

## **Math 1071 FA: Vectors and Matrices**

**Instructor:** Alex Hudyma      **Office:** RB 2005      **Email:** akhudyma@lakeheadu.ca

**Class Times:** Tuesdays and Thursdays, 2:30 - 4:00 pm in UC 0050

**Lab Times:** Fridays, 11:30 am - 1:30 pm in RB 2047

**Office Hours:** Tuesdays 1:00 - 2:00 pm in RB 2005

**Textbook:** *A First Course in Linear Algebra* by K. Kuttler, found at:  
<https://lyryx.com/first-course-linear-algebra/>

**Course Webpage:** There is a page for the course on myCourseLink through myInfo. Announcements, your WeBWoRK login info, due dates, the syllabus, and any other course information will be posted here.

**Course Content:** By the end of the course students will be able to: draw vectors in 2 and 3 dimensions; perform arithmetic with vectors; compute dot and cross products; construct vector, parametric, and standard form equations for lines and planes; perform arithmetic with matrices; solve systems of equations using Gaussian elimination and Cramer's rule; identify linearly independent vectors and spanning sets; and find the eigenvalues and eigenvectors of a linear transformation.

**Labs:** The lab on Fridays will give students the opportunity to ask questions about course content and problems. Tests will also be held during the lab time.

**Class Policies:** Paying attention during lecture, asking and answering questions, and otherwise participating when prompted are all ways to respect myself and your fellow students. Lakehead University will not tolerate any form of harassment or discrimination to students or instructors. Academic dishonesty (plagiarism, cheating, or impersonation of any kind) is a serious offence and penalties will be strictly enforced.

<b>Grading Scheme:</b>	Participation	5%
	Assignments	10%
	Test I	20%
	Test II	20%
	Final Exam	45%

**Participation:** MathMatize games will be played at random during lecture. Completing a game will contribute 0.5% to your grade, so you must complete 10 throughout the semester to fulfil this component.

**Assignments:** Homework will be assigned every week and is to be completed by the following Sunday by 11:59 pm via the online homework system WeBWoRK. Please note that late assignments will not be accepted under any circumstances, but your lowest assignment mark will be dropped in calculating your final grade.

**Tests:** There will be two tests given during lecture time, scheduled for Friday, October 6<sup>th</sup> and Friday, November 10<sup>th</sup>. You will be allowed a non-programmable scientific calculator. Please note that there will be no makeup tests. If a legitimate and documented reason is given (i.e. a doctor's note) no later than 3 business days after missing a test, then the weight will be transferred onto the other tests.

**Final Exam:** The final exam will be scheduled by the registrar during the examination period. The final will be a three hour open book cumulative exam.

**Accommodations:** Lakehead University is committed to achieving full accessibility for persons with disabilities. This includes arranging academic accommodations for students with disabilities and/or medical conditions to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please contact Student Accessibility Services <http://studentaccessibility.lakeheadu.ca> (SC0003, 343-8047, or [sas@lakeheadu.ca](mailto:sas@lakeheadu.ca)).

<b>Important Dates:</b>	September 5 <sup>th</sup>	First Day of Fall Term
	September 18 <sup>th</sup>	Final Date to Register
	October 6 <sup>th</sup>	Test I
	October 9 <sup>th</sup> -13 <sup>th</sup>	Fall Reading Week
	November 3 <sup>rd</sup>	Final Date to Withdraw
	November 10 <sup>th</sup>	Test II
	December 4 <sup>th</sup>	Last Day of Fall Term
	December 7 <sup>th</sup> -17 <sup>th</sup>	Examination Period
	December 18 <sup>th</sup>	Exam Contingency Date