
4	7	Personal Money Management

**Each of the four modules is comprises of:**

**Units, featuring:**

***Lessons***

Each lesson is designed to take you between 40 and 75 minutes depending on the content covered and activities involved. Lessons are presented as video clips.

***Note taking tool***

This is a printable tool that you can use to create study notes

***Lesson and assignment tracker***

This checklist includes the number of lessons and assignment in the unit. Use it to track your progress in each unit

***Practice Questions***

Practice questions with solutions are included with each lesson. It is a self assessment tool so that you can determine whether you fully understand the concepts taught in each lesson.

***Hand-in Assignment***

This is an assignment at the end of the unit which you must submit to your teacher for marks.

**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.

**Final Exam**

At the end of the course will be final exam which you will be required to complete

**How will your mark be calculated?**

<b>Engagement Unit</b>		5%
<b>Balance of the Course</b>		95%
Assignments	40 %	
Unit Exams	40 %	
Final Exam	20 %	

**Learning Outcomes:**

## Prescribed Learning Outcomes: Apprenticeship and Workplace Math 11

It is expected that students will:

### MEASUREMENT

- A1. Solve problems that involve SI and imperial units in surface area measurements and verify the solutions.
- A2. Solve problems that involve SI and imperial units in volume and capacity measurements.

### GEOMETRY

- B1. Solve problems that involve two and three right triangles.
- B2. Solve problems that involve scale.
- B3. Model and draw 3-D objects and their views.
- B4. Draw and describe exploded views, component parts and scale diagrams of simple 3-D objects.

### NUMBERS

- C1. Analyze puzzles and games that involve numerical reasoning, using problem-solving strategies.
- C2. Solve problems that involve personal budgets.
- C3. Demonstrate an understanding of compound interest.
- C4. Demonstrate an understanding of financial institution services used to access and manage finances.
- C5. Demonstrate an understanding of credit options, including:
  - credit cards
  - loans.

### ALGEBRA

- 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.
- D2. Demonstrate an understanding of slope:
  - as rise over run
  - as rate of change
  - by solving problems.
- D3. Solve problems by applying proportional reasoning and unit analysis.

### STATISTICS

- E1. Solve problems that involve creating and interpreting graphs, including:
  - bar graphs
  - histograms
  - line graphs
  - circle graphs.

### Student Expectations

**Students are expected to:**



# Burnaby Online Program

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](mailto:online.info@sd41.bc.ca)

Fax: (604)664-2527

Registration [register.online@sd41.bc.ca](mailto:register.online@sd41.bc.ca)

- 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.