MATH 1522 SYLLABUS

FALL 2001

Course Number:	MATH 1522C1
Course Name:	Introduction to Linear Algebra for Calculus
Lecture Time:	MWF 10:05–10:55 a.m.
Lecture Room:	Skiles 202
Professor:	Dr. Christopher Heil Office: Skiles 260 Office Phone: (404) 894-9231 Email Address: heil@math.gatech.edu
Office Hours:	MWF 2:00–3:00 p.m., and by appointment
Contacting me:	I encourage you to contact me at any time by email. I try to check email evenings and weekends and to respond to questions quickly. Try it, it works! Please don't be afraid to set up other appointment times if you are having trouble getting in touch with me.
Tutoring Lab:	The mathematics department operates a tutoring lab during the quarter in Skiles 257. The lab is usually open many hours a day and is staffed by teaching assistants. Watch for announcements on the walls of the halls of the math department.
Textbook:	*Elementary Linear Algebra* by Spence, Insel, and Friedberg
Material:	Matrices, Vectors, and Systems of Linear Equations (Chapter 1) Matrices and Linear Transformations (Chapter 2) Determinants (Chapter 3) Subspaces and Their Properties (Chapter 4) Eigenvalues, Eigenvectors, and Diagonalization (chapter 5) Orthogonality (Chapter 6)

Comments. This course is a "bridge course" that covers the linear algebra portion of the material that is usually presented in MATH 1502 (Calculus II).

Grading. Your grade will be determined by your performance on quizzes, in-class exams, and the final exam:

15 Homeworks	2 points each
11 Quizzes	10 points each, lowest dropped
Hour Exam I	50 points
Hour Exam II	50 points
Hour Exam III	50 points
Final Exam	70 points
TOTAL	350 points

Letter grades will be based on your accumulated points at the end of the quarter, according to 90%, 80%, 70%, 60% cutoffs (although I may adjust the cutoffs downward at the end of the quarter, depending on class distribution):

315–350	at least A
280–314	at least B
245–279	at least C
210–244	at least D
0–209	at least F

At the end of the course, I'll evaluate the class distribution and decide if a curve is needed. I'll only curve *down* from the above cutoffs, not up.

Midterm Grades. You will receive a midterm grade of S (satisfactory) or U (unsatisfactory). This just gives you some idea of where you stand in the course. The midterm grade is just for your benefit, it has no impact on your final grade.

Homework. Homework will be assigned and collected each week. Homework will not be graded. You will receive two points for turning in a complete assignment. You must show work for each problem in order to receive your two points. I strongly encourage you to work extra problems from each section, as this is one of the best ways to prepare for the quizzes and exams.

Quizzes. There will be a 20-25 minute quiz in each Wednesday class, except for weeks in which an hour exam is scheduled. The lowest quiz score will be dropped. NO CALCULATORS ARE ALLOWED ON QUIZZES OR EXAMS.

Exams. The exams test UNDERSTANDING as well as problem solution skills. The final is comprehensive. The tentative dates for the exams are:

Hour Exam I	Wednesday, September 12
Hour Exam II	Wednesday, October 10
Hour Exam III	Wednesday, November 7
Final Exam	Friday, December 14, 11:30 a.m.–2:20 p.m.

Make-up quizzes and exams are given only in extreme circumstances. If you have a problem or conflict, CONTACT me by phone or email!

MATH 1522 SYLLABUS

FALL 2005

Course Number:	Math 1522 C
Course Name:	Linear Algebra for Calculus
Lecture Time:	MWF 10:05–10:55 a.m.
Lecture Room:	Skiles 146
Instructor:	Dr. Christopher Heil Office: Skiles 260 Office Phone: (404) 894-9231 Email Address: `heil@math.gatech.edu`
Office Hours:	MWF 1:00-2:00, and by appointment
Web site:	`http://www.math.gatech.edu/~heil`
Contacting me:	I encourage you to contact me by email. I try to check email daily and to respond to questions quickly. Please don't be afraid to set up other appointment times if you are having trouble getting in touch with me.
Textbook:	*Elementary Linear Algebra: A Matrix Approach* by Spence, Insel, and Friedberg
Material:	Matrices, Vectors, and Systems of Linear Equations (Chapter 1) Matrices and Linear Transformations (Chapter 2) Determinants (Chapter 3) Subspaces and Their Properties (Chapter 4) Eigenvalues, Eigenvectors, and Diagonalization (Chapter 5) Orthogonality (Chapter 6)

Comments. This course is a "bridge course" that covers the linear algebra portion of the material that is usually presented in MATH 1502 (Calculus II).

