

# Workplace & Apprenticeship 10 Course Outline

## GENERAL INFORMATION:

- i. Workplace & Apprenticeship Math 10
- ii. This course is offered Semester 1 & 2; it is asynchronous; and it a self-paced independent study course.
- iii. Instructor: Ms. Aileen Nienaber
- iv. Teacher Access:
  - a. Send a private message in Moodle
  - b. Email: [aileen.nienaber@horizonsd.ca](mailto:aileen.nienaber@horizonsd.ca)
  - c. Leave a message with the secretary at my home school and I will get back to you as soon as possible  
1 306 944 2027 (Viscount Central School)

## COURSE DESCRIPTION:

- i. This course combines and rearranges the eleven Learning Outcomes (LOs) as outlined in the Saskatchewan Curriculum to develop five broad themes named below (see student assessment).
- ii. Prerequisites: Math 9.

## STUDENT LEARNING OUTCOMES:

- i. Demonstrate understanding of the preservation of equality including solving problems that involve the manipulation and application of formulas.
- ii. Analyze puzzles and games that involve spatial reasoning using problem solving strategies
- iii. Demonstrate using concrete, and pictorial models, and symbolic representations, understanding of measurement systems
- iv. Demonstrate, using concrete, and pictorial models, and symbolic representations, understanding of linear measurement, including units in the SI and Imperial systems of measurement
- v. Demonstrate, using concrete, and pictorial models, and symbolic representations, understanding of area of 2-D shapes and surface area of 3-D objects including units in SI and Imperial systems of measurement
- vi. Apply understanding of the Pythagorean Theorem to solve problems
- vii. Demonstrate understanding of similarity of convex polygons, including regular and irregular polygons
- viii. Demonstrate an understanding of primary trigonometric ratios (sine, cosine and tangent)
- ix. Demonstrate understanding of angles
- x. Apply proportional reasoning to solve problems involving unit pricing and currency exchange
- xi. Demonstrate understanding of income

**TEACHING STRATEGIES:**

- i. The course has eleven Learning Outcomes (LO). LO1 and 2 are addressed throughout the course.
- ii. It is expected that students will spend 5-8 hours completing the work involved in each Learning Outcome.
- iii. All assignments, discussions, choice decisions, and quizzes must be submitted prior to writing the Final Exam. Assignments are completed throughout the course to demonstrate understanding of the content areas.
- iv. While there are no set assignment due dates, continuous participation and progress are expected.
- v. Specific requirements of each Learning Outcome (LO) are provided in Moodle.
- vi. A Final Exam (closed-book) needs to be arranged mutually between the student, the home school (as supervision is required), and the course Instructor.

**COURSE MATERIALS:**

- i. All required course resources are provided within Moodle, or are available on the Internet. If additional readings are required, list the articles and indicate where they can be obtained.
- ii. Students require access to a computer, scanner, web-browser, Microsoft Office (or equivalent), the Internet, geometry set and graph paper. A smart phone camera would be useful (but is not required).

**EVALUATION:**

<b>Course Work:</b>	<b>Weighting:</b>
Rates, Ratios, & Proportional Reasoning (WA10.10)	10%
Earning an Income (WA10.1, WA10.11)	10%
Problem Solving & Reasoning (WA10.2)	5%
Systems of Measurement (WA10.3)	10%
Linear Measurement (WA10.1, WA10.4)	10%
Area & Surface Area (WA10.1, WA10.5)	10%
Angles, Triangles & Polygons (WA10.9, WA10.7)	10%
Solving Right Triangles (WA10.1, WA10.6, WA10.8)	<u>10%</u>
Total	75%
<b>Final Exam</b>	25%*
<b>TOTAL</b>	100%

*\* A student who achieves a mark of 80% or above can earn a recommend if they so choose, which means their final mark in the course will reflect what they earn on their Course Work.*



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**GENERAL TIMELINE:**

**TERM 1 COMPLETION DATES:**

Rates, Ratios, & Proportional Reasoning	September 20
Earning an Income	October 10
Problem Solving & Reasoning	October 25
Systems of Measurement	November 5
Linear Measurement	November 20
Area & Surface Area	December 5
Angles, Triangles & Polygons	December 20
Solving Right Triangles	January 20
Final Exam	TBD

**TERM 2 COMPLETION DATES:**

Rates, Ratios, & Proportional Reasoning	February 15
Earning an Income	March 20
Problem Solving & Reasoning	April 5
Systems of Measurement	April 20
Linear Measurement	May 1
Area & Surface Area	May 15
Angles, Triangles & Polygons	May 31
Solving Right Triangles	June 20
Final Exam	TBD