Contact Information
Professor: Prof. Fowler

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Course Web Site: See the “EECE301” link at  http://www.ws.binghamton.edu/fowler/
Also See: "Blackboard"  http://blackboard.cc.binghamton.edu/

Check these sites often since this website will be used to:
- convey any important announcements about the course
- distribute course materials used during lectures (please download and bring to class)
- post HW assignments and (later, of course) their solutions
- Etc.

Office Hours: TBD  (Check the Course Web Sites)

TA: TBD   (Check the Course Web Sites)
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Prerequisites & Independent Review
EE 260: Electrical Circuits
MATH 371: Math. Methods I (i.e. Ordinary Differential Equations)

Students are expected to review in a calculus book the definition of integration as “a limit
of the sum of the areas of rectangles”; ask me if you need guidance as to where to find this in
your particular calculus book.
Familiarity with the concepts of integration, differentiation, and differential equations are
necessary!  You also need to be able to compute simple integrals and derivatives.

Reading Materials
- **Text Book:**  
  *Fundamentals of Signals and Systems (Using the Web and Matlab), 3rd Edition*  
  Edward W. Kamen and Bonnie S. Heck  

- **Reference Tables:**  There are several reference tables that you’ll learn about that are on the
inside covers of the textbook.  However, I recommend that you use the tables that I post on
my web site… they are more accurate!
- **Lecture Notes:**  Will be posted on my EECE Web Site…
Homework Assignments & Solutions: Will be posted on Blackboard

Course Overview
Course Goals: The world is full of systems: electrical, mechanical, economic, .... We’ll think of systems as anything that takes in an input signal and changes it into an output signal; for example, a radio is a system: it takes in a radio frequency (RF) signal (through the antenna) and from it creates sound. It is essential that engineers know how to model and analyze such systems to be able to understand how these systems respond to the input signals that stimulate them. The characterization, design and analysis of systems relies on the use of mathematical models to describe signals and systems. Thus the goals of this course are:
- understand and be able to apply mathematical system models
- understand and be able to apply mathematical signal models
- understand the interplay between these system and signal models
For electrical systems, understanding things at the “system level” allows engineers to
- better accomplish the design and analysis at the “circuit level”
  - a circuit is designed to meet certain specifications – the specs that must be achieved are usually determined using the ideas discussed in this class
- determine how individually designed circuits will interact when connected together
- determine how “boxes” will work together (e.g. CD player – Amplifier – Speakers)

Specific Course Coverage: We will cover the material in the following order:
Ch. 1
Ch. 2
Ch. 3
Ch. 5
Ch. 4
Ch. 6 & Portions of Ch. 8
Ch. 7

Grading Details
Quizzes, Exams, & Homework:
- Unannounced 10-Minute Quizzes may be given as needed
- Six 30-minute Chapter Quizzes (In Class)
- A cumulative final (during Finals Period)
- HW will be assigned roughly every week or so

MATLAB Project: At the end of October I will assign a MATLAB project to be due on 12/5

Course Grade: Homework & Unannounced Quizzes: 15%
Six 30-minute Chapter Quizzes: 40%
Project: 15%
Final: 30%
**Class Attendance:** You are expected to attend class. If you have a legitimate need to miss a class, see me *prior* to the missed class.

**Unannounced Quizzes:**
- 10 Minutes at beginning of class (*no make-ups for late arrivals*)
- **no make-ups for late arrivals or missed quizzes**
- Concept oriented questions & Simple calculations
- Closed notes & book

**HW:**
- Due at beginning of class; 
- About one assignment per week
  - You are encouraged to **work** (e.g., discuss, get advice from) on HW’s with others, but you must do your own write-up. *In other words, you can get help but you can’t just get the answer. If HW write-ups are deemed to be too similar to others you will get no credit.*

**Chapter Quizzes:**
- In-class exam
- Closed notes & book
- **One** 4”x6” Note Card allowed
  > Can write on both sides
  > I will provide any reference tables needed.

**Final:**
- During final period
- Closed notes & book
- **Two** Note Sheets allowed
  > two 8½”x11” sheets of paper
  > Can write on both sides

**Project:**
- Assigned end of October
- Work in pairs (Groups of more than two not allowed!)
- Due in class on Friday 12/5… *NO* Late projects accepted!!