Academic Dishonesty. All students are expected to comply with the Georgia Tech Honor Code. Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the Dean of Students. The institute honor code is available at

`http://www.deanofstudents.gatech.edu/integrity/policies/honor_code.php`

Attendance. Because the lectures amplify and supplement the text, REGULAR attendance is expected. For best understanding, read the section(s) to be covered in the text before attending the lecture. Check the list of recommended homework problems on the class website to see which text sections are upcoming. In the event of an absence, you are responsible for everything that is covered in the lecture.

Grading. We will have three in-class exams, some shorter quizzes, and a final exam.

5 Quizzes	15 points each, lowest quiz dropped
Exam 1	50 points
Exam 2	50 points
Exam 3	50 points
Final Exam	90 points
TOTAL	300 points

Letter grades will be based on your accumulated points at the end of the semester, according to 90%, 80%, 70%, 60% cutoffs (although I may adjust the cutoffs downward at the end of the semester, depending on class distribution):

270–300	A
240–269	B
210–239	C
180–209	D
0–179	F

At the end of the course, I'll evaluate the class distribution and decide if a curve is needed. I'll only curve *down* from the above cutoffs, not up.

Midterm Grades. You will receive a midterm grade of S (satisfactory) or U (unsatisfactory). This just gives you some idea of where you stand in the course. The midterm grade is just for your benefit, it has no impact on your final grade.

Quizzes and Exams. Quizzes will last 20 minutes at the end of class, while exams will take the full 50 minute class period. The TENTATIVE dates for the quizzes and exams are:

Quiz 1	Friday, September 2
Exam 1	Friday, September 9
Quiz 2	Friday, September 23
Exam 2	Friday, October 7
Quiz 3	Friday, October 21
Exam 3	Friday, November 11
Quiz 4	Friday, November 18
Quiz 5	Friday, December 2
Final Exam	Thursday, December 15, 8:00 a.m.–10:50 a.m.

The quizzes and exams are closed-book and closed-notes, except that you will be allowed to bring one 8.5x11 sheet of notes to each quiz or exam. I strongly encourage you to work many problems from the book on your own in order to prepare for the exams. I will post a list of recommended problems on the course website. The final is comprehensive.

Makeup exams are given only in extraordinary circumstances.

MATH 3802 SYLLABUS

SPRING 2001

Course Number:	MATH 3802B
Course Name:	Introductory Linear Algebra
Lecture Time:	TuTh 1:35–2:55 p.m.
Lecture Room:	Skiles 256
Professor:	Dr. Christopher Heil Office: Skiles 260 Office Phone: (404) 894-9231 Email Address: heil@math.gatech.edu
Office Hours:	TBA, and by appointment
Contacting me:	I encourage you to contact me at any time by email. I try to check email evenings and weekends and to respond to questions quickly. Try it, it works! Please don't be afraid to set up other appointment times if you are having trouble getting in touch with me.
Tutoring Lab:	The mathematics department operates a tutoring lab during the quarter in Skiles 257. The lab is usually open many hours a day and is staffed by teaching assistants. Watch for announcements on the walls of the halls of the math department. The material that is presented in this course is the same as the linear algebra portion of the material that is presented in MATH 1502, so the tutors should be able to help you with it.
Textbook:	*Linear Algebra and its Applications* (Second Edition), by David Lay
Material:	Linear Equations in Linear Algebra (Chapter 1) Matrix Algebra (Chapter 2) Determinants (Chapter 3) Vector Spaces (Chapter 4) Eigenvalues and Eigenvectors (Chapter 5) Orthogonality and Least Squares (Chapter 6)

Comments. This course is a "bridge course" that covers the linear algebra portion of the material that is usually presented in MATH 1502 (Calculus II).

Grading. Your grade will be determined by your performance on quizzes, in-class exams, and the final exam:

15 Homeworks	5 points each
11 Quizzes	10 points each, lowest dropped
Hour Exam I	50 points
Hour Exam II	50 points
Hour Exam III	50 points
Final Exam	75 points
TOTAL	400 points

Letter grades will be based on your accumulated points at the end of the quarter, according to 90%, 80%, 70%, 60% cutoffs (although I may adjust the cutoffs downward at the end of the quarter, depending on class distribution):

360–400	at least A
320–359	at least B
280–319	at least C
240–279	at least D
0–239	at least F

At the end of the course, I'll evaluate the class distribution and decide if a curve is needed. I'll only curve *down* from the above cutoffs, not up.

