VALENCIA COLLEGE: WEST CAMPUS

**MAT1033C: INTERMEDIATE ALGEBRA – CRN 10447**

**COURSE SYLLABUS** – FALL 2014

MW 1 pm – 2:15 pm (Bldg. 7/Rm. 208)

**INSTRUCTOR:** Samuel Tsegäye

**OFFICE:** 3-126

**OFFICE HOURS:** Monday – Friday: 9am – 11am

**PHONE/EMAIL:** 407-582-1794 / stsegaye@valenciacollege.edu

**WEBSITE:** http://frontdoor.valenciacollege.edu/?stsegaye

**PREREQUISITE**: Minimum grade of C in MAT0028C or appropriate score on an approved assessment.

**REQUIRED** Intermediate Algebra, 6th edition, by Elayn Martin-Gay

**MATERIALS:**

MyMathLab Student Access Kit

* A MyMathLab Student Access Kit is included with a new book purchase in the Valencia bookstore.( www.pearsonmylabandmastering.com ) **COURSEID:** **lab82558**
* If you purchase a used text, or a new text from a source other than the Valencia bookstore, then you may need to purchase a MyMathLab student access kit as a standalone item. If so, please make sure the kit you purchase is for MyMathLab.

**CALCULATOR:** In an effort to increase your skills in the use of technology, this course will include some activities and examinations that will require the proper use of scientific calculators. Therefore, scientific calculators are required in this course. If you plan to continue studying mathematics, you might consider purchasing a TI-84 Plus graphing calculator now, as it is the most frequently used model in the “Gordon Rule” math courses. If you are receiving financial aid it may be possible to utilize some of your funds to purchase your calculator. Check with the financial aid office for more information.

**COURSE DESCRIPTION:** Intermediate Algebra presents algebraic skills for MAC 1105. Topics include: linear equations and inequalities in two variables and their graphs, systems of linear equations and inequalities, introduction to functions, factoring, algebraic fractions, rational equations, radicals and rational exponents, complex numbers, quadratic equations, scientific notation, applications of the above topics and the communication of mathematics. Applications emphasizing connections with other disciplines and the real world will be included.

**COURSE COMPETENCIES:** Valencia Community College wants graduates to possess and demonstrate a set of global competencies including the ability to **THINK, COMMUNICATE, VALUE AND ACT**. In an effort to help you acquire and improve your ability to demonstrate the competencies this course will include activities that require you to:

1. Think clearly, critically and creatively.

2. Communicate with others in written and verbal form.

3. Make reasoned value judgments and responsible commitments.

4. Act purposefully, reflectively and responsibly.

**COURSE LEARNING OUTCOMES:**

### The student will be able to use the graphing calculator to enhance and visualize mathematical concepts.

### The student will be able to understand the properties of exponents, and work with real life applications such as scientific notation, and formulas like compound interest.

### The student will recognize the mathematical function concept and describe relationships between variables in real world situations. The student will also be able to use functions expressed verbally, numerically, graphically, and symbolically.

### The student will be able to recognize, model, and analyze linear equations in the real world.

### The student will be able to recognize, model, and analyze linear inequalities in real world situations.

### The student will be able to recognize, model, and analyze systems of linear equations in real world situations.

### The student will be able to recognize and analyze polynomials in real world situations.

### The student will be able to recognize, model, and analyze rational expressions in real world situations

### The student will be able to recognize and analyze radical expressions in real world situations

### The student will be able to recognize, model, and analyze quadratics in real world situations

**WITHDRAWAL:** The withdrawal (W) deadline for this session is **Friday, November 7, 2014**. It is the student’s responsibility to withdraw through Atlas. Withdrawal after the deadline due to attendance is at the discretion of the instructor.

