

**Cumberland County
Office of Emergency Management**

**Amateur Radio
Technician Course**

Fall 2013

Course Syllabus

Wednesday, September 11 (7-10 PM) “Please note classes may run overtime”

Registration / Orientation:

Registration, Course overview, Demonstrations, Where & How to Purchase Equipment, Setting up your Station.

Topics:

1. Welcome and opening statement
2. Registration requirements.
3. What to expect, Course requirements.
4. Why Amateur Radio? Presentation of ARRL Video
5. Demonstrations: Local Repeaters (VHF/UHF), HF (short wave)
6. Where & how to purchase Equipment. (PowerPoint Presentation)
7. Setting up your Station. (to be further reviewed in manual)
8. Review of Chapter #1 Welcome to Amateur radio.

Homework:

Read Chapter #2: Radio and Signals Fundamentals
Study: 99 Terms to Know

- ***(NOTE): Time permitting chapter reviews may run into the next weeks assignment. Students should read ahead at least one chapter even though not officially assigned and be prepared to review and discuss at instructors discretion.***

Wednesday, September 18 (7– 10 PM)

Students should have read the assigned materials and be prepared to discuss each chapter segment in class. Students should expect and be prepared for short quizzes. Students can prepare for quizzes by reviewing the “Study Questions” as numbered found periodically in each chapter.

Chapter #2

- 2.1 Radio Signals
- 2.2 Modulation.
- 2.3 Radio Equipment Basics

Homework:

Read Chapter #3: Propagation, Antennas and Feed Lines

Wednesday, September 25 (7 - 10 PM)

Students should have read the assigned materials and be prepared to discuss each chapter segment in class. Students should expect and be prepared for short quizzes. Students can prepare for quizzes by reviewing the “Study Questions” as numbered found periodically in each chapter.

Chapter #3

- 3.1 Electricity
- 3.2 Components and Units
- 3.3 Types of Radios and Radio Circuits

Homework:

Read Chapter #4: Propagation, Antennas and Feed Lines

Wednesday, October 2 (7 – 10 PM)

Students should have read the assigned materials and be prepared to discuss each chapter segment in class. Students should expect and be prepared for short quizzes. Students can prepare for quizzes by reviewing the “Study Questions” as numbered found periodically in each chapter.

Chapter #4

- 4.1 Propagation
- 4.2 Antenna Fundamentals
- 4.3 Feed Lines and SWR
- 4.4 Practical Antenna Systems

Homework:

Read Chapter #5: Amateur Radio Equipment

Wednesday, October 9 (7 – 10 PM)

Students should have read the assigned materials and be prepared to discuss each chapter segment in class. Students should expect and be prepared for short quizzes. Students can prepare for quizzes by reviewing the “Study Questions” as numbered found periodically in each chapter.

Chapter #5

- 5.1 Transmitters and Receivers
- 5.2 Digital Communications
- 5.3 Power Supplies and Batteries
- 5.4 RF Interference (RFI)
- 5.5 RF Grounding

Homework:

Read Chapter #6 Communicating with Other Hams

Wednesday, October 16 (7 – 10 PM)

Students should have read the assigned materials and be prepared to discuss each chapter segment in class. Students should expect and be prepared for short quizzes. Students can prepare for quizzes by reviewing the “Study Questions” as numbered found periodically in each chapter.

Chapter #6

- 6.1 Contact Basics
- 6.2 Band Plans
- 6.3 Making Contacts
- 6.4 Using Repeaters
- 6.5 Nets
- 6.6 Emergency Communications
- 6.7 Special Activities, Modes and Techniques

Homework:

Reads Chapter #7 Licensing Regulations

Wednesday, October 23 (7 – 10 PM)

Students should have read the assigned materials and be prepared to discuss each chapter segment in class. Students should expect and be prepared for short quizzes. Students can prepare for quizzes by reviewing the “Study Questions” as numbered periodically in each chapter.

Chapter #7

- 7.1 Licensing Terms
- 7.2 Working with the FCC
- 7.3 Bands and Privileges
- 7.4 International Rules
- 7.5 Call Signs

Homework:

– Read Chapters 8 Operating Regulations and Chapter 9 Safety

Wednesday, October 30 (7 – 10 PM)

Students should have read the assigned materials and be prepared to discuss each chapter segment in class. Students should expect and be prepared for short quizzes. Students can prepare for quizzes By reviewing the “Study Questions” as numbered periodically in each chapter.

Chapter #8

- 8.1 Control Operators
- 8.2 Identification
- 8.3 Interference
- 8.4 Third-Party Communications
- 8.5 Remote and Automatic Operation
- 8.6 Prohibited Transmissions

Chapter #9

- 9.1 Electrical Safety
- 9.2 RF Exposure
- 9.3 Mechanical Safety

Supplement Chapter

Choosing a Ham Radio
Questions and Scheduled Test date

Saturday, November 2 or Sunday, November 3 Review/ Test (9 AM - ???)
9:00 AM for last minute questions, Testing starts at approximately
10:00 AM

Amateur Radio Technician Test Administered by Volunteer Examiners

Test Fee of \$15.00 is the responsibility of the student. Be sure you have all required information and I.D.'s for taking the test