Homework. Homework will be assigned and collected each week. Usually five problems will be assigned, and of these one will be selected for grading. YOU MUST SHOW CLEAR AND CAREFUL WORK TO GET FULL CREDIT. I strongly encourage you to work extra problems from each section, as this is one of the best ways to prepare for the quizzes and exams.

Quizzes. There will be a 20-25 minute quiz in each Thursday class, except for weeks in which an hour exam is scheduled. The lowest quiz score will be dropped. NO CALCULATORS ARE ALLOWED ON QUIZZES OR EXAMS.

Exams. The exams test UNDERSTANDING as well as problem solution skills. The final is comprehensive. The tentative dates for the exams are:

Hour Exam I	Thursday, February 1
Hour Exam II	Thursday, March 1
Hour Exam III	Tuesday, April 10
Final Exam	Friday, May 4, 11:30 a.m.–2:20 p.m.

Make-up exams are given only in extreme circumstances.

MATH 1522 SYLLABUS

SPRING 2005

Course Number:	Math 1522 E
Course Name:	Linear Algebra for Calculus
Lecture Time:	MWF 12:05–12:55 p.m.
Lecture Room:	Skiles 146
Instructor:	Dr. Christopher Heil Office: Skiles 260 Office Phone: (404) 894-9231 Email Address: `heil@math.gatech.edu`
Office Hours:	WF 3:30-4:30 p.m., and by appointment
Web site:	`http://www.math.gatech.edu/~heil`
Contacting me:	I encourage you to contact me at any time by email. I try to check email daily and to respond to questions quickly. Please don't be afraid to set up other appointment times if you are having trouble getting in touch with me.
Textbook:	*Elementary Linear Algebra: A Matrix Approach* by Spence, Insel, and Friedberg
Material:	Matrices, Vectors, and Systems of Linear Equations (Chapter 1) Matrices and Linear Transformations (Chapter 2) Determinants (Chapter 3) Subspaces and Their Properties (Chapter 4) Eigenvalues, Eigenvectors, and Diagonalization (chapter 5) Orthogonality (Chapter 6)

Comments. This course is a "bridge course" that covers the linear algebra portion of the material that is usually presented in MATH 1502 (Calculus II).

Academic Dishonesty. All students are expected to comply with the Georgia Tech Honor Code. Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the Dean of Students. The institute honor code is available at

`http://www.deanofstudents.gatech.edu/Honor`

Grading. We will have five homework assignments, three in-class exams, and a final exam.

5 Homeworks	10 points each
Exam 1	40 points
Exam 2	40 points
Exam 3	40 points
Final Exam	80 points
TOTAL	250 points

Letter grades will be based on your accumulated points at the end of the semester, according to 90%, 80%, 70%, 60% cutoffs (although I may adjust the cutoffs downward at the end of the semester, depending on class distribution):

225–250	A
200–224	B
175–199	C
150–174	D
0–149	F

At the end of the course, I'll evaluate the class distribution and decide if a curve is needed. I'll only curve *down* from the above cutoffs, not up.

Midterm Grades. You will receive a midterm grade of S (satisfactory) or U (unsatisfactory). This just gives you some idea of where you stand in the course. The midterm grade is just for your benefit, it has no impact on your final grade.

Homework. Homeworks will consist of problems selected from the book or problems that I make up. Assignments will be posted on the course web site. A subset of the problems will be selected for grading.

Homeworks must be NEATLY written on the FRONT SIDE of the page only, and must be STAPLED. You must SHOW WORK neatly and completely in order to receive credit. Homeworks are due at the BEGINNING of class on the announced due date, and late homeworks will not be accepted.

You are allowed to work together with other students on the homework, as long as you each INDEPENDENTLY WRITE UP YOUR OWN SOLUTIONS. You are also allowed (and encouraged) to ask me questions, although you should try to think about the problems before asking. I strongly encourage you to work extra problems from the book on your own and will post a list of recommended problems on the course website.

