The Instructors

<table>
<thead>
<tr>
<th>Instructors</th>
<th>Anna Zemlyanova</th>
<th>Gerald Hoehn</th>
<th>Rina Anno</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td><a href="mailto:azem@ksu.edu">azem@ksu.edu</a></td>
<td><a href="mailto:hoehn@math.ksu.edu">hoehn@math.ksu.edu</a></td>
<td><a href="mailto:ranno@ksu.edu">ranno@ksu.edu</a></td>
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<tr>
<td>Lecture</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<tr>
<td>Ref n.</td>
<td>11866</td>
<td>11865</td>
<td>13446</td>
</tr>
<tr>
<td>Time</td>
<td>MW 10:30-11:20am</td>
<td>MW 1:30-2:20pm</td>
<td>MW 2:30-3:20pm</td>
</tr>
<tr>
<td>Room</td>
<td>CW 102</td>
<td>CW 102</td>
<td>MS 211</td>
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The Course

Course Goals and Learning Outcomes

The material to be covered in this course is mostly contained in Chapters 1-5, 7 of the textbook. The following topics and its applications will be covered: systems of equations, matrices, vectors, orthogonality, determinants, eigenvalue problems. Some additional topics will also be included, particularly when it comes to current applications of matrix theory to engineering, image processing, and computer science. Students are expected to attend lectures and lab sessions, which will be used to explain new material, to work examples, and to answer questions. They are strongly urged to read the material in advance and to begin the homework assignments early. Interaction and participation in class are expected, and attendance to office hours is very welcome.

Course Prerequisites

MATH 205 (General Calculus and Linear Algebra) or MATH 220 (Analytic Geometry and Calculus I).

Textbook

A First Course in Linear Algebra, by Ken Kuttler, Lyryx, 2017. The PDF file of this open source book can be found at: https://open.umn.edu/opentextbooks/BookDetail.aspx?bookId=213 (Links to an external site.)

Assignments and Grading

Assignment Types

Final grades will be based on weekly homework assignments both written and online, programming lab assignments, two midterm exams and a final exam. Final grades will be weighted as follows:
- Written Homework: 15%
- Online Quizzes: 15%
- Labs: 15%
- Midterms: 15% (each)
- Final: 25%

**Written Homework**

Homework will be assigned each week and will be due the following week on Wednesdays at 5:00pm.

You must place your homework in the box under your instructor's name that is located in Cardwell Hall next to room 120. *Homework placed in the wrong box will not be graded!* Please staple all the sheets and put the assignment number and your name in the front page. Write the statement of each problem and explain all your steps. You are encouraged to work with others on homework but your solution must be written up independently and *copying is not permissible.*

Show your work! The homework is intended to help you practice and perfect your problem-solving techniques as applied to this course, not to simply see if you can write down the correct answer. Therefore, you must clearly and carefully explain the steps you took in arriving at your answer.

**Online Quizzes**

The online part of the homework will consist of weekly quizzes in Canvas. These will be due each Monday at 11:00pm.

**Programming Assignments**

There will be approximately a dozen MATLAB projects. Each one will be discussed in the computer lab on Thursdays or Fridays. Instructions will be posted in Canvas. Lab projects will be due on Fridays at 11:00pm in Canvas. You are encouraged to work with others on the labs but your solution must be written up independently and *copying is not permissible.*

**Midterm Exams**

There will be two coordinated midterm exams

- Exam 1: Wednesday, February 19, 2020, 7:05 PM - 8:05 PM.
- Exam 2: Wednesday, March 25, 2020, 7:05 PM - 8:05 PM.

Exam Locations depend on the Lecture you belong to, as follow:

<table>
<thead>
<tr>
<th>Rooms</th>
<th>Bluemont Hall 101</th>
<th>Ackert Hall 120</th>
<th>Throckmorton Hall 1018</th>
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</thead>
</table>
Final Exams

The Final will depend on the Lecture you belong to. The times will be as follow (and will be held in classrooms to be announced):

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<td>MW 2:30-3:20pm</td>
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<td>Final</td>
<td>Monday, May 11, 11:50 AM - 1:40 PM</td>
<td>Wednesday, May 13, 11:50 AM - 1:40 PM</td>
<td>Friday, May 15, 4:10 PM - 6:00 PM</td>
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Letter Grades

This class will follow the usual 90-80-70-60 breakdown. This grading scheme can be a subject to modifications at the end of the semester.

