Course Syllabus

Course: Math 4050/8056, Linear Algebra
Section 1: TR 4:00 PM – 5:15 PM
Location: Durham Science Center, Room 254
Dodge Campus, UNO

Prerequisites: Completion of Math 2050 and Math
2030/ Math2230; or permission of instructor.

Instructor: Dr. Ying Hu
Assistant Professor

Office: Durham Science Center, room 223
E-Mail: yinghu@unomaha.edu
Instructor Office Hours: TBA

Course Description:
Linear algebra is extensively utilized in the mathematical modeling of many natural
phenomena. Many scientific and engineering disciplines, such as data science, chemical
engineering and biology, make extensive use of the theory and techniques commonly present in
basic to advanced linear algebra courses. This course will be focused on the theory of
vectors, vector spaces, inner product spaces, linear transformations, eigenvalues, canonical forms,
complex vectors, matrices and orthogonality.

Textbook:
S. Axler, Linear algebra done right, 3rd edition, Springer, New York, 2015.

Mandatory Attendance: A full learning experience requires being present, so you are only
allowed 4 absences for the course (i.e. 1 week of classes). If you are absent on a test day, a make-
up exam is not guaranteed. It is given at the discretion of the instructor with adequate notice and
justification (before the exam). Students are expected to be on time and stay in class for the full 65
minutes. Departures are allowed only in true EMERGENCIES.

Classroom participation/presentations: You are expected to come to class, discussing ideas and
strategies, and presenting materials. You are also highly encouraged to participate in math activities
outside of class, such as colloquium talks for undergraduate students, advanced learning seminar
for undergraduate students etc.

Homework. There will be both reading and writing assignments for each section. Your homework
will be graded based on the mathematically correctness and the clarity of your solution.

Group Presentation. I will put you into groups of three or four. Each group will choose a topic on
applications of linear algebra and give a short presentation on that topic.

Midterm Exam. There will be one midterm exam, which covers the first 5 chapters of the book.

Final exam: Tuesday, May 05, 5:00 pm – 7:00 pm

Course grade:

Participation & Presentation	5%
Homework	45%
Midterm	20%
Presentation	10%
Final Comprehensive Exam	20%

A+: 97-100%	B+: 87-89%	C+: 77-79%	D+: 66-69%	F: 0 – 59%
A : 93-96%	B : 83-86%	C : 73-76%	D : 60-65%	
A-: 90-92%	B-: 80-82%	C- : 70-72%		

Academic Integrity Policy
The maintenance of academic honesty and integrity is a vital concern of the University community. Any student found responsible for violating the policy on Academic Integrity shall be subject to both academic and disciplinary sanctions. Violations of the policy on Academic Integrity include, but are not limited to, the following: cheating, fabrication and falsification, plagiarism, abuse of academic materials and/or equipment, complicity in academic dishonesty, falsifying grade reports, and/or misrepresentation to avoid academic work. More information about these areas and the procedures addressing academic integrity is available from the Office of Academic and Student Affairs at
http://www.unomaha.edu/student-life/student-conduct-and-community-standards/policies/academic-integrity.phpA

Accessibility Statement
Appropriate accommodations are provided for students who are registered with the Accessibility Services Center (ASC) and make their requests sufficiently in advance. For more information, contact the Accessibility Services Center (MBSC 126, Phone: (402) 554-2872, Email: unodisability@unomaha.edu) or visit: www.unomaha.edu/disability.

*The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.