Keyano COLLEGE

Course Outline

MATH 30-2A, Mathematics 30-2
5 credits, 6 hours lecture

Topics covered include properties of angles and triangles; oblique triangle trigonometry; systems of linear equations; operations (addition, subtraction, multiplication, division) on rational expressions; solve rational equations; logarithms; numerical and logical reasoning Extensions to the core materials include a Business/Arts Prep module focussing on linear inequalities; probability; permutations, combinations and the fundamental counting principle and/or a Trades prep module which explores measurement involving triangles, quadrilaterals and regular polygons, including transformations on 2D shapes or 3D objects.

Alberta Education Course Equivalency: Math 30-2
Prerequisites: Math 20-2 or Math 20-1 or permission from the Program Chair.

Instructor

Christel Kennedy
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Office Hours

Monday-Friday 12:00 – 12:50

Hours of Instruction

Monday - Friday   9:00 – 11:50 Room   CC228

Required Resources

Principles of Mathematics 12: Alberta (Nelson)
Other supplies: TI83plus calculator, geometry set, graph paper, binder, ruled paper, pencils, pen, and eraser

Course Outcomes

Upon successful completion of the course, the student shall be able to:

- Solve problems that involve the application of set theory.
- Solve problems that involve the Fundamental Counting Principle.
- Solve problems that involve permutations.
- Solve problems that involve combinations.
- Determine equivalent forms of rational expressions (limited to numerators and denominators that are monomials and binomials).
- Perform operations on rational expressions (limited to numerators and denominators that are monomials and binomials).
- Solve problems that involve rational equations (limited to numerators and denominators that are monomials and binomials).
- Represent data, using polynomial functions (of degree ≤ 3), to solve problems.
- Solve problems that involve exponential equations.
- Represent data, using exponential and logarithmic functions, to solve problems.
- Demonstrate an understanding of logarithms and the laws of logarithms
- Solve problems that involve exponential equations.
- Represent data, using exponential and logarithmic functions, to solve problems.

Evaluation

Assignments	20%
Tests	30%
Projects	10%
Final Exam	40%
Total	100%

The minimum pre-requisite for progression is 1.7 (refer to Grading System on following page)

Grading System

Descriptor	4.0 Scale	Percent
	4.0	96 – 100
Excellent	4.0	90 – 95
	3.7	85 – 89
	3.3	81 – 84
Good	3.0	77 – 80
	2.7	73 – 76
	2.3	69 – 72
Satisfactory	2.0	65 – 68
Minimum Prerequisite	1.7	60 – 64
Poor	1.3	55 – 59
Minimum Pass	1.0	50 – 54
Failure	0.0	0 – 49

Proposed Schedule of Topics

1 weeks	Chapter 1: Set Theory
1 week	Chapter 2: Counting Methods
1 week	Chapter 4: Rational Expressions and Equations
1 week	Chapter 6: Exponential Functions
1 week	Chapter 7: Logarithmic Functions
1 week	Projects

Please Note:

Date and time allotted to each topic is subject to change

Performance Requirements

Student Responsibilities

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College credit calendar.

More specific details are found in the Student Rights and Student Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a students' learning experience. Second, attending class is a good way to keep informed of matters relating the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and / or notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own
- The use of unauthorized aids in assignments or examinations (cheating)
- Collusion or the unauthorized collaboration with others in preparing work
- The deliberate misrepresentation of qualifications
- The willful distortion of results or data
- Substitution in an examination by another person
- Handing in the same unchanged work as submitted for another assignment
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Student Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

In order to ensure your understanding of the concept of plagiarism, you must successfully complete the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of your instructors. Your course work will not be graded until you show this signed certificate.

Specialized Supports

The Student Academic Support Services (SASS) department: Accessibility Services, Skill Centre and Wellness Services, work together to support student success at Keyano College.

Accessibility Services (CC167) supports student success through group and individualized instruction of learning, study and test taking strategies, and adaptive technologies. Students with documented disabilities, or who suspect a disability, can meet with the Learning Strategists to discuss accommodation of the learning barriers that they may be experiencing. Students who have accessed accommodations in the past are encouraged to visit our office at their earliest opportunity to discuss the availability of accommodations in their current courses. Individual appointments can be made by calling 780-791-8934

Skill Centre (CC119) provides a learning space where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff. Students visiting the centre have access to one-to-one or group tutoring, facilitated study groups, and assistance in academic writing. The Skill Centre's Peer Tutor program provides paid employment opportunities for students who have demonstrated academic success and want to share what they have learned. Tutoring is available free to any students registered at Keyano College on a drop in basis, from 9:00 am to 5:00 pm Monday through Friday. Additional evening hours are subject to tutor availability and are posted in the Skill Centre.

Wellness Services (CC260) offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. The Mindfulness Room in CC260 is available as a quiet space for students to relax during regular office hours. Wellness Service welcomes students to participate in any of the group sessions offered throughout the academic year addressing such topics as Mindfulness and Test Anxiety. Individual appointments can be made by calling 780-791-8934.

Please watch your Keyano email for workshop announcements from our Student Academic Support Services team.