Academic Inquiries: Portland State University

MTH 261 - Intro to Linear Algebra (4 quarter hours)
MTH 299 - Intro to Linear Algebra (2 quarter hours)

A transcript for this course will be issued by the host university, Shanghai International Studies University. The syllabus and instructor have also been approved as equivalent to MTH 261 and MTH 299 (6 quarter hours in total) by Portland State University, serving as US University of Record, as many universities require to transfer courses taken as study abroad. Portland State University will provide a transcript at the student's request.

Basic Information:

Instructor Name	TBD
E- Mail	
Office	TBD
Office Hours	TBD, and by appointment

Course Description:
Linear algebra is concerned with concepts central to understanding and handling systems of linear equations and inequalities, the latter being of wide application and importance in such disciplines as physics, chemistry, engineering, economics and computer science, among others.

Course Objective: To provide an introduction to basic linear algebra, including matrices, vector spaces, linear transformations and determinants

Prerequisites: A good understanding of pre-calculus; i.e., basic algebra, analytic geometry and trigonometry is required.

Required Course Materials:

Textbook	Edition	Author	Publisher	ISBN-10
Linear Algebra with Applications	9th	Steven J. Leon	Pearson	0321962214

Link to the ebooks:
https://www.amazon.com/Linear-Algebra-Applications-Featured-Introductory-ebook/dp/B00XIHIFW2/ref=mt_kindle?_encoding=UTF8&me=

Course Hours:
The course has 19 class sessions and a 5-hour field trip. Each class session is 160 minutes in length. The course normally meets from Monday to Friday. This course has a total of 67 contact hours including a final exam. Final exams are scheduled on July 29 and 30, 2019.

Prerequisite:
None

Course Schedule:

Week	Session	Day	Topic (s)	Chapter(s)	Homework
Week 1	July 2	T	School Orientation		
	July 3	W	Introduction		
	July 4	TH	Overview. Introduction. Systems of linear equations. Row Reduction.		Section 1.1: 1–28, 33–34 Section 1.2: 1–31
	July 5	F	Reduction continued. Vectors and Linear Combinations. Geometry of Vectors: orthogonality, Cauchy-Schwarz inequality, vector projections.		Section 1.3: 1–6. 9–26, 32–34
Week 2	July 8	M	Quiz #1, Matrix-vector product. Homogeneous systems		Section 1.4: 1–36. Section 1.5: 1–40
	July 9	T	Quiz #2, Independence. Transformations.		Section 1.7: 1–18, 20–40.
	July 10	W	Independence. Transformations.		Section 1.8: 1–36
	July 11	TH	Quiz #3, More transformations		Section 1.9: 1–24.
	July 12	F	Quiz #4, Matrix arithmetic. Intro to inverses		Section 2.1: 1–34.
Week 3	July 15	M	**Mid-term exam**		
	July 16	T	Quiz #5, Inverses. Elementary matrices		Section 2.2: 1–35.
	July 17	W	Inverses. Elementary matrices		Section 2.3: 1–38.
	July 18	TH	Quiz #6, LU factorization. Subspaces and bases		Section 2.5: 1–4, 24. Section 2.8: 1–36.
	July 19	F	**Field Trip (5-Hour)** Company Visit of Industrial Bank Co.,LTD Industrial Bank is one of the first batch of joint-stock commercial banks in China and represents a time of change. Industrial Bank will arrange their HR manager and Business manager to introduce key elements of their bank operations.		
Week 4	July 22	M	Quiz #7, Dimension and rank. Gram-Schmidt procedure		Section 2.9: 1–28
	July 23	T	Quiz #8, Rank theorems. Fundamental theorem of linear algebra		Section 4.6: 1–30
	July 24	W	Quiz #9, Determinants. Cofactor expansion. Cramer's rule		Section 3.1: 1–14, 33–42. Section 3.2: 1–4, 15–16, 21–40.
	July 25	TH	Quiz #10,		Section 5.1: 1–8, 17–19,

			Eigenvectors and diagonalization		21–27, Section 5.2:1–15, 19, 20, Section 5.3: 7–12.
	July 26	F	Review for all chapters		
Week 5	July 28	Sta	Reading Day	13	
	July 29	M	**Final Exam**	13	E5,E7,E9,E16,P2,P4
	July 30	T	**Final Exam**		

Grading Policies:

Part	Percentage
Participation	10%
Quizzes	10%
Homework	30%
Exams	20%
Final Exam	30%

Grade Distribution:

Percentage	Letter Grade	Grade Points
100-90	A	4.0
80-89	B	3.0
70-79	C	2.0
60-69	D	1.0
59 or below	F	0.0

Academic Integrity

School expects honesty from students in presenting all of their academic work. Students are responsible for knowing and observing accepted principles of scholarly research and writing in all academic work.

Academic dishonesty or cheating includes acts of plagiarism, forgery, fabrication or misrepresentation, such as the following:

- claiming the work or thoughts of others as your own
- copying the writing of others into your written work without appropriate attribution
- writing papers for other students or allowing them to submit your work as their own
- buying papers and turning them in as your own
- having someone else write or create all or part of the content of your assignments
- submitting the same paper for more than one study or class without explicit permission from the faculty members

General Principles

This program is committed to principles of trust, accountability, clear expectations and consequences. It is also committed to redemptive efforts, which are meaningful only in light of these principles. Students will be granted due process and the opportunity for an appeal.

Academic dishonesty offenses generally are subject to incremental disciplinary actions. Some first offenses, however, receive severe penalties, including dismissal from the program.

General Disciplinary

The following is a non-comprehensive list of possible actions apart from dismissal from the program: warning from a professor, program director; a lower or failing grade on an assignment, test or course; suspension or dismissal from the course; suspension or dismissal from the program.

Disciplinary Actions for Specific Offenses

Some academic dishonesty offenses call for specific disciplinary actions. The following have been identified:

Falsification of documents: Students who falsify or present falsified documents may be dismissed. Prospective students who are discovered to have presented falsified admission documents prior to admission shall be denied admission to the program. Should it be discovered after admission that a student had presented falsified documents for admission, such admission may be annulled and the record of academic achievement removed from the academic record, with appropriate notations. Such annulments or denials may be reviewed after one year.

Dishonesty in course requirements: Course work (a quiz, assignment, report, mid-term examination, research paper, etc.) in which a student has been dishonest generally will receive zero points towards the grade in fulfillment of a course requirement, and/or the student may receive a failing grade for the course. The professor of the course determines the appropriate consequence.

Final assignment: When a student cheats in a major or final assignment such as a comprehensive examination or presents plagiarized material in a major or final assignment, that student shall receive an F in that particular subject. Student cheats on more than two exams shall be dismissed from this program.