

LEARNING OUTCOMES:

As a result of taking this course, students will gain the ability to:

- solve problems involving slope, grades, angle of elevation, and rate of change
- construct bar graphs, histograms, line graphs, and circle graphs and identify the better display of data
- solve problems that involve SI and imperial units in surface area of 3-D objects
- estimate and calculate the volume and capacity of three dimensional objects
- calculate distances and angles using trigonometry of triangles
- solve complex problems in three-dimensions by decomposing them down into two or more right-angled triangles
- make scale models
- create drawings that represent two and three dimensions
- calculate the full-size measurements of objects from drawings
- identify the point of perspective of a given one-point perspective drawing of a 3-D object
- calculate simple and compound interest, and explain their relationship
- describe the advantages and disadvantages of debit and credit card purchases and state informed decisions about the use of credit cards
- describe ways that ensure the security of personal and financial information
- create a personal budget based on given income and expense data
- modify a budget to achieve a set of personal goals
- analyze the budget and prioritize expenses to balance a budget

TRANSFERABILITY:

This course is listed in the Alberta Transfer Guide. It is accepted at colleges and universities in Alberta as equivalent to Math 20-3. Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page

<http://www.transferalberta.alberta.ca>.

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

3 section tests (best 3 out of 4)	30 %
Midterm	25 %
Final Exam	45 %

****Note:** Even though 50% is a passing mark, a mark of at least 65% is recommended for success in future courses.

GRADING CRITERIA:

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	95-100	C+	2.3	67-69
A	4.0	85-94	C	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
B	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

See table on last page.

STUDENT RESPONSIBILITIES:

In addition to the Student Rights and Responsibilities as set out in the Northwestern Polytechnic website, the following guidelines will maintain an effective learning environment for everyone:

- Regular attendance is expected of all students in all mathematics courses. Your success in math is directly linked to your attendance. Attendance will be taken daily.
- Students are expected to be punctual. Arrive on time for classes and remain for the duration of scheduled classes.
- Refrain from disruptive talking or socializing during class time.
- Be respectful of others regarding food or beverages in the classroom. Clean up your eating area and dispose of garbage.
- Recycle paper, bottles, and cans in the appropriate containers.
- Children are not permitted in the classrooms.
- Students are expected to notify the instructor of any extenuating circumstances.
- Students are expected to silence cell phones during class time. No unspecified electronic devices will be allowed in exams.

STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

**Note: all Academic and Administrative policies are available on the same page.

Test #	% towards final grade	Topics	Recommended Test Date	Date written	Mark
1	10%	Chap. 1: Slope and Rate of Change & Chap. 2: Graphical Representations	January 29		
2	10%	Chap. 3: Surface Area, Volume, and Capacity	February 14		
Midterm Exam	25%	All of the Above	February 26		
3	10%	Chap.4: Trigonometry of Right Triangles & Chap. 5: Scale Representations	March 19		
4	10%	Chap. 6: Financial Services & Chap. 7: Personal Budgets	April 12		
FINAL Exam	45%	All of the Above	TBA (April 17-24) 3 hour exam		

*****All tests must be completed by April 12th.**

*****Midterm must be completed by March 4th.**