GPRC

DEPARTMENT Science

COURSE OUTLINE – Fall 2021

MA1130 (A2): Elementary Calculus I – 3 (3-2-0) 75 Hours for 15 Weeks

Grande Prairie Regional College respectfully acknowledges that we are located on Treaty 8 territory, the traditional homeland and gathering place for many diverse Indigenous peoples. We are honoured to be on the ancestral lands of the Cree, Dene/Beaver and Métis, whose histories, languages, and cultures continue to influence our vibrant community. We are grateful to have the opportunity to work, learn, and live on this land.

INSTRUCTOR: Dallas Sawtell   **PHONE:** 780 839 2989
OFFICE: C412   **EMAIL:** dsawtell@gprc.ab.ca
OFFICE HOURS: virtual by appointment

CALENDAR DESCRIPTION: This course will include a review of analytic geometry; functions, limits, continuity; differentiation of elementary functions; applications to maxima, minima and rates; introduction to integration; Fundamental Theorem; numerical integration; and areas and other applications of the definite integral to areas.

PREREQUISITE(S)/COREQUISITE: Math 30-1 or equivalent

REQUIRED TEXT/RESOURCE MATERIALS: We will use two free open source textbooks found at www.lyryx.com . One is : Calculus - Early Transcendentals, Comprehensive Lyryx Version(original text by D. Guichard)the other is the Open Stax ALLY book titled Calculus Volume 1 . The authors are G. Strang and E, "Jed" Herman. Click on the book and then download PDF. You can use the online version or print out what you need.   Another resource is: Differential Calculus and Integral Calculus textbooks and problem books at http://www.math.ubc.ca/~CLP/index.html

DELIVERY MODE(S): In class and over zoom. You must be on campus for the midterm and final. You must be prepared to go remote if needed. Students must have a computer with a webcam and reliable internet connection. Technological support is available through helpdesk@gprc.ab.ca.

COURSE OBJECTIVES: This course is designed to provide students with an understanding of first year Calculus

LEARNING OUTCOMES: A successful student will be able to adequately demonstrate an understanding of the concepts stated below (among others)

Limits and continuity

Derviatives of Polynomials, Exponentials, Logarithms, Trigonometric Functions, the Product and Quotient Rule, Chain Rule, Implicit Differentiation
Related Rates and Linear Approximation, Differentials, Maximum and Minimums, Mean Value Theorem, Rolle's Theorem, Increase, Decrease, Concavity, Graphing, Optimization Problems, antiderivatives
Areas and Distances, The Definite and Indefinite Integral, The Fundamental Theorem of Calculus, Substitution Rule
Area Between Curves

TRANSFERABILITY:

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.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:	Online assignments	10%
	Written assignments	20%
	Online quizzes	10%
	Exam I Wednesday Oct. 20	30% written and oral
	Final Exam	30% written and oral

It is the student's responsibility to be available to write the final exam at the scheduled time. Writing early is not permitted.

For online quizzes and assignments you need to register on Lyryx. There is a fee of $39.95. $19.95 reregistration fee if you have registered for this course before.

Student Registration Instructions: http://login.lyryx.com/unprotected-servlets/FDOC.html?c=LALG1_921

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	90-100		C+	2.3	67-69
A	4.0	85-89		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:TBA

STUDENT RESPONSIBILITIES: : Students are responsible for all lecture material, seminars and readings. Students are expected to practice the material by doing problems from the textbook. No late assignments or tests will be accepted. Assignments and quizzes cannot be made up if missed. If the midterm is missed due to illness the weight will be put on the final (ie. the final will be worth 60%). If the final is missed due to illness it will be deferred (see calendar for information). A doctor's note and a phone message or email will be required in all cases.
Cellphone use is not permitted in the classroom. This includes texting. Please turn off and put away your cellphone during class. You may be asked to leave the classroom if using a cellphone.
No recording of any kind is allowed in the class, seminar or during consultation with the instructor.
Refer to the College Policy on Student Rights and Responsibilities at:

www.gprc.ab.ca/d/STUDENTRESPONSIBILITIES

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Calendar at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at https://www.gprc.ab.ca/about/administration/policies

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