During the first or second attempt in the same course at Valencia, if you withdraw or are withdrawn by the professor, before the Withdrawal Deadline, you will receive a W (Withdrawn). You will not receive credit for the course, and the W will not be calculated in your grade point average; however, the enrollment will count in your total attempts in the specific course. If you do not withdraw prior to the Withdrawal Deadline or fail to take the required final examination, the professor will assign your grade based on your performance in the course at the time of withdrawal.

Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and Withdrawals), a student who withdraws from class before the withdrawal deadline will receive a grade of “W.” A student is not permitted to withdraw after the withdrawal deadline. A faculty member 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 faculty 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.” For a complete policy and procedure overview on Valencia Policy 4-07 please go to: <http://valenciacc.edu/generalcounsel/policydetail.cfm?RecordID=75>.

**ATTENDANCE:** Attendance and class participation are expected of all students. You are responsible for any information and/or assignments given during class, whether you are present or not. Furthermore, you may be withdrawn from the course at the instructor’s discretion if absences are excessive. **It will be considered excessive if it exceeds 3 absences.** In-class activities can’t be “made up.” If you are absent on a day that an in-class activity occurs for credit or extra credit, your grade is likely to be adversely affected. ***You must be in class on time.*** Two tardies or early departures count as an absence. Do not make a habit of being late. It is disruptive to arrive or depart while class is in session. It is your responsibility to make up the notes/assignments that you may have missed as soon as possible. If you have to leave early then let me know in advance before class.

**ACADEMIC HONESTY:** Representing another’s work as your own or allowing such conduct on the part of a fellow student is cheating. Cheating will not be tolerated in this class. Such incidents will be handled according to the college policy on academic honesty.

**CLASSROOM CONDUCT:** You are encouraged to actively participate and ask pertinent questions during class. Every student is expected to behave in a manner that encourages an atmosphere of respect in the classroom. The Valencia College Code of Student Conduct will be the minimum standard for behavior. In addition to that standard:

* Cell phones will be disabled and out of sight during class meetings.
* If you are text messaging or your cell phone rings during class then the incident will count as one tardy (half of an absence).
* Cell phone calculators will not be allowed.
* If your cell phone rings during a quiz or a test then you will be penalized for that assignment.

Your attitude will greatly affect your ability to succeed in this course. It will also affect your classmates’ attitudes should you choose to participate in class discussions. Always consider this carefully before you speak or act. To create a good environment for learning, avoid sidebar conversations with other students while work is being done at the board, rude comments or remarks, raised voices or confrontational comments. Follow instructions given by your instructor, who serves as your classroom manager.

If your actions in class are deemed by your instructor to be disruptive, you will be asked to leave class immediately. If you are ever asked to leave class, you **may** be permitted to return to future class meetings after consultation with your instructor outside of class. You may also be required to arrange a conference with another college official before attending class again.

**WORK ETHICS and TIPS FOR SUCCESS:** Students should maintain an organized notebook, complete homework regularly, get assistance as needed outside of class, and check their solutions to problems worked out. Students should plan to spend 2 – 3 hours daily on math homework and lab assignments. Students are expected to keep track of all due dates, exam dates, and should manage their time accordingly. Students should plan for the unexpected and should not wait until the last minute to complete assignments. Avoid last minute cramming and study, practice, and learn as we go along. This will lead to more effective learning and less stress! Students are expected to read ahead the sections that will be taught before class. The instructor will assume that students read ahead and previewed the main notes and examples in the section(s) that will be taught. Students that do not read ahead will be at a major disadvantage in terms of understanding and learning. Understanding math occurs with note taking, paying attention to lessons, asking questions, etc. Learning take places when you actually “do” math, not just watch it. The most effective way to improve your math skills is through practice and more practice!

**HOMEWORK:** Completion of homework on a regular basis is an essential part of your success in this course. Online (via MyMathLab) and textbook homework will be assigned during each lecture session and is expected to be completed by the next class session (no later than the specified due date). At that time an opportunity to discuss the homework will be given. Make a sincere effort to stay current with homework. Success in the class is unlikely otherwise. You are encouraged to seek assistance from the instructor if you encounter difficulties with the assigned problems, visit the open lab in the Math Center in 7-240, or Math Connections in 7-240.

