

Linear Algebra and Vector Analysis (Math 1120), Credit Hours 3 (3, 2, 0)

Course syllabus

Instructor: Lecturer: Abdulsalam Mohammed Alsughayyir

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Class Timings:

- **Lectures:** Monday: 10:00 – 11:50 a.m., Wednesday: 11:00 – 11:50 a.m.
- **Tutorial:** Thursday: 10:00 – 11:50 a.m.

Office Hours:

- Monday & Tuesday & Wednesday: 12:00 pm – 1:00 pm.
- Wednesday 10:00 am – 1:00 p.m.
- An online meeting could be scheduled anytime.

Textbook:

- H. Anton and C. Rorres , John Wiley & Sons, 10th ED 2010

Pre-requisite:

- Math 1110 Calculus for Engineers.
- PHYS 1110 Physics for Engineers I.

References:

- Swokowski, Olinick and Pence, PWS publishing Co, 6th Ed 1994

Grading Criteria

No.	Assessment task	Date due (Academic Week)	Proportion of Final Assessment
1	Class Participation + HW (2)	4 th , 12 th	15%
2	Quizzes (5)	3 rd , 5 th , 9 th , 11 th , 13 th	20%
3	Mid-term Examination	As announced by the college	25%
4	Final Examination	As scheduled by the university	40 %
Total			100%

Tentative Schedule

Week	Topics to be covered
1	Introduction
2	
3	Matrices Topics
4	
5	
6	
7	
8	Mid-Term
9	Vector Analysis
10	
11	
12	Eigen Values
13	
14	Review

Course Learning Outcomes

- To Learn some concepts system of linear equations
- To learn methods for solving system of linear equations
- To learn properties determinants
- To learn about vector Algebra and vector calculus
- To learn about the calculus of function of more than one independent variable.

Course Policy

• **General policies:**

1. Course material such as lecture slides, homework ...etc. will be uploaded on LMS KSU platform and via emails as well. *However*, the material is not a substitute for the text book. Therefore, students are expected to purchase the textbook.
2. The student is responsible to check his email (university email) **daily** for any class announcements.
3. Use of mobile/cellular phone or other electronic devices or equipment is not allowed during class. All such systems must be turned off or silenced and not used during classes without prior permission from the instructor.
4. It is the student's responsibility to ask questions, for me if you don't ask questions then I assume that you are happy. If for one reason or another, my answer is not satisfactory for your question, then you are welcome to visit my office or by scheduling an online meeting for more discussions and details.

• **Attendance:**

1. All students are advised to attend all of classes as well as labs.
2. Two late arrivals will be considered as one absent. Entering in class after 15 minutes will be considered as late-arrival.
3. If your attendance is below 75% of scheduled classes then you will not be allowed to sit in final examination.
4. If you miss any class due to medical reason, please handover your medical certificate from any public-sector hospital within a week after you resume your studies/university.

• **Makeup policy:**

1. Make up examination of quizzes and homeworks will not be taken. Instead, the calculation of the quiz/homework grade will be adjusted.
2. Make up examination of Mid-Term examination will be decided by the college management upon receiving medical certificate from a public sector hospital
3. Any official excuse should be presented to the instructor within one week from the absence.

• **Assignments Policy:**

1. HWs will be announced in classes. HWs should be submitted one week after the announcement.
2. All HWs should be submitted on time. Any late homework will be subject to a late penalty as follows: 10% for each one day late, 50% for a week late and 75% for more than that. In case that you have not submit the HW or you submit after the manual solutions addressed, then you will receive no marks regardless.
3. Any identical solutions will receive zero for both of them.