



[\(printable copy\)](#)

# Course Syllabus

## Course:

Online Technician Class License Course

## Dates and time:

Saturday, March 19, 2022	1:00 PM to 4:00 PM
Saturday, March 26, 2022	1:00 PM to 4:00 PM
Saturday, April 2, 2022	1:00 PM to 4:00 PM
Saturday, April 9, 2022	1:00 PM to 4:00 PM
Saturday, April 16, 2022	1:00 PM to 4:00 PM
Saturday, April 23, 2022	1:00 PM to 4:00 PM
Saturday, April 30, 2022	1:00 PM to 4:00 PM

## Exam information:

Sunday, May 1, 2022	8:30 AM to 11:00 AM
Sunday, May 8, 2022 (rain date)	8:30 AM to 11:00 AM

## Course objectives:

- **prepare you for the Technician Class license test**
- prepare you for [public service and community service](#)
- foster self study and group learning - "a license to learn"
- learn to operate ham radio equipment
- learn some radio science
- learn some electronics

- encourage technical experimentation
- join the ham radio community
- have fun

### **Purpose of the Technician Class license test:**

- to test you on concepts and procedures on the **safe** and **legal** operation of amateur radio equipment

### **Instructors:**

- Saturday, March 19, 2022 – Richard Hayman, WN3R
- Saturday, March 26, 2022 – Joe Massi, AC3JM
- Saturday, April 2, 2022 – Al Taylor, KN3U
- Saturday, April 9, 2022 – Marc Pressman, N4DR and Tom Horne, W3TDH
- Saturday, April 16, 2022 – Glenn Simons, N3COB
- Saturday, April 23, 2022 – Vic Nardo, WB2U
- Saturday, April 30, 2022 – David Bern, W2LNX
- host – David Bern, W2LNX

### **Course email address:**

[education@marcclub.org](mailto:education@marcclub.org)

### **Study resources:**

- [The ARRL Ham Radio License Manual \(HRLM\)](#), 4th Edition, ISBN: 978-1-62595-082-6
- [ARRL HRLM Exam Review software](#)

- [Element 2 Technician Class Question Pool](#)
- [study resources](#)

## **Sponsor:**

- The [Montgomery Amateur Radio Club \(MARC\)](#)

## **Course Schedule**

### **Session 1: Saturday, March 19, 2022, 1:00 PM to 4:00 PM**

- [agenda](#)
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- [module 1](#) - Welcome to Amateur Radio: HRLM chapter 1
- [module 2](#) - Radio Waves and Signals: HRLM chapter 2
- [module 3](#) - Modulation & Bandwidth: HRLM chapter 2
- demonstration - operating a hand held radio over an FM repeater

### **Session 2: Saturday, March 26, 2022, 1:00 PM to 4:00 PM**

- [agenda](#)
- [module 4](#) - Electricity: HRLM chapter 3
- [module 5](#) - Ohm's Law, Power and the Metric System: HRLM chapter 3
- [module 6](#) - Electronic Components: HRLM chapter 3
- demonstration - resonance of a tuned circuit

### **Session 3: Saturday, April 2, 2022, 1:00 PM to 4:00 PM**

- [agenda](#)
- [module 7](#) - Types of Radio Circuits: HRLM chapter 3

- [module 11](#) – Basic Amateur Radio Station Equipment: HRLM chapter 5
- [module 12](#) – Power Supplies and RF Interference: HRLM chapter 5
- demonstration – sending email to the Internet using Winlink on VHF

#### **Session 4: Saturday, April 9, 2022, 1:00 PM to 4:00 PM**

- [agenda](#)
- [module 18](#) – Safety and Amateur Radio: HRLM chapter 9
- [module 13](#) – Communicating with Other Hams – Part 1: HRLM chapter 6
- [module 14](#) – Communicating with Other Hams – Part 2: HRLM chapter 6
- demonstration – narrow-band data communications

#### **Session 5: Saturday, April 16, 2022, 1:00 PM to 4:00 PM**

- [agenda](#)
- [module 8](#) – Propagation: HRLM chapter 4
- [module 9](#) – Antennas and Feed Lines: HRLM chapter 4
- [module 10](#) – Practical Antenna Systems: HRLM chapter 4
- demonstration – Automatic Packet Reporting System (APRS)

#### **Session 6: Saturday, April 23, 2022, 1:00 PM to 4:00 PM**

- [agenda](#)
- [module 15](#) – License Regulations and License Privileges: HRLM chapter 7
  - CFR – [Part 97 – Amateur Radio Service](#)
- [module 16](#) – Call Signs, Control Operators, Station Identification and Third-Party Communications: HRLM chapter 7 and 8

- [module 17](#) - Interference, Remote & Automatic Operation, Prohibited Transmissions: HRLM chapter 8

**Session 7: Saturday, April 30, 2022, 1:00 PM to 4:00 PM**

- [agenda](#)
- review and questions answered
- practice Technician tests

**Test session: Sunday, May 1, 2022, 8:30 AM to 11:00 AM**

**Sunday, May 8, 2022, 8:30 AM to 11:00 AM** (rain date)

- [study resources](#)

**Public Service Opportunities:**

- [MARC public service calendar](#)

**updated:** May 4, 2022 06:22 AM