Course ID:	Course Title:	Fall 2019
MA 111	Linear Algebra	Prerequisite: Math 30
		Credits: 3

	Class Information		Instructor Information		Important Dates	
Days:	Wed, Fri	**Instructor:**	John Wiest M.Sc.	**First day of classes:**	Sept.4, 2019
Time:	8:15 AM – 9:30 AM	**Email:**	jwiest@ambrose.edu	**Last day to add/drop, or change to audit:**	Sept. 15, 2019
Room:	A2131	**Phone:**	403-410-6915	**Last day to request revised exam:**	November 1, 2019
Lab/ Tutorial:	Tues, 4:00-5:15 PM	**Office:**	L2115	**Last day to withdraw from course:**	November 18, 2019
	A2133	**Office Hours:**	Tuesdays, 2:00 PM or drop-in	**Last day to apply for coursework extension:**	November 25, 2019
Final Exam:	Dec. 19, 2019 1:00 – 4:00 PM A2133			**Last day of classes:**	December 11, 2019

Course Description

This course teaches linear equations, matrices, and vectors with elements and application to coordinate geometry.

It includes diagonalization and applications to Markov Chains and linear recursions.

Expected Learning Outcomes

It is the aim of the course that students should

1. Understand and be able to utilize the Gaussian algorithm to solve many different problems relating to systems of linear equations.
2. Develop fluidity in matrix algebra and understand its relation to Markov Chains, linear recursions, and other mathematical models.
3. Be able to compute eigenvalues, eigenvectors, and diagonalized forms of matrices.
4. Be able to apply the concepts of linear algebra to the R^3 vector space.

Textbooks

Linear Algebra With Applications (Open Ed.)
Base Textbook(Version 2019 – Revision A)

Volume 1: Ch 1-5 & Appendices
W. Keith Nicholson

This textbook is an open educational resource and is available for purchase at https://www.amazon.ca/Linear-Algebra-Applications-1-5-Appendices/dp/1717015220/ref=sr_1_6?keywords=Keith+Nicholson&qid=1567547696&s=gateway&sr=8-6. The cost is $12.71.

Course Schedule

September 10:	*Quiz 1*
Sep. 25 - 26:	**Spiritual Emphasis Days (No Classes)**
September 24:	*Quiz 2*
October 08:	*Quiz 3*
October 14:	**Thanksgiving Day (No Classes)**
October 23:	*Midterm Exam*
November 5	*Quiz 4*
November 11-15:	**Remembrance Day/Reading Week (No Classes)**
November 26:	*Quiz 5*
December 10:	*Quiz 6*

Requirements:

The course will include 6 quizzes, a Midterm, and a Final Exam. The quizzes will be written on paper during the lab times. The best 5 out of 6 marks on quizzes will be taken in for grades. The weighting of quizzes and exams will be

Quizzes (best 5 out of 6)	35%
Midterm Exam	30%
Final Exam (cumulative)	35%

Attendance:

Students are expected to attend all lectures and labs to ensure success on exams, and quizzes. Students not attending lectures may find themselves missing information not covered in the textbook. Students who have scheduling conflicts with exams or quizzes are expected to speak with the professor as soon as possible to make other invigilating arrangements. If a student misses a quiz or exam without making arrangements with the professor to make up the marks, said marks will be left as a 0 and affect their GPA accordingly.

Grade Summary:

The available letters for course grades are as follows:

Letter Grade	Percentage	Description
A+	96-100%	
A	91-95%	Excellent
A-	87-90%	
B+	83-86%	
B	79-82%	Good
B-	73-78%	
C+	69-72%	
C	64-68%	Satisfactory
C-	59-63%	
D+	55%-58%	
D	50-54%	Minimal Pass
F	Below 50%	Failure

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

Other:

The course will be following the first four chapters of the textbook, beginning with Chapter 1. Students wishing to study in advance should begin reading the first section of the textbook (Chapter 1, section 1.1). Sections of the book that are not covered in class will be discussed as the class proceeds.

Instructor notes for this class will be given by hand. While students may endeavor to write notes via their laptops, they are warned that much of the course content is rather difficult to typeset with typical word processing software. It is suggested that students utilize pen and paper for their notes as much as possible.

Calculator use for this class is allowed: students may utilize any calculators they wish to aid them in basic calculations on quizzes and exams provided it is not connected to any online services (i.e. not on their phones, laptops, etc.). If students wish to use a calculator, they are responsible for understanding the functions of the calculator they use, either by searching out its use on their own or talking to the instructor.

Ambrose University Academic Policies:

Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline;** please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Exam Scheduling

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devises in class. The professor has the right to disallow the student to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of $50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.