

### MATH 30-2A, Mathematics 30-2

5 credits, 6 hours lecture

#### **Instructor**

Tracy Boger Office: S213F 780 791-4833 tracy.boger@keyano.ca

#### **Office Hours**

- Tuesday 3:00 4:50
- Thursday 11:00 12:50
- Friday 8:00 9:50

#### **Delivery Method(s):**

In-person – offered in person (face-to-face) on campus.

#### **Hours of Instruction & Location**

Day	Time	Location
Tuesday	1:00 PM – 2:50 PM	CC283
Thursday	11:00 AM – 11:50 AM	CC283
Friday	8:00 AM – 9:50 AM	CC283

#### **Required Resources**

*Principles of Mathematics 12: Alberta edition.* ISBN: 978-0-17-652700-6 Authors: Cathy Canvan-McGrath, Serge Desroches, Hugh MacDonald, et. al.

Graphing Calculator: TI-83plus or TI-84, Available at Staples and amazon.ca

A digital version of the textbook can be purchased through the Keyano college bookstore for a significantly reduced price. The graphing calculator is REQUIRED for this course. Every student is expected to purchase their own calculator.



#### **Assessment Details and Dates**

Assessment	Weighting	Course Learning Outcome
Daily Textbook Exercises	5%	All outcomes
Assignment 1 (Ch 1,2)	9%	CLO1, CLO2, CLO3, CLO4, CL5
Assignment 2 (Ch 3,6,7)	12%	CLO6, CLO7, CLO8, CLO9, CL10, CL11, CL12, CL13, CL14, CL15,
Quiz 1 (Ch1)	3%	CLO1, CLO2,
Quiz 2 (Ch2)	3%	CLO3, CLO4, CL5
Quiz 3 (Ch 3)	3%	CLO6, CLO7, CL8, CL9
Quiz 4 (Ch 6-7)	3%	CL10, CL11, CL12, CL13, CL14, CL15,
Quiz 5 (Ch 8)	3%	CL14, CL15,
CH 1 & 2 Exam	13%	CLO1, CLO2, CLO3, CLO4, CL5
Ch 3, 6, & 7 Exam	16%	CLO6, CLO7, CLO8, CLO9, CL10, CL11, CL12, CL13, CL14, CL15,
Final Exam	30%	All outcomes

#### **Proposed Course Schedule**

The course schedule includes daily lessons and dates for all course activities including assignments, exams, quizzes, and textbook exercises. For your convenience, this document is also available at the end of this document.

#### Link to daily course schedule:

https://docs.google.com/document/d/10mXn6zFt0clXaMC9ulJgci-Wth3PKOCaUOhxNLWHCtY/edit?usp=sharing

Topics	Proposed Dates
Set Theory	Jan 9- Jan 16
Counting Methods	Jan 17 -Jan 31
Probability	Feb 1- Feb 15
Polynomial Functions	Feb 17- Mar 4
Exponential Functions	Mar 7- Mar 18
Log Functions	Mar 20- Mar 27
Sinusoidal Functions	Mar 28 – April 4
Final exam week: April 1	17-25

<sup>\*\*</sup>The date and time allotted to each topic are subject to change.



#### Please Note:

- The date and time allotted to each topic are subject to change.
- Students will have access to their Moodle course shells for 15 days following completion of their course.
- Every effort has been made to ensure that the information in this course syllabus is accurate at
  the time of publication. Keyano College reserves the right to change the course syllabus content if
  it becomes necessary so that course content remains relevant. Any changes to the course
  syllabus during the semester will be communicated to students in writing by the instructor in a
  timely manner. A revised course syllabus will be posted to the LMS.
- A minimum GPA of 1.7 or higher is required for students to remain in good academic standing and progress to the next semester, unless otherwise indicated for a specific program.

#### **Specialized Information**

**Please avoid scheduling appointments during class time.** Quizzes and exams will not be excused or omitted due to missing class for personal appointments. This includes routine medical appointments, volunteer or work commitments, and college related appointments. However, if you have extenuating circumstances, contact your instructor.

