

Math 30-1

Course Outline

Instructor: Mr. Carder (scarder@rockyview.ab.ca)
Textbook: Pre-Calculus 12 (McGraw Hill Ryerson, 2012)
Calculator: TI-84+ is recommended

Units of Study

Unit 1 (3 weeks): Transformations and Function Operations (Chapters 1 & 10)

- Operations on Functions
- Translations
- Reflections
- Stretches
- Inverses

Unit 2 (4 weeks): Trigonometry (Chapters 4, 5 & 6)

- Unit Circle
- Trig Ratios
- Trig Equations
- Trig Identities
- Graphs of Trig Functions
- Transformations

Mini-Unit (1.5 weeks): Combinatorics (Chapter 11)

- Permutations
- Combinations
- Binomial Theorem

Unit 3 (3 weeks): Functions (Chapters 2, 3 & 9)

- Radical Functions
- Square Root of a Function
- Polynomial Functions
- Remainder Theorem
- Factor Theorem
- Rational Functions

Unit 4 (3 weeks): Exponential and Logarithmic Functions (Chapters 7 & 8)

- Exponential Functions
- Logarithmic Functions
- Transformations
- Solving Equations
- Laws of Logarithms

Evaluation:

Your class mark will be determined as follows:

Unit Tests (4)	42%
Chapter 11 Quiz	5.25%
Project	10.5%
Question Analysis	5.25%
Portfolio	7%
Diploma	30%

Class Expectations:

How Will You **RISE** in Math 30-1?

R – Responsibility: At all times, you are responsible for your own effort and attitude and how you interact with others. Always treat classmates, staff, and our learning space with respect.

I – Integrity: Be someone who is worthy of trust and admiration. Work submitted as your own must be created entirely by you. Credit others where credit is due: this includes citing information used in your work and also crediting and thanking those who help you on your way.

S – Strength: One of the best ways to learn is to fail. Embrace this, learn, and try again. This building is full of caring people. Seek help and support when you need it – from friends, teachers, and counsellors. Understand that we all experience stress and problems. How we deal with them and overcome them demonstrates strength in our character.

E – Excellence: Excellence can never be achieved without a foundation of responsibility, integrity, and strength. Excellence is PERSONAL excellence. Your personal excellence may look very different than another person. Set realistic goals and strive to meet them.

**"Don't be upset by
the result you
didn't get
with the work
you didn't do."**

Procedures when Absent:

- from a regular class: You are responsible to obtain missed notes from another student or check the Moodle page and catch up on the assignment listed on the assignment sheet.
- from a unit exam: The unit exam dates are posted well in advance. As such, if there is a conflict you need to let me know ASAP so that other arrangements can be made.

Phone Policy: Phones are unwelcome in this classroom. Students are asked to leave their phones in their vehicle or locker.

Important Dates:

Unit 1 Test	Sept 25
Project Quiz / Project Due	Oct 24
Unit 2 Test	Oct 30
Chapter 11 Quiz	Nov 13
Unit 3 Test	Dec 5
Unit 4 Test	Jan 8
Question Analysis Due	Dec 20
Portfolio Due	Jan 10