Amateur Extra Course Chapter 1

Introduction



Reasons to Upgrade

- More Frequencies
- More Communications Modes
- New technical opportunities and a greater understanding of radio engineering
- More Fun!



- To qualify for an Extra Class license, you must pass Elements 2 (Technician), 3 (General) and 4 (Extra)
- A Technician licensed before March 21, 1987, may upgrade to General by going to a test session with proof of being licensed before that date
- An EXPIRED beyond the 2-year grace period General class license may be renewed after passing the Technician license exam
- Morse code is alive and well on the Amateur bands, although it's no longer required for any Amateur license



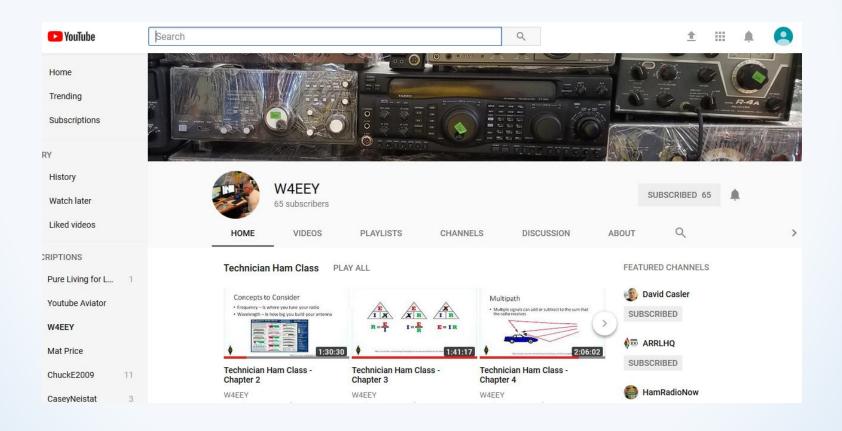
- We will cover one Chapter over one or two weeks
- Chapter 1 is an introduction. No test questions are from this chapter. But it has good information.
- Read Chapter Two, Operating Practices, for next week. It is VERY important that you read ahead due to the pace of this class.
- You are the key to your success! All of the necessary info will be covered –
 in the book and in the class. But your motivation is the secret ingredient!



YouTube

- Each class session will be recorded
- The result will be edited and posted to YouTube
- Search YouTube for "W4EEY"
- MP3 Audio recordings will also be available on Dropbox







Class Schedule

Session	Date	Chapte	r Topic	Instructor
1	16-Jan	1	Introduction/Books	Gary
2	23-Jan	2	Operating Practices	Gary
3	30-Jan	2	To Be Determined	
4	6-Feb	3	Rules and Regulations	Gary
5	13-Feb	3	To Be Determined	
6	20-Feb	4	Electrical Principles Pt 1	Dave
7	27-Feb	4	Electrical Principles Pt 2	Dave
8	6-Mar	5	Components and Building Blocks Pt 1	Gary
9	13-Mar	5	Components and Building Blocks Pt 2	Gary
10	20-Mar	6	Radio Circuits and Systems Pt 1	Dave
11	27-Mar	6	Radio Circuits and Systems Pt 2	Dave



Class Schedule

12	3-Apr	7	Radio Signals and Measurements Pt 1	Gary
13	10-Apr	7	Radio Signals and Measurements Pt2	Gary
14	24-Apr	8	Modulation, Protocols and Modes	Dave
15	1-May	8	Modulation, Protocols and Modes	Dave
16	8-May	9	Antennas and Feedlines Pt 1	Gary
17	15-May	9	Antennas and Feedlines Pt 2	Gary
18	22-May	10	Topics in Radio Propagation	Dave
19	29-May	10	Topics in Radio Propagation	Dave
20	5-Jun	11	Safety	Dave or Tom
21	12-Jun		Test Review	Gary



Red Cross Testing

16-Jun

Target!

• June 16, 2018





A test is based on a question pool of at least 10x the number in a single exam. The test you will take is 50 questions. Need 37 right (74%).

We will provide PDFs by email at the end of each evening with test questions and the RIGHT answers. The goal is for you to recognize the correct answers automatically.

We are targeting June 16, 2018 as your test day.

You of course may take the test earlier!



- Bring your book, something to take notes in and a <u>scientific calculator</u>.
- Math ahead! We will work with you to regain your skills.
- Sign up for an account at the ARRL Exam Review website:

arrlexamreview.appspot.com

Use this site to review chapter questions



https://www.amazon.com/Texas-Instruments-Engineering-Scientific-Calculator/dp/B004NBZB2Y/ref=sr_1_1?ie=UTF8&qid=1516103149&sr=8-1&keywords=TI-36X+Pro



Use other study resources if you wish. Consider

ke0og.net

Dave has videos for each Chapter in the ARRL book.

- Each week we will send an email with a PDF copy of the class presentations, and links to supplemental information.
- Ask questions! Communicate! Find us on the repeaters, email, text. We are here to help you.





- There may be in-class tests or quizzes! We need to know how you are doing (and how WE are doing!).
- We will have some in class demonstrations and speakers. This is a symposium!
- You are a resource! Share your experience with the class.
- A Ham ticket is a license to learn. But have fun doing it!
- Consider joining a local ham club. One that matches your interests. Give a presentation!



By Comparison

Radio License Types in Great Britain

Foundation License

- •10W Transmission Power
- Access to most HF/VHF/UHF Bands

Intermediate License

- •All Foundation License Benefits
- •50W Transmission Power
- No restriction on construction/repair/modification of equipment (you can design your own transmitters)
- •Remote operation
- Unattended beacon operation

Advanced License

- All Foundation & Intermediate
- License Benefits
- Access to all amateur radio bands •400W Transmission Power
 - Access to all amateur bands
 - Operation in foreign countries
 - Operation at sea (maritime mobile)
 - Operation and supervision of club stations



Advanced License Course in Great Britain

- Week 1 License Conditions and Operating Practices
- Week 2 Maths Primer (driving a calculator)
- Week 3 Amateur Radio Safety
- Week 4 Basic Electronics (Part 1)
- Week 5 Basic Electronics (Part 2)
- Week 6 Basic Electronics (Part 3) + mock exam
- Week 7 Basic Electronics (Part 4)
- Week 8 Transmitters (Part 1)
- Week 9 Transmitters (Part 2) + mock exam
- Week 10 Transmitter Interference

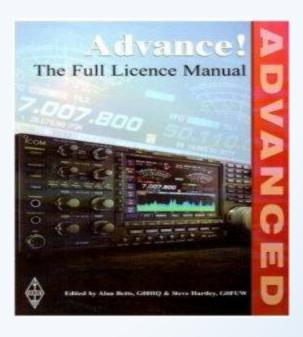
- Week 11 Receivers (Part 1)
- Week 12 Receivers (Part 2) + mock exam
- Week 13 Feeders
- Week 14 Antennas
- Week 15 Propagation + mock exam
- Week 16 EMC (Part 1)
- Week 17 EMC (Part 2)
- Week 18 Exam Briefing + mock exam
- Week 19 Mock Exam
- Week 20 Two Mock Exams
- Week 21 Real Exam!



Advanced Class License in Great Britain

62 Multiple Choice Questions

Two Hour Time Limit









https://blog.walkerinfo.com/blog/making-it-easy-for-customers-is-pretty-difficult/

Have fun! Learn something!

And share what you have learned!





Mythos of Greer - Greek/Italian Restaurant Third Thursdays of the Month 6PM



6140 Wade Hampton Boulevard