**Late assignments.** Students will lose 10% the first day that an assignment is late, after day one an additional 10% per day will be deducted until day 3. **On the 4<sup>th</sup> day of being late students will receive a zero for the assignment.** Late assignments will have minimal feedback so if written feedback is important to you make sure that you submit assignments on time.

**Exams & Quizzes.** A missed exam may be written at an alternate time only under certain exceptional circumstances and *at the instructor's discretion*. The instructor should be contacted within 24 hours of the scheduled exam or quiz, and acceptable documentation must be provided. Athletes who know they are will be away for game must contact the instructor BEFORE the date of the exam if they wish to write at an alternate time. Failing to do so may result in a zero or other penalty (such as a 10% deduction) on the exam/quiz.

**Final Exam.** The final exam schedule and policy is available on the Keyano College website. It is your responsibility to be familiar with final exam policy. Final exams must be written on the date scheduled by the College. If there are extenuating circumstances the procedure for "Deferred Final Examination" in the Credit Calendar is to be followed.

**Make-up assignments and Extra Credit will NOT be given in this course.** If you are unable to meet assignment deadlines contact your instructor <u>24 hours prior</u> to the due date. Requests for extensions after the due date will not be considered unless there are extenuating circumstances.

Take home Assignments (worth 21%). All take-home assignments will be posted in moodle. Take home assignments should be printed off and students should write their answers on the assignment (not on loose leaf). Only hard copies (paper versions of the assignments) will be accepted. The take home assignments cannot be submitted electronically via moodle or email unless there are extenuating circumstances and the student has written permission to do so (which is very rare). Assignments should be submitted at the BEGINING of class. Students are expected to work on assignments individually and not share their completed work with other students. Students who submit the same work as another student will receive a zero for all copied work. This also applies to work that has been submitted in previous offerings of the course.



**Daily In class Text Book Exercises (worth 5%).** Time will be given in class to practice applying the skills and concepts taught at the beginning of class. All textbook exercises for the previous week are due every Monday BEFORE class. All textbook exercises will be graded for completion and should be submitted in Moodle by the due date. Students who are absent are still required to submit <u>ALL</u> daily exercise work, regardless of why they are absent. Assignments are never accepted via email.

**Submitting textbook exercises in moodle.** Instructions on how to convert photos of math assignments into a PDF file are posted in moodle. If you require additional assistance, you can book a help session via the following link (select Educational Technology Support): <a href="https://keyano.libcal.com/appointments/Library">https://keyano.libcal.com/appointments/Library</a>

**Additional Moodle Support.** If you need assistance with moodle or preparing files to be uploaded to Moodle contact the college's educational support technologist:

Kelly Keus, Educational Support Technologist:

Office: CC168B (In the Library)

Phone: 780.791.8910

• Email: kelly.keus@keyano.ca

You can book a help session online for in-person or online assistance via the link (select Educational Technology Support): <a href="https://keyano.libcal.com/appointments/Library">https://keyano.libcal.com/appointments/Library</a>

**Electronic Devices Policy:** Students should only engage in the use of personal laptop computers, tablets or iPads, and/or cellphones for course related purposes. The use of these devices for anything that is not course related is prohibited. Smart devices that have access to the internet are prohibited for all exams.

## **Keyano Performance Requirements and Student Services**

#### **Student Responsibilities**

As a student, it is your responsibility to contact the Office of the Registrar to complete the required forms, including the Withdrawal/Drop Form. All forms are available on the College website. Please refer to the important dates listed in the Academic Schedule in the Keyano College credit calendar and/or on the College website. It is the responsibility of each student to be aware of the guidelines outlined in the Student and Academic Policies.

#### **Student Attendance**

Class attendance is helpful for two reasons: First, class attendance maximizes a student's learning experience. Second, attending class is an excellent way to keep informed of matters relating to the course administration (e.g., the timing of assignments and exams). Ultimately, you are responsible for your learning and performance in this course. It is the responsibility of each student to be prepared for all classes. Absent students are responsible for the material covered in those classes, and students must ensure they are ready for their next class, including completing any missed assignments and notes.

