## VALENCIA COMMUNITY COLLEGE MAC 1105 - COLLEGE ALGEBRA COURSE SYLLABUS FALL TERM 2010

Course: MAC 1105 College Algebra (CRN: 11631 and 12942)

**Professor:** Kurt Overhiser

**Office:** East Campus Building 8 - Room 206

**Phone:** 407-582-2481

E-mail: koverhiser@valenciacc.edu

## **Student Engagement Hours:**

Monday 1:15 p.m. – 2:15 p.m. AND 7:00 p.m. – 8:00 p.m.

Tuesday 9:30 a.m. – 11:15 a.m.

Wednesday 1:15 p.m. – 2:15 p.m. AND 7:00 p.m. – 8:00 p.m.

Thursday 9:30 a.m. – 11:15 a.m.

Friday 8:00 a.m. – 10:30 a.m. via cell phone (407-247-4574)

Catalog Course Description: MAC 1105 is a three-credit mathematics course. The prerequisite for this course is MAT 1033C with a grade of 'C' or better. An appropriate score on an approved assessment such as the CPT can also satisfy this requirement. This course is based on the study of functions and their role in problem solving. Topics include the linear, quadratic, and exponential families of functions, as well as inverse functions and graphing. Students will be required to solve applied problems and communicate their findings effectively. Technology tools will be utilized in addition to analytical methods. A minimum grade of 'C' is required to use this course to satisfy Gordon Rule and general education requirements.

**Learning Outcomes:** This course will enable a student to achieve the following learning outcomes:

- 1) Read and comprehend quantitative information describing real world situations at the college algebra level.
- 2) Use algebra to model real world situations.
- 3) Recognize the mathematical function concept and describe relationships between variables in real world situations. Use functions expressed verbally, numerically, graphically, and symbolically.
- 4) Given the graph of a function, write its algebraic equation. Given an algebraic equation of a function, graph the function or a transformation of the function.
- 5) Recognize, model, and analyze linear functions in real world situations.
- 6) Recognize, model, and analyze quadratic functions in real world situations.
- 7) Recognize, model, and analyze exponential and logarithmic functions in real world situations.
- 8) Given several concurrent quantitative conditions, express each condition algebraically, and find all possible solutions of the resulting system.

## **Required Materials:**

- 1. Modeling, Functions, and Graphs-Algebra for College Students, 4<sup>th</sup> ed. By Yoshiwara & Yoshiwara
- 2. A Graphing Calculator (the instructor will be using the TI-84 PLUS for classroom demonstration) Note: Any calculator with a built-in C.A.S. such as the TI-89 or TI-92 may not be used on in class tests.

**Optional Materials:** Student Solutions Manual

**Homework:** There will be homework assignments taken from your textbook all throughout the semester. This homework is listed by section in the accompanying homework list. There will be time allotted at the beginning of class to go over selected homework problems. Please complete all your homework on loose leaf paper and keep it in a three ring binder. I will collect your homework on test days for a grade. I will be grading this homework on overall completeness and correctness. I will choose a handful of problems in which to grade for correctness. I will not say in advance which problems I will be grading but I will grade the same problems for every student so be sure to do all the assigned homework. Any collected homework assignments with answers that are not supported with work and required steps will not receive full credit. The key for success in this course is to do the homework. If you are having trouble with the material, be sure to seek help.

**Examinations:** There will be THREE in-class exams and a comprehensive final. Because mathematics builds upon itself, some of the content from exam to exam may be cumulative. Many of the exam questions are similar to homework problems, examples in the book and/or examples worked in class. Exam dates and the sections that are to be tested are found in the accompanying course calendar. Not taking the final exam will automatically result in a final course grade of 'F'.

**Makeup Policy for Exams:** No makeup exams are available without the explicit consent of the professor, which will only be granted in certain cases per VCC policy. All exams must be taken on or before the dates assigned in the course calendar. If you are unable to take an in class exam due to a medical emergency, legal situation, or death in the family then the final exam score may replace ONE missed exam once appropriate documentation is received by the professor. Missing more than one exam will result in a zero percent grade.

**Final Exam Dates and Times:** You must attend the final exam for the CRN that you are assigned. Final exams are held in our regularly scheduled classroom.

The final exam for CRN: 11631 will be held on Wednesday Dec. 15, 2010 from 5:00 p.m. – 7:30 p.m. The final exam for CRN: 12942 will be held on Thursday Dec. 16, 2010 from 10:00 a.m. – 12:30 p.m.