Exams. The exams test UNDERSTANDING as well as problem solution skills. The tentative dates for the exams are:

Exam 1	Friday, February 11 (in class)
Exam 2	Friday, March 11 (in class)
Exam 3	Friday, April 8 (in class)
Final Exam	Thursday, May 5, 8:00 a.m.–10:50 a.m.

The exams are closed-book and closed-notes, except that you will be allowed to bring one 8.5x11 sheet of notes to each exam. The final is comprehensive.

Makeup exams are given only in extraordinary circumstances.

Georgia Institute of Technology

Math 1522 - Linear Algebra for Calculus – Fall 2010

Room	Days/Time
Skiles 202	MW 4:35–5:55 pm

Instructor: Josephine Yu
Office Hours: M 12:30–2pm, W 1–2:30 pm, and by appointment
Office: Skiles 223
Email: josephine.yu@math.gatech.edu
Webpage: See t-square. You are encouraged to use the forum and wiki on t-square for asking questions, discussing course material, and organizing study groups.

Textbook: *Elementary Linear Algebra: A Matrix Approach* 2nd ed. by Spence, Insel, and Friedberg. Several copies are on reserve at the library.

Tentative list of topics:

- Matrices, Vectors, and Systems of Linear Equations (Chapter 1)
- Matrices and Linear Transformations (Chapter 2)
- Determinants (Chapter 3)
- Subspaces and Their Properties (Chapter 4)
- Eigenvalues, Eigenvectors, and Diagonalization (Chapter 5)
- Orthogonality (Chapter 6)

Homework: There will be weekly homework assignments. They will be posted on t-square. You are encouraged to discuss homework problems and solutions with each other and to come to office hours, but you must write up your own solutions independently, i.e. you must not be looking at other people's solutions while you are writing yours. Use examples in the book as a model for the level of details expected for the write-ups. Write in complete sentences as much as you can. You must list *sources consulted* on the front page of your write-up (e.g. names of classmates you worked with, tutors, office hours, books, wikipedia, etc.). If you do not use sources other than the course textbook and your own notes, write "Sources consulted: none." Otherwise points may be taken off. *No late homework is accepted.*

Quizzes: There will be five short quizzes in class. The lowest quiz score will be dropped. The dates will be announced at least one week in advance.

Exams: There will be 2 midterm exams and a *comprehensive* final exam. The midterm exams will take the entire class period. The tentative dates for the exams are:

Exam 1	Sep 29
Exam 2	Nov 10

Calculators are not allowed on quizzes and exams. All quizzes and exams are closed-book and closed-notes.

Attendance: Regular attendance and *active participation* in class is expected from every student. The student who misses a class meeting is responsible for everything that is covered in class.

Make-up exams: In the event of an absence due to travel representing Georgia Tech, such as an intercollegiate sports competition, you must notify me at least two weeks in advance to arrange an early test or other alternative. If you miss an exam due to family or medical emergency, please bring me a note from the Office of the Dean of Students.

Grading: The usual ten-point scale will be used (A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F: 0-59%). If necessary, I may "curve down" (but not up) to arrive at a standard grade distribution. The following weighting is used to compute the grades:

Homework	10 %
Quizzes	15 %
Exam 1	20 %
Exam 2	20 %
Final	35 %

Learning Disabilities: It is the right of any student with a certified learning disability to request necessary accommodation. Such requests must be made well in advance of the time that the accommodation is required. A letter of documentation from the ADAPTS office must be presented at the time of any request. Please make an individual appointment with me so that we can discuss your needs.

Academic Honesty: All students must be aware of their individual responsibilities under the Georgia Tech Academic Honor Code, which will be strictly adhered to in this class. Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the Dean of Students.

Additional Resources: In addition to the textbook, lectures, and office hours there are other resources available that might be of use for you during the course. All Georgia Tech students are eligible for 1-on-1 tutoring at the Success Programs. There is also the Math Lab in the School of Mathematics where tutoring services are provided.

Important Dates for Fall 2010:

Aug 23	First day of classes
Aug 27	Last day to register
Sep 6	Labor Day. No class.
Oct 15	Last day to drop individual courses with a grade of "W" by 4:00 pm ET
Oct 18	Student recess. No class.
Oct 31	Last day to withdraw from school with "W" grades in all courses by 4:00 pm ET
Dec 10	Last day of classes

MATH 1522 SYLLABUS
Spring 2006

Instructor: Klara Grodzinsky
Office: Skiles 248, 404-894-4397 (or leave a message at 404-894-2700)
Office hours: MW, 9:30-10:00 am; Th, 10:00 am-12:00 pm; and by appointment
E-mail: klarag@math.gatech.edu
Web Page: http://www.math.gatech.edu/~klarag

Course Title: Introduction to Linear Algebra for Calculus
Text: Course packet for Linear Algebra, available at Engineer's bookstore.