#### **Course Evaluation**



Midterm exams and term work is to be completed at the time/date indicated in your course syllabus. It is the expectation of the College that students make every reasonable effort to complete all course evaluation, including, quizzes, midterms, and exams, as scheduled. In the event of an emergency, rescheduling of exams and/or extensions are only provided at the discretion of the course instructor. Students should contact the instructor as soon as they are able, to notify them of missing an evaluative component. Instructors will use discretion in deciding whether circumstances justify granting a reschedule and/or extension.

Regular term quizzes, midterms, and exams are not eligible for deferral and/or date extension accommodations. Students with accommodations, please refer to Accessibility Services.

Final Exams are subject to deferral processes, please refer to the current <u>Keyano College Credit</u> Calendar.

#### **Academic Integrity & Misconduct**

Academic integrity requires commitment to the values of honesty, trust, fairness, respect, and responsibility. It is expected that students at Keyano College will adhere to these ethical values in all activities related to learning, teaching, research, and service. Any action that contravenes this standard, including misrepresentation, falsification, or deception, undermines the intention and worth of scholarly work and violates the fundamental academic rights of members of our community.

Academic dishonesty takes many forms:

- Plagiarism or the submission of another person's work as their own,
- The use of unauthorized aids in assignments or examinations (cheating),
- Using Artificial Intelligence (AI) to complete coursework (without instructor approval),
- 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,
- Submitting unchanged work for another assignment, and
- · Breach of confidentiality.

In all academic work, the ideas and contributions of others must be appropriately acknowledged and work that is presented as original must be, in fact, original. Using an AI-content generator (such as ChatGPT) to complete coursework without proper attribution or authorization is a form of academic dishonesty. If you are unsure about whether something may be plagiarism or academic dishonesty, please contact your instructor to discuss the issue.

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 & Academic Policies* section of the <u>Keyano College credit calendar</u>. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights, Academic Integrity, and Non-Academic Misconduct Policies.

To ensure your understanding of plagiarism and academic integrity, you are required to complete the online <u>Understanding Academic Integrity tutorial</u> (<a href="https://keyano.libwizard.com/f/academic-integrity-tutorial">https://keyano.libwizard.com/f/academic-integrity-tutorial</a>) and submit the certificate of completion to your instructor(s).



#### **Online Learning**

Technology and internet connectivity will impact your online learning experience. You may be required to watch online videos, take online quizzes, or participate in live online classes. Live/virtual courses will be hosted in Microsoft Teams or Zoom. For all course delivery types, you will access your course outline, course syllabus and course resources on Keyano's learning management system: Moodle (iLearn). Login in using your <a href="Keyano username and password">Keyano College operates in a Windows-based environment and having access to the correct tools for online learning is essential.</a>

#### **Computer System Requirements**

Keyano College software are Windows based.

## Minimum Requirements and Recommended Upgrades for Windows (preferred system) and Apple devices

These minimum standards are required for a Windows computer/laptop (OS 10 or 11) and a MacIntosh (OS 10.14 or above).

- 1. Windows 10 Operating System or above.
- 2. 4GB of RAM. Recommended upgrade to 8GB of RAM.
- 3. 10GB+ available hard drive storage space. Note installing Microsoft Office 365 requires 3GB of available hard drive space.
  - a. Install the Microsoft Office 365 suite (~3GB) \*
- 4. Microphone, webcam, and speakers (All modern laptops have these three accessories built-in). However, a headset or earbuds with a microphone is also recommended.
- 5. Windows has built-in anti-virus/malware software. It is essential to install system updates to keep your device secured regularly.

\*Microsoft Office 365 is free to Keyano students.

Tablets, iPads, and Chromebooks are **not** recommended: They may not be compatible with your programs such as lockdown browsers used for assessments and/or Microsoft Office 365.

#### **Computer Software**

Students have access to Microsoft Office 365 and Read & Write for free using Keyano credentials.

See Recommended Technology for more information.