**MAKE-UPS:** It is my policy NOT to allow make-ups of missed tests or assignments. The only exceptions that will be considered are verifiable absences due to illness, death in the family, or such unanticipated emergencies. In the event of such a situation, written verification (Dr.’s excuse, police report, etc.) of the emergency must be provided. If you are going to have to miss an exam, you must let the instructor know before the scheduled exam time, and you may be allowed to take the exam at the discretion of the instructor.

**LAB COMPONENT:** Two platforms will be used in this course: Blackboard and MyMathLab. The buttons on the left are Lab Activity Chapter folders (included for Chapters 2, 3, 6, 7, 8, & 4). Click on the appropriate chapter to complete the steps of the activity for each chapter. Each lab activity has 4 parts and is worth 100 lab points:
This lab is designed to enhance your learning experience as you master the algebraic skills needed to successfully complete MAT 1033C. Each chapter that you learn from your textbook is accompanied by a set of lab assignments.

* Lab Attendance Requirements: Each student must spend a **minimum of 50 minutes per week** in the open lab area each week working on Lab assignments.

Step 1: View Concept Videos and Animations

Three to four concept videos or animations from each section should be viewed. The links to each video or animation is provided in Blackboard under the appropriate Lab Activity button. They review course material that you will need to know to complete the project portion of the lab successfully. Use the designated area on the MLP (Math Learning Plan) to describe what you have learned from viewing the videos and/or animations.

Step 2: Complete Lab Project

Open and print the lab project worksheets, which can be found in Blackboard under the appropriate Lab Activity button. Each project will ask a series of questions that covers the material that you learned in the course and applies it to real-life scenarios. Complete the project worksheet, getting help on it as necessary.

The following steps, 3 and 4, must be completed in the West Campus Math Lab (7-240).

Step 3: Complete Project Self-Check Quiz

Bring your completed worksheets and a MLP (Math Learning Plan) to the West Campus Math Lab. Show your work to a lab instructor, who will then give you access to a password protected Project Self-Check Quiz in MyMathLab under Quizzes & Tests. The Project Self-Check Quiz will give you feedback on your answers to the project. You will have unlimited attempts at completing the self-check quiz, to check your work. Use the designated area on the MLP (Math Learning Plan) to describe what you have learned or need to work on after getting feedback on your project answers. Upon completing the Project Self-Check Quiz, have a lab instructor, sign the project worksheet, and MLP (Math Learning Plan) with your Project Self-Check Quiz grade.
This component is graded as complete or incomplete and comprises 50% of the lab assignment grade.

Repeat steps 1, 2, and 3 until you feel confident with the material. No score is required on the project self-check for you to move onto the next step but the better you understand the material on the above steps, the better you should do on the assessment in step 4!

Step 4: Complete Lab Activity Assessment

You must be in the West Campus Math Lab (7-240) to take the assessment, since it is password protected. Once you have completed step 3 with a signature from a lab instructor on your project worksheets and MLP, you will then be given access to take the Lab Activity Assessment which is completed in MyMathLab. You will have 3 attempts to complete this assessment at the required (70%) or desired score. Have a lab instructor sign your MLP (Math Learning Plan) after each attempt. This component is graded by your score on the assessment and comprises 50% of the lab assignment grade.

**GRADING:** Your grade will be determined by your attendance, performance in the class, on homework, quizzes, tests, and the final exam. These will be figured according to the grading scale below.

