APPLIED SCIENCE & MANAGEMENT DIVISION
School of Science
MATH 101 - Winter 2020

COURSE OUTLINE

MATH 101

Single Variable Calculus II

3 CREDITS

PREPARED BY: Jaclyn Semple, Instructor
DATE: January 4, 2020

APPROVED BY: Name, Title
DATE: Click or tap to enter a date

APPROVED BY ACADEMIC COUNCIL: Click or tap to enter a date
RENEWED BY ACADEMIC COUNCIL: Click or tap to enter a date

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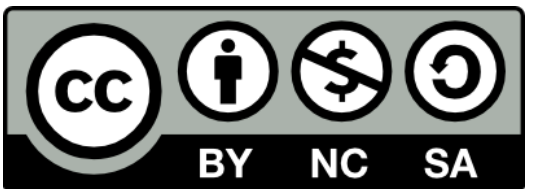

Version 1.1 revised and approved by Academic Council: June 20, 2018
Academic Council, Governance Office
Academic Council MyYC: Policies, Procedures and Forms

INTRODUCTION TO ASTRONOMY

INSTRUCTOR: Jaclyn Semple

OFFICE LOCATION: A2410

E-MAIL: jsemple@yukoncollege.yk.ca

TELEPHONE: 867-456-8548

OFFICE HOURS: TBD

CLASSROOM: A2601

TIME: Mon/Wed/Fri, 8:30 – 10:00am

DATES: Jan 6 – Apr 29, 2020

COURSE DESCRIPTION

This is a second course in calculus with emphasis placed on integration. The topics include log and exponential functions, techniques of integration, improper integrals, linear differential equations, infinite series, polar coordinates and parametric equations.

PREREQUISITES

MATH 100 or equivalent

EQUIVALENCY OR TRANSFERABILITY

KWAN	Math 1220 (3)	OC	Math 122 (3)
SFU	Math 152 (3) – Q	TRU	Math 1240 (3)
TRU-OL	Math 1241 (3)	TWU	Math 124 (3)
UAF	Math 201 (3)	UAS	Math 201 (3)
UBC	Math 101 (3)	UBCO	Math 101 (3)
UFV	Math 112 (3)	UNBC	Math 101 (3)
UR	Math 111 (3)	UVIC	Math 101 (1.5)
VIU	Math 122 (3)		

For more information about transferability contact the School of Science office.

COURSE FORMAT

Lectures: 3 hours per week
Tutorial: 1 hour per week
The course content is covered through lectures, tutorials, and homework assignments using the prescribed textbook. Students with a sound mathematical background can expect to spend between two and four hours in preparation and study for every hour spent in class.

ASSESSMENTS:

Homework Sets
Problems (not graded by the instructor) will be assigned each week and solutions will be available on the course Moodle page or in the textbook.

Quizzes (30%)
There will be *around* ten quizzes during the term, worth 30% of the final grade. Most questions on the quizzes will be drawn from the assigned problems, thus completing the assignments should guarantee good quiz results. Missed quizzes cannot be made up (unless prior arrangements have been made with the instructor), but the lowest quiz result will be discarded.

Midterm Test (30%)
There will be one midterm test worth 30% of the final grade.

Final Examination (40%)
The final examination will cover the entire course and is worth 40% of the final grade. **A minimum mark of 50% on the final exam is required in order to pass the course.** It will be held at the end of the term sometime during the exam period (April 20 – 29). The exact date of the exam will be announced as soon as it is set by the School of Science.

EVALUATION:

Quizzes	30%
Midterm Test	30%
Final Exam	40%
Total	**100%**

REQUIRED TEXTBOOK AND MATERIAL

Anton H, Bivens I, Davis S. *Calculus: Single Variable*. 11th Edition. New York: Wiley, 2016. ISBN 978-1-118-88561-1 (binder-ready version)

ACADEMIC AND STUDENT CONDUCT

Information on academic standing and student rights and responsibilities can be found in the current Academic Regulations that are posted on the Student Services/ Admissions & Registration web page.

PLAGIARISM

Plagiarism is a serious academic offence. Plagiarism occurs when a student submits work for credit that includes the words, ideas, or data of others, without citing the source from which the material is taken. Plagiarism can be the deliberate use of a whole piece

of work, but more frequently it occurs when students fail to acknowledge and document sources from which they have taken material according to an accepted manuscript style (e.g., APA, CSE, MLA, etc.). Students may use sources which are public domain or licensed under Creative Commons; however, academic documentation standards must still be followed. Except with explicit permission of the instructor, resubmitting work which has previously received credit is also considered plagiarism. Students who plagiarize material for assignments will receive a mark of zero (F) on the assignment and may fail the course. Plagiarism may also result in dismissal from a program of study or the College.

YUKON FIRST NATIONS CORE COMPETENCY

Yukon College recognizes that a greater understanding and awareness of Yukon First Nations history, culture and journey towards self-determination will help to build positive relationships among all Yukon citizens. As a result, to graduate from ANY Yukon College program, you will be required to achieve core competency in knowledge of Yukon First Nations. For details, please see www.yukoncollege.yk.ca/yfnccr.

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 College Academic Regulations (available on the Yukon College website). It is the student's responsibility to seek these accommodations. If a student requires an academic accommodation, he/she should contact the Learning Assistance Centre (LAC): lac@yukoncollege.yk.ca.

TOPIC OUTLINE

Week	Content (numbers refer to textbook sections)
1	Exponential, Log, and Inverse Functions (Appendix E, 6.1)
2	Derivatives and Integrals of Exponential, Log, and Inverse Functions (6.2–6.3)
3	L'Hôpital's Rule, Exponential, Log, and Inverse Functions (6.4–6.6)
4	Techniques of Integration (7.2–7.3)
5	Techniques of Integration cont'd (7.4–7.5)
6	Techniques of Integration cont'd (7.6–7.8)
7	**Midterm**
8	Differential Equations (8.1-8.2)
9	Modelling with Differential Equations (8.3-8.4)
10	Modelling with Differential Equations cont'd (8.4)
-	*Reading Week*
11	Sequences & Series (9.1–9.2)
12	Sequences & Series cont'd (9.3–9.6)
13	Sequences & Series cont'd (9.7–9.10)
14	Review