#### **Recording of Lectures and Intellectual Property**

Students may only record a lecture if explicit permission is provided by the instructor or Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not share, distribute, or publish any of the lectures or course materials; this includes any recordings, slides, instructor notes, etc., on any platform. Thus, no student is allowed to share, distribute, publish, or sell



course-related content without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The <u>Academic Integrity Policy</u> provides additional information on Keyano College's expectations from students as members of the intellectual community.

#### **ITS Helpdesk**

If you have issues with your student account, you can contact the ITS Helpdesk by emailing <a href="mailto:its.helpdesk@keyano.ca">its.helpdesk@keyano.ca</a> or calling 780-791-4965.

#### **Specialized Supports**

Keyano College is committed to Keyano students and their academic success. There is a variety of student support available at Keyano. All student services are available during Keyano business hours: Monday to Friday, 8:30 a.m. to 4:30 p.m. The College is closed on statutory holidays. If you require support outside of regular business hours, please inform the support service team, and they will do their best to accommodate your needs.

Accessibility Services provides accommodations for students living with disabilities. Students with documented disabilities or who suspect a disability can register to discuss their current learning barriers and possible accommodations. Students are required to request accommodations for each term. Please note that requesting accommodations is a process and requires time to arrange. Contact the department as soon as you know you may require accommodations to ensure timely implementation. For accessibility supports, adaptive technology, learning strategies and disability-based funding, please register with Accessibility Services by emailing <a href="mailto:wellness/">wellness/</a>, or scanning this qr code below.



Wellness Services 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 provide a safe and confidential environment for you to seek help with personal concerns. Our Wellness Navigator offers support with finding basic needs such as housing, financial and nutritional support, and outside referrals when needed. Wellness Services welcomes students to participate in group sessions that address topics including mindfulness and test anxiety throughout the academic year. Individual appointments can be made by emailing <a href="wellness.services@keyano.ca">wellness.services@keyano.ca</a>, or visiting <a href="www.wellnessxp.net/wellness/">www.wellnessxp.net/wellness/</a>, or scanning this qr code below.



The **Library** provides students with research, information, and educational technology services and spaces as they engage in their studies. The Library is located at CC-166 or <a href="www.keyano.ca/library.">www.keyano.ca/library.</a>
Library staff are available to help students online and in person throughout the semester. Librarians offer individual and small group consultations booked using the online <a href="Book A Librarian calendar">Book A Librarian calendar</a>. The library also provides virtual research and subject guides to help you with your studies. Find the guide that supports your course-related research by viewing the complete list of online <a href="Subject Guides">Subject Guides</a>. To start your research and access citation guides (APA, MLA, Chicago, or IEEE), visit the Research Help page. The



library's collections (including print and online materials) are searchable using <u>EDS (EBSCO Discovery Service)</u> on <u>www.keyano.ca/library/find</u>. The library offers a Loanable Technology collection to support students accessing and using technology. For an up-to-date list of technology available for borrowing, visit the library's <u>Loanable Technology webpage</u>. For a detailed list of library resources and services, go to <u>www.keyano.ca/library</u>. For all inquiries, please email askthelibrary@keyano.ca or chat with us online.

The Academic Success Centre (ASC) provides free academic support services to registered students, such as tutoring, writing support, facilitated study groups, workshops, and study space. Academic Content Specialists are available in Business, Mathematics, Science, English, Humanities, Power Engineering, Upgrading/College Prep, and more. Peer Tutors are available to provide peer academic support to students in all college programs, such as Nursing, Business, Education, Environmental Science, among others. Students are encouraged to visit the Academic Success Centre at CC-119 to discuss strategies for academic success. Specialists in the Academic Success Centre also work with students to develop academic success plans, time management skills, study strategies, and homework plans. For additional information, please email Academic.Success@keyano.ca

**Work Integrated Learning (WIL)** is located in the ASC in CC-119. Career Services WIL staff assist students with their program-related WIL and co-op placements, provide resume advice, and support with using the GradLeaders platform. Additionally, they coordinate several career fairs for students throughout the academic year and host coop and resume workshops for students. Students can reach WIL by emailing: <a href="https://will@keyano.ca">WIL@keyano.ca</a> or by visiting them in person.