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| --- | --- | --- |
| **5 Tests (NO drop grade)** | **50%** | **Grading Scale (%)**90 – 100 **A**80 – 89 **B**70 – 79 **C**60 – 69 **D** Below 60 **F** |
| **Homework / Projects** | **15%** |
| **Lab Assignments** | **15%** |
| **Final Exam** | **15%** |
| **Quizzes** | **5%** |
| **Perfect Attendance** | **3%** |

You can check your grades on **MyMathLab** under ***GRADEBOOK***

**Note:** Each homework problem may be attempted multiple times until desired grade is achieved for the section.

There will be a two hour final exam on, **Monday, December 8, 1:00pm – 3:30pm**. The final will be comprehensive. Failure to take the final exam will result in a grade of F.

**RESOURCES:**

* I, your instructor, am interested in your success in this class. Ask questions regularly!
* Many students of algebra find it extremely helpful to form study groups with their classmates. This practice is highly recommended.
* The **West Campus Math Center** is in **building 7, room 240**. It is open:
* Monday through Thursday from 8:00 a.m. to 8:00 p.m.
* Friday from 8:00 a.m. to 7:00 p.m.
* Saturday from 10:00 a.m. to 3:00 p.m.

There you will find Valencia math division staff, peer tutors, study rooms and other comfortable work areas for study group meetings, computer-based tools as available for your text, and support materials for checkout with your Valencia College identification card.

* Peer tutors in the Math Center are available for walk-in assistance, no appointment necessary. Peer tutors are available for individual appointments as scheduling and funding permit. Ask for details at the Welcome Desk in the Math Center. Tutors have been trained to use techniques that help you become an independent learner. They have been instructed to guide you through the problem solving process and utilize the materials you have available through your course. They may help you by asking open ended questions, walking you through examples in your text, or (hopefully on rare occasions) using pencil and paper to show you how to solve a problem similar to one you are working on. Since the tutors’ goal is to help you become an independent learner, they will let you do the work as much as possible. The learning process requires a regular investment of your time, and patience is the key.
* If you purchased a new text, you received a Student Access Kit for the MyMathLab software with it. It is also possible to purchase a student access kit for MyMathLab separately in the bookstore or online. Take your MyMathLab Student Access Kit with you to your Open Lab orientation. You will use the software as part of your lab experience.
* The Math Connections, located inside the Math Center 7-240, is a learning community for increasing mastery of the math competencies associated with your course. Various instructors work with and coach community members according to a posted schedule. Visit early; visit often!
* **BayCare Behavioral Health Student Assistance Program (SAP):** Valencia College is interested in making sure all our students have a rewarding and successful college experience.  To that purpose, Valencia students can get immediate help that may assist them with psychological issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work.  Students have 24 hour unlimited access to the BayCare Behavioral Health’s confidential student assistance program phone counseling services  by calling (800) 878-5470. Three free confidential face-to-face counseling sessions are also available to students.

**SPECIAL ACCOMMODATIONS:**

Students with disabilities who qualify for academic accommodations must provide a letter from the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities (West Campus SSB 102, extension 1523).

\*\* **If you are struggling or having questions, please make sure you see me before it is too late \*\***

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**NOTICE:**

Changes in the procedures described in this syllabus may be made at the discretion of the instructor.

