# Instructor: Terry Adair Cell Phone/Text: 707-331-7297 E-Mail: tadair@santarosa.edu

#### **Class Hours**

Section	Day/Time	Room
1240 Lecture	Tuesday 6-8 pm	1452, Bussman Hall
1240 Lab	Thursday 6-9 pm	1452, Bussman Hall
Office Hours	Thursday 5:15-6:00 pm	1452, Bussman Hall
Email – Include "ELEC167" in subject line, tadair@santarosa.edu – response within 48hrs		

### **Course Description**

An introductory course in theory and practice of radio frequency and wireless communication technologies.

# **Student Learning Outcomes:**

- 1. Construct and analyze fundamental circuits used in RF communication devices
- 2. Perform measurements of various radio parameters such as deviation, carrier frequency, receive sensitivity, forward and reflected power
- 3. Assemble coaxial connectors onto braided and heliax cable types
- 4. Assemble ethernet cables and perform microwave dish alignments
- 5. Test and identify common faults within coaxial cables and antennas
- 6. Identify and operate common test equipment used in communications system

### **Required Textbook**

• Principles of Electronic Communications Systems, Louis E. Frenzel Jr McGraw Hill publishers, 4th Edition, ISBN 978-0073373850

### **Technical Requirements**

You will need to have access to a computer to type your lab reports and access the course website. A thumb drive is recommended to move files to and from Lab nights. The course website on Canvas contains the information and resources for the course. You may use a laptop or tablet to take notes as long as it does not become a distraction.

### **Required Materials**

- 1. Scientific Calculator
- 2. Engineering Paper
- 3. Pencil, Eraser

### **Grading Policy**

The grading values and assignment weights are listed below:

Grade Values		
90 -100	Α	
80-89	В	
70-79	С	
55-69	D	
Less than 55	F	

#### **Assignment Weights**

Homework	30%
Quizzes	20%
LAB Reports *	30%
Final Exam	20%

### \*LAB Report Assignment Weights

Objective	10%
Theory	30%
Data Collected	30%
Observations	30%

### Lab Reports

Consult the Lab Report Format for specifics on what is required in the lab report.

### Late Assignments

Without prior arrangement, late work will be accepted after the due date and a 20% deduction will be imposed. (The one exception is the last "Lab" class day, your final work must be turned in by the end of the class.) No assignments will be accepted the last class session (Finals Week).

### **Student Responsibilities**

You are responsible for reading the chapters and all lecture and lab material before coming to class. Come to class ready to participate.

### **Time Management**

Plan to spend eight hours per week outside of class on homework assignments and preparation for this class; although you may not always need that much time, you should have it available.

### **Academic Integrity**

I have a zero tolerance policy on cheating. You might want to read the JC's policy on academic integrity and student conduct. Here is a link that might be helpful: <u>https://student-conduct.santarosa.edu/</u>

### Attendance

Attendance is required. If you miss a class you are still responsible for submitting the assignments.

### **Cell Phone Policy**

The goal is to prevent cell phone usage from disturbing students and faculty.

- **1.....No Ringing!** All cell phones must be turned off or placed in vibrate mode when entering any lab or classroom.
- **2....No Talking!** No phone calls may be made or accepted while in any lab or classroom. Students must step outside before initiating phone calls or answering their phone.
- 3.....No Texting!

# **Other Personal Electronic Devices**

No other personal electronic device including personal headphones or wireless cell phone headsets may be used during class.

### **Important Dates**

Date Class Begins:	8/20/2024
Date Class Ends:	12/17/2024
Last Day Add with add code:	10/8/2024
Last Day Drop for Refund:	
Last Day Drop w/o "W":	10/8/2024
Last Day Drop with "W":	11/17/2024
Date Final Exam:	12/17/2024

### Accommodations for Students with Disabilities

If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to the instructor as soon as possible. You may also speak with the instructor privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located in Analy Village on the Santa Rosa campus (707) 527-4278, and Jacobs Hall on the Petaluma Campus (707) 778-2491.