Syllabus

Math for Liberal Arts 2 (MGF 1107) 3 credits

Prerequisite: Suitable placement score (See http://www.fau.edu/mathplacement for details)

| Instructor: | CRN: |
|----------------------------|--------------------------------|
| Office: E-mail Address: | Office Hours: Phone number: |
| Lecture Time: | Lecture Room: |
| Scheduled Lab SE350 Time: | MyMathLab Plus Course ID: |
| Teaching Asst: | Office Hours: |
| Office: | Email Address: |

<u>**Description:**</u> Financial mathematics, linear and exponential growth, history of mathematics, elementary number theory, graph theory.

<u>Objectives, Learning Outcome Goals</u>: Mathematics for Liberal Arts 2 is one of two courses designed to give the liberal arts students a broad view of both classical and contemporary mathematics, emphasizing ideas while not neglecting the computational aspects. These two courses can be taken in either order. Upon successful completion of this course, the student will be able to solve problems in the following areas and achieve the quantitative skills required for courses requiring math for liberal arts 2:

- 1. Represent numbers and calculate in other numeration systems and in other bases;
- 2. Solve congruencies and understand applications of modular systems;
- 3. Find the gcd and lcm of two natural numbers and use them to solve applied problems;
- 4. Perform operations using rational numbers and convert between fractions and repeating decimals;
- 5. Solve and graph linear equations and build linear models;
- 6. Understand the difference between linear and exponential growth and build exponential models;
- 7. Use compound interest to compute present and future values;
- 8. Calculate the present and future values of an ordinary annuity;
- 9. Compute the annual percentage rate of a loan;
- 10. Find Euler and Hamilton circuits and understand applications of connected graphs;
- 11. Use directed graphs to solve scheduling problems;
- 12. Applications of above techniques.

IFP General Education Outcomes:

- 1. Knowledge in several different disciplines;
- 2. The ability to think critically;
- 3. The ability to communicate effectively:
- 4. An appreciation for how knowledge is discovered, challenged, and transformed as it advances;
- 5. An understanding of ethics and ethical behavior.

Information available at http://www.fau.edu/deanugstudies/NewGeneralEdCurriculum.php

General Education: This course satisfies, in part, the general education requirements for Foundations of Mathematics and Quantitative Reasoning.

http://www.science.fau.edu/student_services/student_info_gen_edu.php

Software: Students must purchase access to a web-based learning and assessment system called MyMathLab Plus either at the bookstore or directly through the website. All homework, quizzes and exams will be completed online. Students not registered online by the third week of the semester may be dropped from the course.

<u>Course Materials</u>: You are not required to purchase a textbook for this course. You will have access to the e-book - Mathematics All Around, 4th Ed., by Thomas Pirnot, Addison Wesley (2010), online through MyMathLab Plus. You may use a scientific calculator for exams. You may NOT use

cell phones or any other electronic devices. Calculators may NOT be shared during exams. You must also have an iClicker, which can be purchased at the bookstore or online. You must have an iClicker by **August 31, 2011**, in the classroom.

<u>Website</u>: Blackboard (BB) <u>http://blackboard.fau.edu</u> (sign in as to MyFau). All announcements, solutions and supplementary materials will be posted on BB.

Attendance Policy: Regular attendance is expected, including active involvement in all class sessions and professional conduct in class. Students are responsible for arranging to make up work missed because of legitimate class absence such as illness, family emergencies, military obligation, court-imposed legal obligations, or participation in university-approved activities. It is the student's responsibility to notify the instructor prior to any anticipated absence, and within a reasonable amount of time after an unanticipated absence.

Tutoring: Tutoring is available in PS 111. Please see the schedule at http://www.math.fau.edu/MLC/ for tutors and hours of operation.

<u>Course Grade</u>: The course grade will be calculated using the following table. Grades will be posted on https://blackboard.fau.edu. Check your grades regularly to make sure that they correctly reflect your scores in the course. *Keep all of your worksheets and exams or a change in grade will not be honored.*

| Attendance | 10% |
|-------------------------|-----|
| MyMathLab Plus Homework | 10% |
| Exams (including final) | 80% |

Grading Scale:

| Percentage: | 93%- | 90%- | 87%- | 83%- | 80%- | 75%- | 65%- | 60%- | 55%- | 0%- |
|-------------|------|------|------|------|------|------|------|------|------|-----|
| | 100% | 92% | 89% | 86% | 82% | 79% | 74% | 64% | 59% | 54% |
| Grade: | A | A- | B+ | В | B- | C+ | С | D | D- | F |

MyMathLab Plus Homework: Homework must be completed by the posted due dates. Give yourself ample time to complete assignments *well before the posted due date*. Lapses in internet access, faulty computers, power outages, or scheduled maintenances are NOT valid excuses for missed or incomplete assignments.

Exams: Four exams (including a non-cumulative final) will be given on the days and times stated in the course calendar, in rooms to be assigned. *Every exam will count towards your final grade.* Students are only allowed a number 2 pencil, eraser, scientific calculator, and valid picture ID during a testing session. DO NOT BRING CELL PHONES, BOOKS, BOOK BAGS, NOTES, OR ANY OTHER ITEMS TO THE EXAM ROOM! *Entrance to the exam requires a valid picture identification card:* Only FAU Owl Cards, U.S. Passports, or Florida Driver's Licenses will be accepted!

Comprehensive Final Exam: 150 Minutes will be given. Date, location and time will be announced in the class. *You must take the final exam to receive a passing grade!* Approval for a makeup exam must be obtained from your instructor.

Makeup Exams: Makeup exams will be given only under exceptional circumstances. *If you miss an exam, you must provide a written, verifiable excuse, if possible in advance of the scheduled exam.* Approval for a makeup exam must be obtained from your instructor.

<u>Classroom Etiquette</u>: Please refer to the FAU Code of Conduct available at http://www.fau.edu/regulations/chapter4/4.007 Student Code of Conduct.pdf.

Academic Honesty: Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an

unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 at

http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf

Students With Disabilities: In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) and follow all OSD procedures. In Boca Raton, SU 133 (561-297-3880); in Davie, MOD 1 (954-236-1222); in Jupiter, SR 117 (561-799-8585); or at the Treasure Coast, CO 128 (772-873-3305). OSD website at http://www.osd.fau.edu.

Included course topics are subject to reasonable changes at the discretion of the instructor.