Department of Electronics Engineering Technology
Division of Architecture, Engineering, & Technology
West Campus Building 9, Room 140 (407) 582-1902/1903

http://www.valenciacollege.edu/west/engineering/ **SESSION: Spring 2013**

Course Syllabus: EET1214C – Introduction to Engineering Technology – CRN 20734

Catalog Course Description: A course involving laboratory environment learning. Student will learn to identify electronic components, use computer circuit simulators, solder and desolder components, and use the basic lab instruments for testing and troubleshooting. Student will be required to build a kit and demonstrate functionality and workmanship. (Special Fee: $64.00)

Prerequisites: None

Class Time and Location: **Lecture/ Laboratory: Tuesday, 9 AM – 11:45 AM, Building 9, Room 211**

Textbook: None

Lab Manual: EET 1214C Introduction to Engineering Technology Lab Manual

Required Materials:

- Scientific calculator (at least a Casio fx-115W or the equivalent)
- Soldering Kit for EET 1214C
- Highlighter and pencil or erasable pen
- USB flash drive

Professor's Information:

Instructor: Dr. Hall
Office: West Campus, University Center – Room 254
Phone: (Office) 407.582.1963
Email: dhall@valenciacollege.edu
Office Hours: Posted just outside my office door and within our Blackboard online course

Student Performance Assessment:

Attendance and In Class Participation	**10%**
My Education Plan	**5%**
Laboratory Exercise Assignments	**40%**
Soldering Project	**10%**
Exams	**20%**
Final Exam	**15%**

A	90-100%
B	80 - 89%
C	70 – 79%
D	60 – 69%
F	< 60%

Important Dates:

Martin Luther King Day	January 21st
Learning Day	February 8th
Spring Break	March 4th – 10th
Withdrawal Deadline for "W" Grade	March 22nd
Final Grades Viewable in Atlas	April 30th

DISCLAIMER: **Any changes in the policy and/or schedule of this syllabus may be made at the discretion of the instructor at anytime during the semester.**

Course Outline for EET 1214C			
Date	**Due Online Before Class Begins**	**Material To Be Covered**	**Laboratory Experiments**
1 (1-8)		➢ Introductions ➢ Course Overview ➢ Introduction to Multisim ➢ Component Symbols ➢ Exercise A Overview	➢ Exercise A - Component Sheet
2 (1-15)		➢ Education Plan Workshop conducted by Amy Love, Career Program Advisor ➢ Multisim Basic Logic Gates (Pin # arrangements, building single chip logic circuits, test instruments, switches, LED's) ➢ SPDT Switches and Probes vs. the Logic Converter	➢ My Education Plan ➢ Exercise 1A (Multisim portion of Exercise 1)
3 (1-22)	➢ My Education Plan [submit in class] ➢ Exercise A	➢ Introduction to Breadboard (Pin # arrangements, building, testing, and troubleshooting single chip logic circuits)	➢ Exercise 1B (Bench portion of Exercise 1)

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4 (1-29)	➢ Exercise 1 Lab Report	➢ Multisim Basic Logic Gates (Pin # arrangements, building multi chip logic circuits) ➢ Introduction to Breadboard (Pin # arrangements, building, testing, and troubleshooting multi chip logic circuits)	➢ Exercise 2A (Multisim) ➢ Exercise 2B (Bench)
5 (2-5)	➢ Exercise 2 Lab Report	**Exam #1** **Digital Circuits (Multisim/Bench)**	
6 (2-12)		➢ Number Notation ➢ Introduction to Resistors (Color Codes) ➢ Introduction to Digital Multimeters ➢ Introduction to Power Supplies	➢ Complete number notation exercises on pages 42,43,45 ➢ Exercise 3 (Bench)
7 (2-19)	➢ Exercise 3 Lab Report	Build basic single path DC Electrical Circuits on Multisim (construct, measure, and troubleshoot…)	➢ Exercise 4A (Multisim)
8 (2-26)		Build basic single path DC Electrical Circuits on the breadboard (construct, measure, and troubleshoot…)	➢ Exercise 4B (Bench)
9 (3-5)	**Spring Break**		
10 (3-12)	➢ Exercise 4 Lab Report	Build multipath DC Electrical Circuits on Multisim and on the breadboard (construct, measure, and	➢ Exercise 5A (Multisim) ➢ Exercise 5B (Bench)