Course Syllabus Template Version 1.0

Every effort has been made to ensure that the information in this course syllabus is accurate at the time of publication. Keyano College reserves the right to change the course syllabus content if it becomes necessary so that course content remains relevant. Any changes to the course syllabus during the semester will be communicated to students in writing by the instructor in a timely manner. A revised course syllabus will be posted to the LMS.

Keyano College reserves the right to modify the syllabus, curriculum, or schedule of any course/program, or to cancel a course/program entirely, at any time and for any reason. Such changes may be necessary due to unforeseen circumstances, regulatory requirements, or to ensure the highest quality of education.

Students will be notified of any significant changes as soon as possible. Keyano College is not responsible for any inconvenience or disruption caused by these changes. It is the responsibility of the students to stay informed about any updates or modifications to their courses.

#### Math 30-2 Course Schedule WINTER 2025

This is subject to change. The link below contains the most current version of the course schedule:

https://docs.google.com/document/d/10mXn6zFt0clXaMC9uIJgci-Wth3PKOCaUOhxNLWHCtY/edit?tab=t.0



Lesson & Date	Textbook Practice Assignments
Jan 9	Class Intro. Review Math Skills. Complete in-class questionnaire
	End week 1
1.1. (Jan 14)	Page 14-17 Questions 1, 2, 4, 7, 9, 11, 17 (bonus # 7,17)
1.2 (Jan 16)	Page 20-21 Questions 1,2,3,4 (bonus # 5)
1.3 (Jan 17)	Page 32-35 Questions 1, 3, 4, 7, 8,12, 13, 15, 18 (bonus 9, 13 )
End week 2	: Textbook exercises Due Tuesday before class. Submit as PDF in moodle.
1.4 (Jan 21)	Page 51-53 Questions # 2, 4, 6, 9, (bonus question: Page 58 #7)
2.1 (Jan 23) CH1 Quiz	Page 73-75 Questions 3, 4, 6, 7, 8, 10, 11, 13, 14, 15 (bonus 8, 14)
2.2 (Jan 24)	Page 81-83 Questions 2, 5abcd, 6ace, 7, 8, 9, 11ab, 13, 14 (bonus 14)
End week 3	: Textbook exercises Due Tuesday before class. Submit as PDF in moodle
2.3 (Jan 28)	P 93-94: 1a,3ab,4,5,6,7,8,9,12,13,14(bonus 12,13,14)
2.4 (Jan 30)	Page 104-107 Questions 1ab, 2, 4, 5, 6ad, 7, 9, 10, 12, 15ab
2.5 (Jan 31)	Handout Posted in Moodle
End week 4:	Textbook exercises Due Tuesday before class. Submit as PDF in moodle
2.6 (Feb 4)	2.6 Page 118-120 Questions 1, 2, 4ace, 5, 7, 11, 12, 16ab, (19 bonus)



3.6 (Feb 27)

5.1 (Feb 28) CH3 Quiz

Lesson & Date	Textbook Practice Assignments
	NO CLASS FEB 17 to Feb 21, Extra help sessions Available Feb 18-23 by appointment
End week 6:	Textbook exercises Due Tuesday before class. Submit as PDF in moodle
3.5 (Feb 14)	Page 188- 191 Questions: 2, 3, 4, 9, 18, 19 (19 is a bonus)
3.4 (Feb 13)	Page 176- 180 Questions: 2, 4, 5, 7, 9, (13 bonus)
3.3 (Feb 11) Assignment 1 Due	Page 159- 160 Questions 2, 3, 4, 6, 8 Assignment 1 (Ch1 and 2) Due Feb 11. Submit HARD COPY. No digital submissions
End week 5:	Textbook exercises Due Tuesday before class. Submit as PDF in moodle
3.2 (Feb 16) CH2 Quiz	Page 148- 149 Question #s 1, 2, 3, 4, 6, 10, 12, 14, 16 (bonus 14, 16) 3.1 handout posted to moodle
2.7 (Feb 5)	Page 126-127 Question #s 1, 2, 3, 4, 5, 6 bonus, 7, 11, 13, 14, (bonus #6)

