Review: Quiz 3

# Session 3f of "Basic Electricity" A Fairfield University E-Course Powered by LearnLinc

# Basic Electricity

#### Two Sections

- Electron Flow and Resistance
  - 5 on-line sessions
  - Lab
- Inductance and Capacitance
  - 5 on-line sessions
  - Lab

### Mastery Test, Part 1

# Basic Electricity (Continued)

• Text: "Electricity One-Seven," Harry Mileaf, Prentice-Hall, 1996, ISBN 0-13-889585-6 (Covers several Modules and more)

#### References:

- "Digital Mini Test: Principles of Electricity Lessons One and Two," SNET Home Study Coordinator, (203) 771-5400
- Electronics Tutorial (Thanks to Alex Pounds)
- Electronics Tutorial (Thanks to Mark Sokos)
- Basic Math Tutorial (Thanks to George Mason University)
- Vector Math Tutorial (Thanks to California Polytec at atom.physics.calpoly.edu )

### Section 3:

# AC, Inductors and Capacitors

• OBJECTIVES: This section introduces AC voltage / current and their effects on circuit components (resistors, inductors, transformers and capacitors). The concept of impedance and the use of the vector analogy for computations is also introduced.

#### **Section 3 Schedule:**

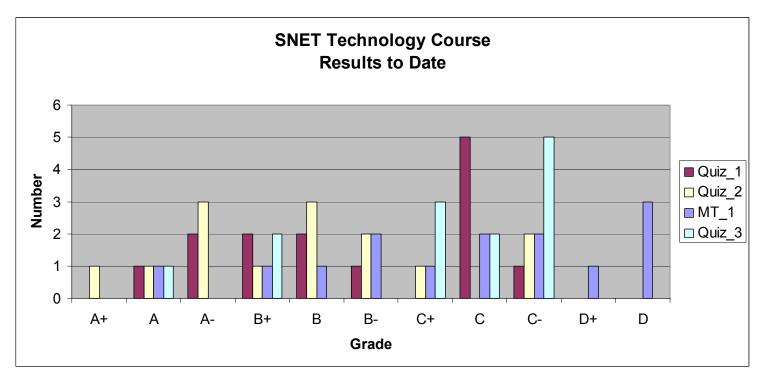
Sine Waves, Magnitude, Phase Text 4.1 - 4.24Session 3a -05/13and Vectors (again) 3a continued -05/20Complete 3a Session 3b -05/22 R-L Circuits Text 4.25 - 4.54(no class on 05/27) 3b continued -05/29 Complete 3b Session 3c -06/03 R-C Circuits Text 4.55 - 4.76Session 3d -06/05 Series LC Circuits Text 4.77 - 4.88(lab - 06/08, Sat.) Session 3e -06/10 Series RLC Circuits Text 4.89 - 4.113

Session 3f -06/17 Review (Discuss Quiz 3)

(Quiz 3 due 06/16)

# Quiz\_2 Results

- The class had a B-/C+ average Nice Job, but could be better.
- Several of you need to correct some deficiencies. We'll be using this material in Section 4, so there's time to improve before MT2.



## Quiz 3

• We'll use Appshare and Word to go over Quiz\_3

#### **Section 3 Schedule:**

Sine Waves, Magnitude, Phase Text 4.1 - 4.24Session 3a -05/13and Vectors (again) -05/203a continued Complete 3a Session 3b -05/22 R-L Circuits Text 4.25 - 4.54(no class on 05/27) 3b continued -05/29Complete 3b -06/03 R-C Circuits Text 4.55 - 4.76Session 3c Session 3d -06/05 Series LC Circuits Text 4.77 - 4.88(lab - 06/08, Sat.) Session 3e -06/10 Series RLC Circuits Text 4.89 - 4.113(Quiz 3 due 06/16) Session 3f - 06/17 Review (Discuss Quiz 3) and complete 3e

## Section 4 Preliminary Schedule:

Session 4a -06/24 Parallel L-R-C Circuits Text 4.114 - 4.132

Session 4b -06/26 Parallel L-R-C Circuits Cont.

(have a nice July 4) (no class on 05/27)

Session 4c -07/08 Parallel Resonance Text 4.133 - 4.146

Session 4d -07/10 Tuning and Filters Text 4.147 - 4.151

(break for a week)

Session 4e -07/22 Transformers and Impedance Text 4.152 - 4.160

(Quiz 4 due 07/28) Matching

(lab - 07/27, Sat.)

Session 4f -07/29 Review (Discuss Quiz 4)

07/31 MT2 Review

MT2 – AC Circuits