Assignment Policies

Late or Missing Assignment Policy

No late homework or lab projects will be accepted.

Missed exams

If you expect to miss a midterm exam for a legitimate reason (illness or hospitalization, for example), please notify your instructor as soon as possible. If your instructor deems the absence excusable then your other exams will be weighted to make up for the missing one; otherwise your score on it will be zero. There will be no make-up exams. A grade of incomplete may be given to a student who has missed more than one midterm or the final exam, if verifiable circumstances warrant it. It is your responsibility to discuss the situation with your recitation instructor should your personal situation suggest this as a possibility.

Make-up Work

Make-up work will be granted only if the issue is communicated to the instructor in a timely manner.
Extra Credit Options

Extra credit options will not be available in this course.

Other Topics

Technology Requirements

Students are encouraged to familiarize themselves with the following tools:

- **Matlab**: The programming assignments in this course must be completed using Matlab. Anyone with a valid KState eID will have access to our Matlab license via this web-site ([https://www.math.ksu.edu/computing/matlab.html](https://www.math.ksu.edu/computing/matlab.html)), by clicking on the light blue rectangle "Matlab Windows Access".

Technical Difficulties

The K-State IT Help Desk is there to assist you with questions regarding the technology used for your course.

- **Phone**: 785-532-7722 or toll free 1-800-865-6143
- **Email**: helpdesk@k-state.edu

If you have issues with your technology, please contact them first, they are the technology experts. If you miss a deadline due to technological difficulties, make sure it is documented through communication with the IT Help Desk, then exceptions may be made on a case-by-case basis.

University Expectations of "Classroom" Conduct

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code ([Links to an external site.]) as outlined in the Student Governing Association By Laws ([Links to an external site.]), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

Student Access Center and Classroom Accommodations

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access
Center (Links to an external site.) at accesscenter@k-state.edu, 785-532-6441; for Salina
campus, contact Disability Support Services (Links to an external site.) at 785-826-2984.

**Academic Honesty**

Kansas State University has an Honor and Integrity System based on personal integrity, which is
presumed to be sufficient assurance that, in academic matters, one's work is performed honestly
and without unauthorized assistance. Undergraduate and graduate students, by registration,
acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of
the Honor and Integrity System apply to all full and part-time students enrolled in undergraduate
and graduate courses on-campus, off-campus, and via distance learning. The Honor and Integrity
System website can be reached via the following URL: [http://www.k-state.edu/honor](http://www.k-state.edu/honor). A component vital to the Honor and Integrity System is the inclusion of the
Honor Pledge which applies to all assignments, examinations, or other course work undertaken
by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student,
I have neither given nor received unauthorized aid on this academic work." A grade of XF can
result from a breach of academic honesty. The F indicates failure in the course; the X indicates
the reason is an Honor Pledge violation.

**Copyright**

Copyright is a form of legal protection that allows authors, photographers, composers, and other
creators to control some reproduction and distribution of their work. Both student and professors
are protected by copyright. Please visit [http://www.k-state.edu/copyright/basics/](http://www.k-state.edu/copyright/basics/) for more information.

**Academic Freedom**

Kansas State University is a community of students, faculty, and staff who work together to
discover new knowledge, create new ideas, and share the results of their scholarly inquiry with
the wider public. Although new ideas or research results may be controversial or challenge
established views, the health and growth of any society requires frank intellectual exchange.
Academic freedom protects this type of free exchange and is thus essential to any university's
mission.

**Changes**

The instructor reserves the right to modify the contents in this description if conditions arise
during the semester that make such changes desirable. Such changes will be announced in class;
it is your responsibility to keep abreast of such changes.