Math 2114 covers topics in Linear Algebra, including systematic solution of linear systems and Gaussian elimination, basic matrix algebra, vectors in two- and three-dimensional space, linear transformations and eigenvalue problems.


Software: MATLAB can be purchased from The Software Distribution Office located in 3240 Torgersen Hall. Engineering students will have MATLAB in their software bundle. All other majors need to purchase MATLAB. It will be $44 for the MATLAB license (valid while enrolled at VT). You will have access to annual updates at no extra charge. See [http://www2.ita.vt.edu/software/student/products/mathworks/matlab/](http://www2.ita.vt.edu/software/student/products/mathworks/matlab/) for more info.

Prerequisites

MATH 1226 or a grade of at least a B in 1225.

Course Format

Class meetings will frequently involve working in small groups on challenging problems, presenting your progress on these problems, however tentative and providing others with questions and comments on their presentations. It is your responsibility as a learner and a member of this class to be engaged in participation, rather than being a passive observer. I also encourage you to find study partners or to form study groups outside of class.

Attendance

Regular attendance is required and attendance will be taken at every class meeting. If you miss a class, you are responsible for any announcements or assignment changes made, whether they are posted on-line or not.

Examinations

There will be three evening exams. The dates for the exams are Tuesdays, Sept 15th, October 20th, and November 24th TBA. Any adjustments to this schedule will be announced at least a week in advance. If a student fails to take an exam, his/her score is zero unless the reasons for the failure are serious, unavoidable, and beyond the student’s control. It is to the student’s advantage to inform the instructor BEFORE the exam. The instructor, after consultation with the student, will decide how to handle a missed exam. The final exam, as dictated by the university, is Wednesday, December 16th, 11:05 am – 1:05 pm. The final exam is a required class meeting that will not be rescheduled for discretionary reasons, including conflicts with work schedules or exams for classes at other colleges.
Homework

Homework is vital to your success in this class and will be assigned weekly. **Written homework** will typically be collected on Thursdays at the beginning of class. Your assignments should be organized and legible, and all work must be shown to earn full credit. **Online homework** must be completed by midnight on Tuesdays/Thursdays. Late homework will not be accepted.

Reflections

On non-exam days, the last 5 minutes of class may be spent answering short reflection question of varying types. These will be graded Credit/No Credit. Credit will only be given for thoughtful and well-explained responses, regardless of correctness. These will factor into your participation grade.

Group Presentations

On days where there is group work, each group will spend the last 5 minutes of this time creating a 2-minute video explaining their findings from the task. There are three group units with 4 group tasks in each unit. Each group member must be the spokesperson on at least one video per unit. All group members present will receive the same grade for the video and the rubric is posted to Scholar. All videos and marker board snapshots will be **posted by the group** to the shared class folder on Google Drive at the end of class.

Evaluation

A course average of 90% guarantees at least an A-, 80 a B-, 70 a C-, and 60 a D-.

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<tr>
<td>Examinations (1-15%, 2, 3, - 20%)</td>
<td>55%</td>
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<tr>
<td>Written Homework /Quizzes / Group Presentations</td>
<td>20%</td>
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<td>Online Homework</td>
<td>5%</td>
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<td>Final Exam</td>
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*Attendance and participation will be used in assigning a final letter grade to borderline cases.*

Honor Code

The Virginia Tech Honor Code applies to all graded work in this course. Students are responsible for understanding and adhering to the Honor Code. Among other things the Honor Code prohibits giving or receiving unauthorized aid, assistance, or unfair advantage on academic work, and it prohibits plagiarism. Under the Honor Code it is the responsibility of each student to consult with his/her teacher, if necessary, to ensure that the student understands exactly how the Honor Code applies to each piece of graded work.

Miscellaneous Information

If my office hours do not fit your schedule, I will be happy to set up an appointment to help you with this course. I can best be contacted by email, which I check frequently during the workday, less frequently on nights and weekends.

The use of laptops or table PCs are permitted during class provided they are in the **flat-on-desk** position. Open laptops are a distraction to others and are not allowed. **Cell phones should be turned off or in silent mode and should be put away while class is in session.**

Students with special needs or circumstances are encouraged to meet with me in my office as their earliest convenience.