GRADING SYSTEM

HOMEWORK: Homework assignments will be posted on my web page. You are expected to understand **al** homework problems for the tests and quizzes. Homework will be collected at the end of class each Friday. A least two homework grades will be dropped. Since several grades will be dropped, **no late homework will accepted**.

QUIZZES: There will be five 20-minute quizzes, given at the end of class on the following Fridays: J**anuary February 3, March 3, March 17, and April 21**. Quizzes will be based on the lecture material and homewor assignment. Quizzes will be closed book and notes.

TESTS: There will be two in-class tests, administered on the following Fridays:

Test 1, February 17; Test 2, April 7.

No books or notes can be used during the tests.

FINAL EXAM: The final exam will cover all course materials and will be administered on the date assigned the official school calendar. You MUST take the final exam on the officially scheduled date, so **do not mak travel plans** during final exam week until the official final exam schedule is announced. (The ***tentative*** date Friday, May 5.)

GRADING SCALE

The final average will then be computed using the following percentages:

Homework	**10%**
Quizzes	**25%**
Tests	40%
Final Exam	25%

Midterm grades will be assigned on **February 17.** A satisfactory grade will be assigned to all students wit midterm average of 70% or higher (based on the above weighting of grades).

Do not expect any deviation from the following scale:

Do not expect any deviation from the following scale:
A: [90%,100%]; **B**: [80%, 90%); **C**: [70%,80%) ; **D**: [60%, 70%); **F**: [0, 60%).

ALL borderline grades will be determined by your attendance in the class lectures.

CLASS POLICIES

ATTENDANCE: You are expected to come **prepared** and actively participate in every class meeting. In th event of an absence, you are responsible for all missed materials, assignments, and any additional announcements or schedule changes given in class. Class disruptions of ANY kind will NOT be tolerated a may result in your removal from the classroom and a LOWER final grade. Please show courtesy to your fel classmates and instructor by adhering to the following class rules: turning off all cellular phones and pagers during class, coming to class on time and staying for the entire class period, refraining from conversing with your fellow students, and putting away any reading materials unrelated to the course.

ACADEMIC DISHONESTY: All students are expected to comply with the Georgia Tech Honor Code (the honor code can be found at http://www.deanofstudents.gatech.edu/integrity/policies/honor_code.php). Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the De of Students. Cheating includes, but is not limited to: using a calculator, books, or any form of notes on tests quizzes; copying directly from **any** source, including friends, classmates, tutors, or a solutions manual; allow another person to copy your work; signing another person's name or having another person sign your name an attendance sheet; taking a test or quiz in someone else's name, or having someone else take a test or q in your name; or asking for a regrade of a paper that has been altered from its original form.

CALCULATORS: Calculators of any kind are **NOT ALLOWED** in this class.

REGRADING OF PAPERS: If a problem on your test or quiz has been graded in error, you must submit a regrade request to me **in writing,** along with your paper, no more than *one week* after the tests or quizzes h been returned in class. Should you wish to have your paper regraded, *do not change or add to the work on your paper*! If you must write on your returned paper, be sure to write in a different color ink and clearly indi what you have added. A regrade request can only be submitted if you have done something CORRECT or your test or quiz that has been marked as incorrect. You MUST check your answers with the solutions BEFORE submitting such a request.

MAKE-UPS: In an emergency situation, I may allow a make-up test or quiz if I am notified **prior** to the exam and provided with a reasonable, **written confirmation** of your absence. Any make-ups must be completed before the corresponding test or quiz has been graded and returned to other students.

WORLD WIDE WEB: I will frequently update the class web page with class information and materials. *You responsible for obtaining any announcements or materials placed on my web page* (http:// www.math.gatech.edu/~klarag)*, or WebCT* (webct.gatech.edu). In addition, the solutions to all tests will be placed on reserve in the library (www.library.gatech.edu).

ADDITIONAL HELP: Please feel free to stop by my office hours whenever you have questions. In addition free tutoring is available on a first-come/first-serve basis Monday-Thursday in the Math Lab.