

School of Academic & Skill Development



Math 030A

Basic Mathematics

Date

3 Credits

Course Outline

INSTRUCTOR

OFFICE

E-MAIL

TELEPHONE

OFFICE HOURS

CLASSROOM

CLASS TIME

CRN

Applied Arts Office: Ayamdigut Campus, A2501, liberalarts@yukonu.ca, 867-668-8770

COURSE DESCRIPTION

Math 030A covers operations with whole numbers, integers and fractions, and introduces the fundamental concept of algebra. Together with Math 030B, these courses will prepare students for Math 051, 050 or an equivalent grade 11 algebra.

COURSE REQUIREMENTS

Completion of Math 020 or acceptance into University Access Pathways

EQUIVALENCY OR TRANSFERABILITY

Together, Yukon University Math 030A & MATH 030B fulfil the Intermediate-Developmental Mathematics requirements in the Adult Basic Education system (ABE) in British Columbia and Yukon.

For more information, please refer to the BC Adult Basic Education Articulation Handbook which may be found at <http://www.bctransferguide.ca/> Find further information at:

<https://www.yukonu.ca/admissions/transfer-credit>

LEARNING OUTCOMES

Math 030A meets the learning outcomes 1, 3, 8 and 9 of Mathematics: Intermediate Level—Developmental of the Adult Basic Education program found in the 2024/2025 edition of the ABE Articulation Handbook at <https://www.bctransferguide.ca/transfer-options/adult-basic-education/past-abe-guides/>.

For specific topics covered, see the Topic Outline section.

COURSE FORMAT

Delivery format

- This course is delivered in a blended format. Students are expected to attend face-to-face sessions on-campus or may attend through Zoom. Students will complete an assortment of synchronous and/or asynchronous online activities. All classes will be taught using a lecture format and all lectures will be recorded. Zoom is a synchronous (in real time) virtual format that enables face-to-face approaches to teaching and learning and allows the recording of the lectures. These classes take place at specified times. Students should plan on arriving or signing in a few minutes before class starts. Course materials will be available on the course Moodle page for students to access and print.

Workload

Students must attend all classes either in person or through Zoom and complete assigned homework and assignments. It is important to note that the homework time required for successful course completion will vary by individual.

EVALUATION

Attendance & Participation & Quizzes

Students should either attend in person or sign in for class at the assigned times. Attendance will be recorded. Attendance and online activities will count towards 10% of the final course grade.

- If a class is missed, it is the student's responsibility to watch the recorded class video or contact the instructor to determine what was covered.
- If a quiz is missed, it is the student's responsibility to inform the instructor and schedule a date and time to complete it within one week of the assigned date.

Assignments

There are three assignments to be completed, and while students may use notes and resources, they are required to demonstrate their own work. Assignments submitted after the due date will receive a deduction of up to 15%. Assignments cannot be accepted and will receive a grade of zero after they have

been returned to the class. If the due date is missed owing to an emergency, an alternate assignment may be given.

Unit Tests

Two in-class unit tests, each worth 15% of the final course grade, will be assigned. There is one final exam covering all chapters from 1 to 4, with an emphasis on chapters three and four. The final exam accounts for 30% of the course's final grade.

Attendance, Participation and Quizzes	25 %
Assignments (3)	15 %
Unit Tests (2)	30 %
Final Exam	30 %
Total	100%

Note: The passing mark for the course is 50%, but a final course mark of at least 65% for both Math 030A & Math 030B is required for admission to Math 051.

TEXTBOOKS & LEARNING MATERIALS

- Complete Math 030 binder available through the Yukon College Bookstore
- Three-ring binder with dividers, writing paper, graph paper, ruler, pencils, scientific calculator.

SUPPLEMENTARY MATERIALS

- Student's Solutions Manual available on-line and on Math 030 Moodle Page
- Math 030 Moodle Page
- World Wide Web Resources
- Khan Academy
- YouTube

RELATED COURSE REQUIREMENTS

It is highly recommended that all students have access to a computer or other device and Internet to do their studies. The minimum specifications for a student device are as follows:

Requirement	Windows-based PC	Apple PC Mac/macOS-based
Operating System	Windows 10	macOS X
Web Browser	Firefox, Edge or Google Chrome	Firefox, Edge or Google Chrome
RAM/Memory	4 GB	4 GB
Storage	5 GB of available space	5 GB of available space

COURSE WITHDRAWAL INFORMATION

Students may officially withdraw from a course or program without academic penalty up until two-thirds of the course contact hours have been completed. Specific withdrawal dates vary, and students should become familiar with the withdrawal dates of their program. See withdrawal information at www.yukonu.ca/admissions/money-matters

Refer to the YukonU website for important dates: www.yukonu.ca/admissions/important-dates

Refunds may be available. See the Refund policy and procedures at www.yukonu.ca/admissions/money-matters

ACADEMIC INTEGRITY

Students are expected to contribute toward a positive and supportive environment and are required to conduct themselves in a responsible manner. Academic misconduct includes all forms of academic dishonesty such as cheating, plagiarism, fabrication, fraud, deceit, using the work of others without their permission, aiding other students in committing academic offences, misrepresenting academic assignments prepared by others as one's own, or any other forms of academic dishonesty including falsification of any information on any Yukon University document.

Please refer to Academic Regulations & Procedures (updated bi-annually) for further details about academic standing, and student rights and responsibilities: www.yukonu.ca/policies/academic-regulations

ACADEMIC ACCOMMODATION

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon University Academic Regulations (available on the Yukon University website at www.yukonu.ca/policies/academic-regulations)

It is the student's responsibility to seek these accommodations by contacting the Learning Assistance Centre (LAC): LearningAssistanceCentre@yukonu.ca.

TOPIC OUTLINE

Estimating Skills/Calculator Use

It is expected that learners will be able to:

- estimate answers to problems
- use a scientific calculator to calculate and solve problems involving adding, subtracting, multiplying and dividing whole numbers, fractions and decimals
- check that answers and solutions to problems are reasonable in the context of the given question

Perimeter, Area, and Volume

It is expected that learners will be able to:

- find perimeters of triangles, squares, rectangles, parallelograms, trapezoids, circles and composite figures by measuring and using formulas
- find areas of the above shapes by measuring and using formulas
- find the surface areas of cubes, rectangular solids, cylinders, cones, spheres, and composite solids by using formulas
- find the volumes of cubes, rectangular solids, cylinders, cones, spheres, and composite solids by using formulas
- distinguish between concepts of perimeter and area and their respective units

Signed (Rational) Numbers

It is expected that learners will be able to:

- add, subtract, multiply, and divide signed (rational) numbers
- demonstrate order of operations with signed (rational) numbers
- graph signed (rational) numbers on the number line
- define absolute value

Algebra

It is expected that learners will be able to:

- explain the use of variables
- evaluate algebraic expressions using substitution
- combine like terms and remove parentheses
- solve first degree equations in one variable
- translate a problem into an equation
- use equations to solve problems
- solve simple formulas for one variable
- use formulas to solve problems