***MAT 1033C – Intermediate Algebra: MW 1pm –2:15pm CRN 10447***

***Elayn Martin-Gay, 6th Edition Timeline – Fall 2014 Full term***

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| ***Week #*** | ***Dates******(M-S)*** | ***Textbook Sections*** | ***Topics*** | ***Monday*** | ***Wed*** |
| 1 | August25 –Aug 31 | Introductions and Lab Orientations2.1 – 2.5 | 2.1 – 2.5 Linear Equations, Inequalities, problem solving and compound inequalities | Intro & Lab IntroDiagnostic | Review 2.1 – 2.5 |
| 2 | Sept1 - 7 | review material for Chapter 2 Exam | (Note: Holiday on September 5 – No Classes) | ***Holiday******No classes*** | Finish 2.1 – 2.5 |
| 3 | Sept8 - 14 | Review material for Chapter 2 Exam& 3.1 | 3.1 Graphing Equations***Lab#1 (Chapter 2) Due Wed, September 10*** | Review DayPlus 3.1 | ***Chapter 2 Exam*** |
| 4 | Sept15 - 21 | 3.2, 3.3, 3.4, 3.5 | 3.2 Introduction to Functions3.3 Graphing Linear Functions3.4 The Slope of a Line3.5 Equations of Lines | 3.2, 3.3 | 3.4, 3.5 |
| 5 | Sept 22 - 28 |  3.7 and review material for Chapter 3 Exam | 3.7 Graphing Linear Inequalities |  3.7 | *Review Day* |
| 6 | Sept 29 – Oct 5  | 5.7, Chapter 5 review | 5.7 Factoring by Special Products (Cubes)Chapter 5 – Exponents and Polynomials***Lab #2 (Chapter 3) Due Monday, September 29*** | ***Chapter 3 Exam*** | 5.7 + Review of Chapter 5 |
| 7 | October6 - 12 | 6.1, 6.2, 6.3, 6.4 | 6.1 Multiplying & Dividing Rational Expressions6.2 Adding & Subtracting Rational Expressions6.3 Simplifying Complex Fractions6.4 Dividing Polynomials: Long and Synthetic  | 6.1, 6.2 | 6.3, 6.4 |
| 8 | October13 - 19 | 6.5, 6.6 & review material for Ch 6 exam | 6.5 Solving Equations Containing Rational  Expressions 6.6 Rational Equations & Problem Solving | 6.5, 6.6 | Review Day |
| 9 | October20 - 26 | 7.1, 7.2 | 7.1 Radicals and Radical Functions7.2 Rational Exponents***Lab #3 (Chapter 6) Due Monday, October 20*** | ***Chapter 6 Exam*** | 7.1, 7.2 |
| 10 | Oct 27 -Nov 2 | 7.3, 7.4, 7.5, 7.6 | 7.3 Simplifying Radical Expressions 7.4 Adding, Subtracting & Multiplying Rational  Expressions7.5 Rationalizing Denominators and Numerators  of Rational Expressions7.6 Radical Equations and Problem Solving | 7.3, 7.4 | 7.5, 7.6 |
| 11 | Nov3 - 9 | 7.7 & review material for Chapter 7 exam | 7.7 Complex Numbers***Lab #4 (Chapter 7) Due Wed, November 5*** | 7.7 & review | ***Chapter 7 Exam*** |
| 12 | Nov10 - 16 | 8.1, 8.2, 8.5, 8.6 | 8.1 Solving Quadratic Equations by Completing  the Square8.2 Solving Quadratic Equations using the Quadratic Formula8.5 Quadratic Functions and Their Graphs8.6 Further Graphing of Quadratic Functions | 8.1, 8.2 | 8.5, 8.6 |
| 13 | Nov17 - 23 | Review material for Chapter 8 exam | ***Lab #5 (Chapter 8) Due Wednesday,*** ***November 19*** | *Review Day* | ***Chapter 8 Exam*** |
| 14 | Nov 24 - 30 | 4.1, 4.3 | 4.1 Solving Systems of Linear Equations in Two  Variables and their applications4.3 Systems of Linear Equations and Applications | 4.1, 4.3 | ***Holiday******No Classes*** |
| 15 | Dec1 - 7 | Chapter 4 Exam andFinal Exam Review | ***Lab #6 (4.1, 4.3) Due Friday, December 5*** | *Review Day* | ***Chapter 4 Exam*** |
| FinalsWeek | Dec8 - 14 | Final Exams |  |  |  |

***\*\*\* This schedule is timeline to change at any time by your instruction \*\*\****

Labor Day (National Holiday) -- Monday, September 1, 2014 (Week #2)

College Night (No Classes) – Thursday, October 9, 2014 (Week #7)

Thanksgiving Break (No Classes) – November 26 – 30, 2014 (Week #14)