**Course Grade and Evaluation:** Each of the three in-class exams as well as the Final Exam is worth 20% of the final grade. The overall average homework grade is also worth 20% of the final grade. Grades will be assigned according to the rule: 90-100 is an A, 80-89 is a B, 70-79 is a C, 55-69 is a D and below 55 is an F.

**Tutoring:** The Math Support Center provides free walk-by tutoring on a first come first serve basis. This center is located in building 4 inside the Academic Success Center (ASC) on the first floor. The ASC has limited tutoring hours. See the posed hours outside for more details.

**College Withdrawal Policy:** A student who withdraws from class on or before the withdrawal deadline of <u>Friday November 5, 2010</u> will receive a grade of 'W'. A student is not permitted to withdraw after the withdrawal deadline. The professor MAY withdraw a student up to the beginning of the final exam period for violation of the class attendance policy. A student who is withdrawn by the professor for violation of the class attendance policy will receive a grade of 'W'. Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of 'F'. More information is available in the 2010-2011 College Catalog on pages 90-92.

**Class Attendance Policy:** Attendance is expected of all students except in emergencies and will be taken at the beginning of each class. If you must be absent, it is your responsibility to find out what you missed by contacting the professor or another student. <u>I do not withdraw students for lack of attendance</u>. <u>If you wish to withdraw from the course</u>, <u>please do so through ATLAS before the withdraw deadline</u>. If you arrive late or leave early, it is courteous to speak with the professor about your reasons for doing so.

**Supplemental Learning (SL):** This only applies to CRN: 12942. This course is enhanced by Supplemental Learning – casual, small-group study sessions led by a student who has already passed the course with a high grade. In SL sessions, you compare notes with other students, discuss assignments, and develop organizational and study skills. Students who take part in SL sessions make higher grades.

**Valencia Student Core Competencies:** Valencia faculty members have defined four interrelating competencies (Think, Value, Communicate, Act) that prepare students to succeed in the world community. These competencies are outlined in the 2010-2011 College Catalog on page 18. In this course, you will further your mastery of these core competencies through classroom lecture and discussion, group work, and other learning activities.

**Academic Dishonesty:** All forms of academic dishonesty are prohibited at Valencia. Academic dishonesty includes, but is not limited to, plagiarism, cheating, furnishing false information, forgery, alteration or misuse of documents, misconduct during a testing situation, and misuse of identification with intent to defraud or deceive. Sanctions available to the professor should a violation occur are described in the Valencia Student Handbook or online at <a href="http://valencia.cc.fl.us/policies/PDF/10-16.pdf">http://valencia.cc.fl.us/policies/PDF/10-16.pdf</a>.

Student Code of Classroom Conduct: Valencia is dedicated not only to the advancement of knowledge and learning, but is concerned with the development of responsible personal and social conduct. By enrolling at Valencia, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct. Students who engage in any prohibited or unlawful acts that results in disruptive behavior may be directed by the professor to leave the class. Violation of any Valencia policies or procedures or classroom rules may lead to disciplinary action up to and including expulsion from the College. Disciplinary action may include being withdrawn from the class, probation, suspension, expulsion, or other appropriate and authorized actions. Valencia's Student Code of Classroom Conduct can be found in the current Student handbook, or online at <a href="http://valencia.cc.fl.us/policies/PDF/10-18.pdf">http://valencia.cc.fl.us/policies/PDF/10-18.pdf</a>. Additional information is available in the 2010-2011 College Catalog on page 93.

**Students with Disabilities:** Students with disabilities who qualify for academic accommodations may provide the professor a notification letter from the Office for Students with Disabilities (OSD) and discuss specific needs with the instructor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities. The East Campus office is located in Building 5, Room 216.

**Valencia ID cards:** Valencia ID cards are required for the Library, Testing Center, and other on campus services. No other forms of ID at those locations will be accepted and having a Valencia ID is mandatory to obtain those services. You may obtain a Valencia ID on the 2<sup>nd</sup> floor of building 5 on the East Campus.

**E-mail Notification:** Where appropriate, I will communicate with you through ATLAS email. Please check your ATLAS account regularly.

**Disclaimer:** Changes to the syllabus, grading procedure, course calendar, and homework assignments may be made at any time at the discretion of the professor.