## End week 7: Textbook exercises Due Tuesday before class. Submit as PDF in moodle

Page 198- 200 Questions: 1, 4 ab, 6, 7, 8, 9ab, (9c bonus)

5.1 Page 277 Questions 1, 2, 3, 4

Lesson & Date	Textbook Practice Assignments
5.2 (Mar 4)	5.2 Page 287-288 Questions 1, 2, 3, 6, (7abc bonus), 13



5.3 (Mar 6)	5.3 Page 301-305 Questions 3, 6, 10, 11 (12 bonus)
5.4 (March 7)	5.4 Page 313-315 Questions 3, 5, 6, 7, 9,
End week 8	: Textbook exercises Due Tuesday before class. Submit as PDF in moodle
6.1 & 6.2 (March 11)	Page 337 6.1 Questions: 1 Pages 347-350 6.2 Questions 1, 2, 5, 6, 9, 10, 11, 12, 13
March 13	Exponent Laws and Fractional Exponent Review
6.3 (March 14)	Page 361-365: 6.3 Questions 2, 4, 5, 7abc, 11, 14
End week 9: Textb	ook exercises and handout Due Tuesday before class. Submit as PDF in moodle
6.4 (March 18)	Page 377-381 6.4 Questions Questions 4, 8, 11, (12 bonus), 13,
6.5 (March 20)	Pages 395-399 6.5 Questions 1,2,3, 5,6, 7, 8, 13, 18, 21
7.1 (March 21) 7.2 (March 21)	7.1 Page 420: 1, 2, (5ac bonus), 6, (7 bonus) 8, 7.2 Page 436: 1ab, 2ab, 6ab, 7abc, 8ab, 9ab, 10ab, 11ab (12 bonus)
End week 10	: Textbook exercises Due Tuesday before class. Submit as PDF in moodle
7.3 part 1 (March 25)	Pages 446-447 7.3 #s 1a, 2a, 3a, 4a, 5, 6ab, 7ac, (10 bonus), 11, 12, (14 bonus)
	Log Product Law handout Pg. 2 (Warm up experiences 1 and 2)  Quotient Law handout Pg. 2 (Warm up exercise 1-4 & Practice Problems)
7.4 (March 27)	Pages 456-457 Question #s 1ac, 4, 5abc, 6, 7, 8, 12, 15ab, (17 bonus)
8.1 (March 28) CH 6/7 Quiz	8.1 Page 489-490 Questions 1, 2, 4, 5, 8
End w	eek 11: Textbook exercises and handouts due Tuesday before class.
8.2 (April 1)	8.2 Page 515 & Questions 4, 5 and
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8.3 (April 3)	8.3 Page 506: Questions # 1, 2, 3, 5, 8, 13
April 4 Exam 2	Ch 3, 6, and 7 Exam

#### End week 12: Textbook exercises Due Tuesday before class. Submit as PDF in moodle

Lesson & Date	Textbook Practice Assignment
8.4 April 8	8.4 Page 528-531 Questions # 1, 2, 3, 7, 8, 9, 13, 15, 17
April 10 Ch8 Quiz	Ch 8 Quiz and Review class
April 11	Review

# The Final Exam Week is April 17 to 25 College closed April 18 and 21

Keyano College Examinations web page: <a href="https://www.keyano.ca/en/student-services/examinations.aspx">https://www.keyano.ca/en/student-services/examinations.aspx</a>

Includes: Final exam schedule, location, and college policy for deferred exams It is your responsibility to read the college policy for the final exam.



Signatures & Date
Name of Instructor: Tracy Boger
Instructor Signature:
Date: January 7, 2025
Name of Course Lead: n/a
Course Lead Signature:
Date:
Name of Chairperson/Program Manager: Patricia Collins
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Chairperson/Program Manager Signature:
Date: 7 / 2 5