Archived Lectures

- Classrooms & Streaming
  - Classes will be taped this term
  - Will be posted on the web
  - Quality may be poor
  - Will be posted on the web
  - Classes will be taped this term

Archived Lectures

- Archived Lectures
  - Very popular in the past
  - Can use in the CECS labs with head phones
  - Posted within 24 hours of lecture
  - Uses Windows media player
  - Entire slides available on the web in advance

This Time

- Discuss syllabus
- Ideal Sources
- Circuits Elements
- Passive Sign Convention
- Definitions: Current, Voltage, Power, & Energy
- Prefixes
- Class overview & logistics
- Discuss syllabus

Lecture Overview

- Very popular in the past
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Classrooms & Streaming

- Keep in mind for exam preparation
- Little workspace
- I recommend that you sit near the front
  - SBA 190: New classroom
- ECE 221 Electric Circuits

Portland State University ECE 221 Fall 2003 Lecture 1

Dr. James McNames
mcnames@pdx.edu

ECE 221 Electric Circuits

ECE: ece.pdx.edu/~ece2xx/ECE221
Fundamentals of Electric Circuits

Textbook

Alexander & Sadiku

New this year

Teaching for 2 years with 1st edition

Students like it

- Concise
- Orderly presentation
- Easy to follow methodology (step-by-step mechanics)
- Many examples
- Homework solutions used poor & inconsistent methodology
- Examples and problems contain unrealistic circuit elements
- Introduction to systems analysis odd (ECE 222)


People Who Can Help

Teaching assistants

- Cristina Crespo
- Dejun Zhou

Office hours, contact information, and recitation sections to be announced Wednesday

IEEE Tutors (to be announced later)

My Background

Ph.D. 1999

Research area: Biomedical signal processing

Fifth time teaching this course

Teaching in PSU ECE Dept: three years

My office hours

EE 160-12

My office

Portland State University ECE 221 Fall 2003 Lecture 1
6-digit Codes

- I use 6-digit codes to post your grades online and for anonymous identification on exams and homework
- Email code to me this week
- Can be any character that you can send via a plain-text email
- Remember it for exams and homework
- Homework assignment labels
  - Assignment number
  - First letter of your last name
  - Homework assignment label
  - Problems
  - Read Chapters 1 & 2
  - Email me 6-digit code

Homework Assignment 1

- Email me 6-digit code
- Read Chapters 1 & 2
- Problems
  - Ch. 7: 8, 13, 15
  - Ch. 1: 1, 15, 17, 18, 27, 31
- Email me 6-digit code
- Homework posted on the class web site
- Solutions will be posted soon
- Due on Wednesday, Oct. 8

Homework & Online Lectures

- For lectures, must click the button (enter key doesn't work)
- Password: Ohm
- User name: ECE221
- Both will be password protected
- Lectures will also be posted online
- Previous students have used the solutions as a learning tool
- Homework solutions will be posted shortly after assigned
- Bring your calculators to help work out examples in class
- Lecture workspace is provided for examples that will be filled in during
- Lectures will not be erasable, so old notes should suffice in most cases
- I will be updating them this term, mostly to fit new textbook
- Posted on the class web site
- Lecture slides created Fall 2000
General Comments on Class

• Challenging
• Fast pace
• Relatively high rate of attrition
• Many new abstract concepts
• Lays the foundation for many ECE classes to follow
• Many critical concepts
• Mastery of these essential to succeed in EE or CpE programs
• Relatively high rate of attrition

Suggestions for Good Performance

• Attend TA’s recitation sections
• Work through the practice problems
• More examples available in Schaum’s Electric Circuits
• Ask questions
• Review lectures
• Keep caught up
• More examples available in Schaum’s Electric Circuits
• Work through the practice problems
• Attend TA’s recitation sections

Scientific Calculators

• Strongly encouraged
• HP no longer makes ENG/ENGINEERING grade calculators
• Recommended features:
  – Manipulate complex numbers
  – Solve simultaneous linear equations
  – Recommended features

Logistics: Text & Workbook Errata

• Solutions
  – HW will be assigned this term, so expect errors in the HW
  – Known errors are posted on the web site
  – My take me a few days to confirm
  – Must be first to email me
  – Typos and Grammar count

• Some errors more than full credit for homework
  – Find two errors = can skip an assignment
  – Each error worth 50% of a homework

Portland State University ECE 221 Fall 2003 Lecture 1