

**MATH 1324-01 Analysis I - Finite Mathematics**  
MWF 9-9:50 AM Room: A15  
Spring 2008

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**Office Hours:** MWF: 10-11 TR: 9-10 MTWR: 1-1:30

**Course Description:** Analysis I is the study of linear functions and graphs, matrices, inequalities and linear programming, simplex algorithm, mathematics of finance, probability, sets, counting techniques, permutations, combinations, statistics, central tendency, standard deviation, and applications in all areas.

**Prerequisites:** MATH 1314 with a grade of “C” or better or an appropriate score on the math section of the SAT or ACT. Three class hours per week. Credit: Three semester hours.

**Core Course:** This is a Core Course in the 42-Hour Core of Blinn College. As such, the students will develop proficiency in the appropriate Intellectual Competencies, Exemplary Educational Objectives, and Perspectives. See [www.blinn.edu/corecurriculum](http://www.blinn.edu/corecurriculum)

**Course Objectives:** The student should maintain at least a 70% average on all course work covering linear functions and graphs, matrices, inequalities and linear programming, simplex algorithm, mathematics of finance, probability, sets, counting techniques, permutations, combinations, statistics, central tendency, standard deviation, and applications in all areas.

**Required Material** Textbook: Howard L. Rolf, Finite Mathematics, Seventh Edition, Thomson – Brooks/Cole Publishing, 2008.

**Graphing Calculator:** A graphing calculator is required in this course and I will be using the (TI – 83 or 84) in class. Other calculators may be used; however the student is responsible for learning how to operate them. Symbolic calculators such as the TI-89 and the TI-92 will not be allowed. The instructor reserves the right to limit the type and/or use of specific calculators and programs on exams.

**Grading Policy:** Homework will be assigned throughout the course. You are encouraged to keep your homework in a loose-leaf folder, separate from your notes. Quizzes will be given and the appropriate homework will be collected for a daily grade, which will make up 20% of your grade. The four exam grades will make up 60% of your grade. The comprehensive final is worth 20% of your final grade. It is recommended that you keep a set of note cards containing important formulas and information in this course.

**Make-up Policy:** It is the student's responsibility to meet with the instructor prior to or immediately after any absences and make arrangements to turn in completed work. Students are not assessed absences when representing Blinn College or observing a holy day but are responsible for class work missed. The final exam grade will replace of a missing exam grade or to replace the lowest grade on an exam. Twenty percent of the daily grades will be dropped at the end of the semester.

**Accommodations for Students with Disabilities:** Blinn College would like to help students with disabilities achieve their highest potential in college. In order to receive accommodations on exams or assignments, proper documentation must first be provided to the Office of Disability Services. This office is located on the bottom floor of the new Administration Building in room 104 (phone # 830-4157). You must then self-identify and conference with me during my posted office hours to begin receiving accommodations in the class.

**Attendance Policy:** The College District believes that class attendance is essential for student success; therefore, students are required to promptly and regularly attend all their classes. Each class meeting builds the foundation for subsequent class meetings. Without full participation and regular class attendance, students shall find themselves at a severe disadvantage for achieving success in college. Class participation shall constitute at least ten percent of the final course grade. It is the responsibility of each faculty member, in consultation with the division chair, to determine how participation is achieved in his or her class. Faculty will require students to regularly attend class and will keep a record of attendance from the first day of class and/or the first day the student's name appears on the roster through final examinations. If a student has one week's worth of unexcused absences during the semester, he/she will be sent an e-mail by the College requiring the student to contact his/her instructor and schedule a conference immediately to discuss his/her attendance issues. If the student accumulates two weeks worth of unexcused absences, he/she will be administratively withdrawn from class. Since this is a MWF class students will receive the 1<sup>st</sup> notification after 3 days of unexcused absences and a 2<sup>nd</sup> notification after 6 days of unexcused absences. If a student is dropped from a class prior to the "W" date, they will receive a "W" in the class. When the student is administratively dropped after the "W" date, students will receive a "WF" as stated in current policy.

**Civility Statement:** Members of the Blinn College community, which includes faculty, staff, and other students, are expected to act honestly and responsibly in all aspects of campus life. Blinn College holds all members accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that recognizes personal respect and demonstrates concern for the personal dignity, rights, and freedoms of every member of the College community, including respect for College property and the physical and intellectual property of others. If a student is asked to leave the classroom because of uncivil behavior, the student may not return to that class until he or she arranges a conference with the instructor: it is the student's responsibility to arrange for this conference.

**Classroom Policy:** All the functions of all personal electronic devices designed for communications and/or entertainment (cellular phones, pagers, beepers, iPods, and similar devices) must be turned off and kept out of sight in all Blinn College classrooms and associated laboratories. No food, drinks, or tobacco products are allowed in the classroom. Please do not prevent others from learning by talking or interrupting.

**Scholastic Dishonesty:** The policy as stated in the 2007-2008 Student Handbook will be followed.

**Academic Support:**

Learning Center Hours are as follows:

Mon –Wed.	8:00 am - 9:00 pm
Thurs.-Fri.	8:00 am - 4:00 pm
Sunday	5:00 pm - 9:00 pm
Check for holiday closing	

Computers, videos, and tutors are available to assist students. A student ID must be presented upon entering the Learning Center. Rules are posted in the Learning Center and all students are expected to abide by them. You are encouraged to go to the Learning Center, study in groups, and/or see your instructor for help outside of class. Students that get help outside of class are more successful than those that do not.

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	16	2.2	Systems with Three Variables
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	23	2.4	Matrix Operations
	25	2.5	Multiplication of Matrices
	28	3.1	Linear Inequalities
	30	3.2	Solutions of Systems of Inequalities
Feb.	1	3.3	Linear Programming
	4	3.4	Applications
	6	4.1	Introduction to Simplex Method
	8		Major 1 (Sections 2.1-3.4)
	11	4.2	Simplex Method
	13	4.3	Minimum Problem: Duality
	15	5.1	Simple Interest
	18	5.2	Compound Interest
	20	5.3	Annuities and Sinking Funds
	22	5.4	Present Value of an Annuity and Amortization
	25	6.1	Sets
	27		Major 2 (Sections 4.1-5.4)
	29	6.2	Counting Elements in a Subset
Mar.	3	6.3	Counting Principals
	5	6.4	Permutations
	7	6.5	Combinations
	17	6.6	A Mixture of Counting Problems
	19	7.1	Probability
	24	7.2	Equally Likely Events
	26	7.3	Compound Events: Union, Intersection, and Complement
	28	7.4	Conditional Probability
	31	7.5	Independent Events
Apr.	2	7.6	Bayes' Rule
	4	8.1	Frequency Distribution
	7		Major 3 (Sections 6.1-7.6)
	9	8.2	Measures of Central Tendency
	14	8.3	Range, Variance, and Standard Deviations
	16	8.4	Random Variables
	18	8.5	Expected Value
	21	8.6	Bernoulli Experiments and Binomial Distributions
	23	8.7	Normal Distribution
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