



Building
the foundation
for Oregon's future

Residential Electrical Inspector Cross-training Course Syllabus – Fall 2022

Class days – Mondays and Wednesdays, 7:30-9:30 a.m.

Progress exam days – Online unless otherwise communicated 8:00-noon

Please note: This syllabus is a guideline. As the course proceeds, some lessons may take longer to complete which will bump all future lessons and/or progress exams forward and dates will no longer be accurate. Course could be extended an additional two-weeks. However, the lessons and associated homework will remain the same even if the dates change.

Week 1 (November 2)

First day of course, attendance via webcam & mic required, 8-12 p.m.

- Welcome, student roles and responsibilities, review of course details
- Ethics presentation
- **Lesson 1:** Basics

Week 2 (November 7 & 9)

- **Lesson 2:** Code
- Homework: review Art. 200, 210 and 230

Week 3 (November 14 & 16)

- **Lesson 3:** Layout and terminology
- Homework: study definitions

Week 4 (November 21)

- **Lesson 4:** Grounding and bonding basics
- Homework: read Art. 250.52 & 250.66

November 23: No class

Week 5 (November 28 & 30)

- **Lesson 5:** Bonding basics
- Review for exam

Week 6 (December 5 & 7)

- **Lesson 5:** (Continued)
- **Lesson 6:** Services

Week 7 (December 12 & 14)

- **Lesson 6:** (Continued)

Week 8 (December 19 & 21)

- **Review lessons 1-6**

December 19: attendance via webcam & mic required, 8-12 p.m. (exam may be bumped forward)

- **Progress exam #1: 52 questions based on lessons 1 thru 6**
- Review progress exam #1

Winter Break: No class between 12/23/22 – 1/2/23

2023

Week 9 (January 4)

- **Lesson 7:** Feeders and sub-panels
- Homework: study

Art. 210.11 thru 210.70

- **Lesson 8:** Parallel conductors
- Homework: study Art, 215 & 240

Week 10 (January 9 & 11)

- **Lesson 9:** Temporary services
Homework: study Ugly's
- **Lesson 10:** Ohms law
Homework: study T-310.15B16

January 16: No class

Week 11 (January 18)

- **Lesson 11:** Formulas
- **Lesson 12:** Taps and table 210.24

Week 12 (January 23 & 25)

- **Lesson 12:** Taps and table 210.24
- **Review lessons 7-12**

Week 13 (January 30 & February 1)

January 30: attendance via webcam & mic required, 8-12 p.m. (exam may be bumped forward)

- **Progress exam #2: 52 questions based on lessons 7-12**
- Review progress exam #2

Week 14 (February 6 & 8)

- **Lesson 13:** Required circuits
Study 210.8 & 210.12
- **Lesson 14:** AFCI/GFCI requirements
Study 210.52, 422 and 424

Week 15 (February 13 & 15)

- **Lesson 15:** Living area layout
- Study past lessons

February 20: No class

Week 16 (February 22)

- **Lesson 16:** Kitchen layout
Study T-220.55

Week 17 (February 27 & March 1)

- **Lesson 17:** Overcurrent protection, Table 220.55
Study 314.16
- **Lesson 18:** Calc's and box fill

Week 18 (March 6 & 8)

- **Lesson 18:** (Continued)

Week 19 (March 13 & 15)

March 13: attendance via webcam & mic required, 8-12 p.m. (exam may be bumped forward)

- **Progress exam #3: 52 questions based on lessons 13-18**
- Review progress exam #3
- **Lesson 19:** Rough-in inspection

Week 20 (March 20 & 22)

- **Lesson 19:** (Continued)
- **Lesson 20:** Cooking equipment calc's
- Study lessons

Spring Break: No class between 3/27/23 – 3/31/23

Week 21 (April 3 & 5)

- **Lesson 21:** HVAC
- Study lessons

Week 22 (April 10 & 12)

- **Lesson 22:** Generators, transfer switches, and swimming pools
- Study lessons
- Exam Review

Week 23 (April 17 & 19)

- **Exam Review**

April 17: attendance via webcam & mic required, 8-12 p.m. (exam may be bumped forward)

- **Progress exam #4: 52 questions based on lessons 19-22**
- Review progress exam

Week 24 (April 24 & 26)

April 11: projected last day of course

- **Lesson 23:** Minor labels
- **Lesson 24:** Solar panels
- **Lesson 25:** Virtual Inspection
- Course review

Possible extension of course of up to two weeks – TBD by middle of March