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		troubleshoot…)	
11 (3-19)	➢ Exercise 5 Lab Report	**Exam #2 DC Circuits (Multisim/Bench)**	
12 (3-26)		Soldering Project	Alarm Board
13 (4-2)	➢ Completed working soldering project	Introduction to AC & Oscilloscopes	➢ Exercise 6 (Multisim)
14 (4-9)		AC Circuit analysis continues…	➢ Exercise 6 (Bench)
15 (4-16)	➢ Exercise 6 Lab Report	More AC & Oscilloscope FUN…	➢ Instructor Exercise
16 (4-23)	➢ All Grade Enhancement Opportunities ~Not Required~ [See Blackboard for details]	**Final Exam (*Comprehensive*)**	

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Rules and Comments:

- Students are strongly encouraged to read the Valencia policy Manual *Student Code of Conduct* and *Computer Acceptable Usage* found at: **http://valenciacollege.edu/policies/policydetail2.cfm?PolicyCatID=10&PolicyID=3**

- You are expected to be in class **on time.** You are responsible for all information and/or assignments given during class, whether you are present or not.

- **NO LATE WORK** will be accepted (no exceptions).

- **NO MAKE UPS** on missed lab assignments or missed exams (no exceptions).

- All lab experiments must be completed during class time. Labs performed in the University Center Open Lab will not be accepted unless prior permission from professor.

- Use pencil or erasable pen **ONLY** and **erase all errors** when recording data within your lab manual. **Five points will be deducted** on each lab report grade if non-erasable pen is used in the lab manual or for scratch outs done with any type of writing instrument.

- Lab reports are to be submitted in an organized, well documented, and structured manner representative of the student's best effort. No hand-written material will be accepted in the lab reports.

- As we embark upon completing various lab experiments within this course during which you will be recording various data within your lab manual, be diligent every step of the way to try and record an explanation of why you think your circuit is behaving as you are observing it during the lab and not to simply just note down your data observations without conveying some reason as to why they might be occurring.

- No audio or video recording allowed in class unless prior permission is granted from professor and every other student in the class.

- It is the student's responsibility to withdraw from the course. Any withdrawal after the withdraw deadline may result in earning an **F** as the overall grade for the course.

- If interested, you may calculate your most current grade in the course utilizing the "Student Performance Assessment" section listed on the first page of this syllabus along with what grades have been posted in Blackboard Learn and with what graded assignments have been returned in class to you thus far in the course. Your professor will

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calculate the final grade in the course that you have earned after the final exam has been given and will post this grade in Atlas for you to view at the end of the semester.

Student Core Competencies:

The faculty members of Valencia College have established four Core Competencies that describe the learning outcomes for a Valencia graduate. They are: THINK, VALUE, COMMUNICATE, and ACT. These general competencies can be applied in many contexts and must be developed over a lifetime. They specify how learning can be expressed and assessed in practice. They enable students and faculty to set learning goals and assess learning within and across the many disciplines of human inquiry. Use the descriptions and examples of academic work for each to measure your own learning outcomes. Samples of the academic work are great additions to your Learning Portfolio. For further information on student core competencies please go to: www.valenciacollege.edu/competencies.

Expected Student Conduct:

Valencia College 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 College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct. The primary responsibility for managing the classroom environment rests with the faculty. Students who engage in any prohibited or unlawful acts that result in the disruption of a class may be directed by the faculty member to leave the class. Violation of any classroom or Valencia's rules may lead to disciplinary action up to and including expulsion from Valencia. Disciplinary action could include being withdrawn from class, disciplinary warning, probation, suspension, expulsion, or other appropriate and authorized actions. You will find the Student Code of Conduct in the current Valencia Student Handbook

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, ext. 1523).

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 with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. BayCare Behavioral Health Student Assistance Program (SAP) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free face-to-face counseling is also available.

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