UNIVERSITY OF CALGARY FACULTY OF SCIENCE DEPARTMENT OF MATHEMATICS & STATISTICS COURSE OUTLINE

1. Course: MATH 211, Linear Methods I -- Summer 2018

Course Site:

D2L: MATH 211 L01 - (Summer 2018) - Linear Methods I

Department of Mathematics & Statistics:

Office: MS 476

Phone: 403 220-5210 Email: math@ucalgary.ca

Note:

Students must use their U of C account for all course correspondence.

2. Requisites:

See section 3.5.C in the Faculty of Science section of the online Calendar.

Prerequisite(s): A grade of 70 per cent or higher in Mathematics 30-1. (Alternatives are presented in C. Mathematics Competency Equivalents in the Academic Regulations section of the online Calendar).

Antirequisite(s): Credit for Mathematics 211 and 213 will not be allowed.

3. Grading:

The University policy on grading and related matters is described in $\underline{F.1}$ and $\underline{F.2}$ of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Date
Assignments (4)	12%	
Quizzes (2)	8%	
Midterm test	30%	(Out of Class: Thursday, July 26, 2018, 06:00-07:30 PM)
Final Examination	50%	(To be scheduled by the Registrar)

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D
Minimum % Required	95 %	90 %	85 %	80%	75%	70 %	65 %	60%	55%	50 %	45 %

This course has a registrar scheduled final exam.

2018-05-14 1 of 4

4. Missed Components of Term Work:

The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in <u>Section 3.6</u>. It is the student's responsibility to familiarize himself/herself/themself with these regulations. See also <u>Section E.3</u> of the University Calendar.

In the unlikely event of a health problem, the <u>Physician/Counsellor Statement Form</u> must be accompanied by either "<u>Application for Deferred Final Examinations</u>" or an "<u>Application for Deferment of Term Work</u>" in order to gain approval for such request. For all other missed term work such as quizzes, assignments or midterms, the <u>Physician/Counsellor Form</u> must be handed directly to your course instructor for approval.

5. Scheduled out-of-class activities:

There are no scheduled out of class activities for this course.

Dates and times of approved class activities held outside of class hours. Midterm — Thursday, July 26, 2018, 06:00-07:30 PM.

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a clash with this out-of-class-time-activity, please inform your instructor as soon as possible so that alternative arrangements may be made for you.

6. Course Materials:

Required Textbook(s):

Ken Kuttler, A First Course in Linear Algebra: Lyryx Learning.

Recommended Textbook(s):

W. Keith Nicholson, *Linear Algebra with Applications (7th Edition)*: McGraw-Hill Ryerson, Limited, 2013. Gilbert Strang, *Introduction to Linear Algebra (5th Edition)*: Wellesley-Cambridge Press, 2016.

Online Course Components: Lyryx Learning (assignments)

We will be using the Lyryx system for homework purposes, offering formative online assessment in an effort to support student learning.

The student license is normally \$39.95+GST payable upon registration on the Lyryx system.

Lyryx is offering students access to their Lyryx online homework at no cost when using University computers, including in MS317, 515, 521, & 571, AFC, TFDL and ES160 computers labs. The normal license fee will continue to be charged to students who chose to access Lyryx from off-campus or other locations.

7. Examination Policy:

The use of calculators and/or portable computing devices will not be allowed on examinations. Students should also read the Calendar, Section G. on Examinations

Students should also read the Calendar, Section G, on Examinations.

8. Approved Mandatory and Optional Course Supplemental Fees:

A list and description of approved optional and mandatory course fees. The student license is normally \$39.95+GST payable upon registration on the Lyryx system.

Lyryx is offering students access to their Lyryx online homework at no cost when using University computers, including in MS317, 515, 521, & 571, AFC, TFDL and ES160 computers labs. The normal license fee will continue to be charged to students who chose to access Lyryx from off-campus or other locations.

9. Writing across the Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section <u>E.2</u> of the University Calendar.

2018-05-14 2 of 4

10. Human studies statement:

Students will not participate as subjects or researchers in human studies.

See also <u>Section E.5</u> of the University Calendar.

11. Reappraisal of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See Section 1.3 of the University Calendar.

- Term Work: The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within 15 days of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall immediately submit the Reappraisal of Graded Term work form to the department in which the course is offered. The department will arrange for a reassessment of the work if, and only if, the student has sufficient academic grounds. See sections L1 and L2 of the University Calendar
- 2. **Final Exam:**The student shall submit the request to Enrolment Services. See <u>Section I.3</u> of the University Calendar.

12. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, Mental Health Services Website) and the Campus Mental Health Strategy website (Mental Health).
- b. **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under <u>Section K</u>. Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct may include: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a report. **These are only examples**.
- c. **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on <u>assembly points</u>.
- d. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at <u>procedure-for-accommodations-for-students-with-disabilities.pdf</u>.

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head of the Department of Mathematics & Statistics, Jim Stallard by email jbstall@ucalgary.ca or phone 403-220-3953. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See <u>Section E.4</u> of the University Calendar.

- e. **Safewalk:** Campus Security will escort individuals day or night (See the <u>Campus Safewalk</u> website). Call <u>403-220-5333</u> for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- f. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see <u>Legal Services</u> website.

2018-05-14 3 of 4

- g. **Student Union Information:** <u>VP Academic</u>, Phone: <u>403-220-3911</u> Email: <u>suvpaca@ucalgary.ca</u>. SU Faculty Rep., Phone: <u>403-220-3913</u> Email: <u>sciencerep@su.ucalgary.ca</u>. Student Ombudsman, Email: <u>suvpaca@ucalgary.ca</u>.
- h. **Internet and Electronic Device Information:** Unless instructed otherwise, cell phones should be turned off during class. All communication with other individuals via laptop, tablet, smart phone or other device is prohibited during class unless specifically permitted by the instructor. Students that violate this policy may be asked to leave the classroom. Repeated violations may result in a charge of misconduct.
- i. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction (<u>USRI</u>) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference please participate in these surveys.
- j. SU Wellness Center: The Students Union Wellness Centre provides health and wellness support for students including information and counselling on physical health, mental health and nutrition. For more information, see www.ucalgary.ca/wellnesscentre or call 403-210-9355.

Department Approval: Electronically Approved **Date:** 2018-05-14 10:51

Course Outcomes

- Recognize which techniques of linear algebra that can be useful in solving or provide information to some problems from various areas
- · Construct a plan on how to approach these problems using the techniques of linear algebra
- Execute the proposed plan correctly from the viewpoint of computation and mathematics
- Interpret the resulting information in the context of the problem at hand

2018-05-14 4 of 4