MATH 6513, Applied Linear Algebra, Fall 2008
Course Information

- **Class Hour**: 5:30pm - 6:45pm TuTh
- **Classroom**: Boyd 305
- **Instructor**: Dr. Jeong-Hyun Kang
- **Course webpage**: www.westga.edu/~jkang/6513.html
- **E-mail Address**: jkang@westga.edu
- **Office and Phone**: Boyd 316, (678)839–4143
- **Office Hours**: 10am–2pm Tu; 3:15–3:30pm, 4:45–5pm, 6:45–7:15pm TuTh; 1:30pm–5:30pm W.
  To refresh your memory, you can read an elementary level of linear algebra book such as Linear Algebra and its applications by David Lay.
- **Prerequisite**: Math 2853 Elementary Linear Algebra (or equivalent)
- **Course webpage**: www.westga.edu/~jkang/6513.html
  It’s your responsibility to check the course webpage regularly for homework assignments, announcements, and a lecture log (useful when you miss a class and when reviewing for an exam).
- **Homework**: Homework will be assigned almost every class, and due on Tuesdays. Homework must be submitted at the beginning of class on the due date. It should be written legibly and logically. Late homework will not be accepted. In case you miss class, it should be handed-in before the class.
- **Hour Exam**: There will be 2 one-hour exams. Missed hour exams may be made up prior to the actual test date if the student has a provable excuse such as an official university field trip or doctor’s note.
  - Exam #1 on Tue, Sep. 30
  - Exam #2 on Tue, Nov. 11
- **Final Exam**: Cumulative. The final exam is scheduled for 5:30–7:30pm Tue, Dec. 9.
  NO make-up final!!!
- **Grading Policy**:
  - Homework 150 points
  - Two hour exams, 200 points (100 points each)
  - Final exam 150 points
  - 500 points total
- **Letter Grades**: ≥ 90% A; ≥ 80% B; ≥ 70% C; ≥ 60% D; below 60% F
Other Class Policies:

• Communications:
  – Homework problems will not be specified during class but will be posted only on the class-log of the course webpage at www.westga.edu/~jkang/6513.html. Sections/Chapters covered will be on the web, too. Hence, it is essential for you to check the course webpage almost everyday.
  – Email communications regarding course should be done only in the domain westga.edu.

• Grading Exams:
  – A final answer without showing procedure won’t earn any credit in homework or exams.
  – No calculator the exams.

• Advice for Students: There are eight levels of mathematical understanding, according to Dudley:
  
  1. Being able to do arithmetic.
  2. Being able to substitute number in ‘formulas’.
  3. Given ‘formulas’, being able to get other ‘formulas’.
  4. Being able to understand hypotheses and conclusions of theorems.
  5. Being able to understand the proofs of theorems, step by step.
  6. Being able to really understand proofs of theorems: that is, seeing why the proof is as it is, and comprehending the underlying ideas of the proof and its relation to other proofs and theorems.
  
  — 6 1/2. Non-trivial applications of math can be placed here.—-
  7. Being able to generalize and extend theorems
  8. Being able to see new relationships and discover and prove entirely new theorems.

  • Calculus courses focus on level 1&2.
  • Lower level undergrad math courses (such as elementary linear algebra) focus on 3&4.
  • Upper level undergrad math courses focus on 3,4,&5 with some of 6.
  • Levels 5&6 are considered as basic mathematical abilities for math majors and graduate level.
  • Levels 7&8 are researching mathematics.