

APPRENTICESHIP AND WORKPLACE MATH 11

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SCHEDULE: Monday 5:00pm-9:00pm

LEARNING CENTRE HOURS: Monday-Thursday 10:00am-2:00pm
Monday-Thursday 5:00pm-9:00pm
The Learning Centre is closed all statutory and school holidays.

INTRODUCTION

Apprenticeship and Workplace Mathematics 11 is designed to provide students with the mathematical understanding and skills required for entry into the majority of trades or direct entry into the workplace. Topics includes rates, graphing, geometry, measurement, trigonometry, scale representations, financial mathematics and budgeting.

PRESCRIBED LEARNING OUTCOMES

Geometry

- 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.*

Trigonometry

- B1 *Solve problems that involve two and three right triangles.*

Scale Representations

- 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.*

Financial Mathematics and Budgeting

- 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 and loans.*

Rate

- D2 *Demonstrate an understanding of slope as rise over run, as rate of change, by solving problems.*

Measurement

- D3 *Solve problems by applying proportional reasoning and unit analysis.*

Graphing

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

LEARNING RESOURCES

There is no textbook for this course. Instruction and practice material is found online. Your login information (Username and Password) will be e-mailed to you by your instructor. The website includes ‘send in assignments’ which can be done for practice but do not submit them. The solutions to the ‘send in assignments’ are also found on that website under the heading “Teacher Keys”.

APPRENTICESHIP AND WORKPLACE MATH 11 at CLOC

Apprenticeship and workplace Math 11 at CLOC is a self-paced, self-directed course. You will be expected to work independently and to manage your time productively. If needed, individual help is available from the math instructors at the Learning Centre.

EVALUATION

Evaluation in Apprenticeship and Workplace Math 11 includes 8 unit tests, one Midterm, and a Final Exam. All tests are to be written at CLOC during Learning Centre hours. We will **not** be using the Content Connections tests. ONE REWRITE is available for each unit test. There are NO REWRITES for the Midterm or the Final Exam. The Midterm covers units 1 – 4. The Final Exam covers units 5 - 8. The tests will be weighted as follows:

| <u>UNIT</u> | <u>CONTENT</u> | <u>PERCENT</u> |
|--------------------|-------------------------------|-----------------------|
| 1 | Ratio and Rate, Percents | 4 |
| 2 | Representing Data Graphically | 8 |
| 3 | Trigonometry | 8 |
| 4 | Slope | 8 |
| Midterm | Units 1 – 4 | 20 |
| 5 | Surface Area and Volume | 8 |
| 6 | Scale and Scale Drawings | 8 |
| 7 | Financial Services Industry | 8 |
| 8 | Personal Money Management | 8 |
| Final Exam | Units 5 – 8 | <u>20</u> |
| TOTAL | | 100 |

Unit 1 has a paper handout. All other units are online using web-based videos.