



Building
the foundation
for Oregon's future

Residential Electrical Inspector Cross-training Course Syllabus – Fall 2025

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 (December 1 & 3)

December 1: 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 (December 8 & 10)

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

Week 3 (December 15 & 17)

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

Week 4 (December 22)

- **Lesson 3: continued**

Homework: study definitions

Winter Break: No class between 12/22/23 – 01/01/24

2025

Week 5 (January 5 & 7)

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

Week 6 (January 12 & 14)

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

January 19: No class

Week 7 (January 21)

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

Week 8 (January 26 & 28)

- **Lesson 6: (Continued)**
- **Review lessons 1-6**

Week 9 (February 2 & 4)

- **Review lessons 1-6**

February 4: 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

Week 9 (February 9 & 11)

- **Lesson 7: Feeders and sub-panels**
- Homework: study Art. 210.11 thru 210.70
- **Lesson 8: Parallel conductors**
- Homework: study Art. 215 & 240

February 16: No class

Week 11 (February 18)

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

Week 12 (February 23 & 25)

Lesson 11: Formulas

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

Week 13 (March 2 & 4)

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

Week 14 (March 9 & 11)

- **Review lessons 7-12**

March 11: attendance via webcam & mic required, 8-12 p.m. (exam may be bumped forward)

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

Week 15 (March 16 & 18)

- Review progress exam #2
- **Lesson 13: Required circuits**
- Study 210.8 & 210.12

Spring Break: No class between 3/23/26 – 3/27/26

Week 16 (March 30 & April 1)

- **Lesson 14: AFCI/GFCI requirements**
- Study 210.52, 422 and 424
- **Lesson 15: Living area layout**

Week 17 (April 6 & 8)

- **Lesson 15: cont.**
- **Lesson 16: Kitchen layout**
- Study T-220.55

Week 18 (April 13 & 15)

- **Lesson 17: Overcurrent protection, Table 220.55**
Study 314.16



Building
the foundation
for Oregon's future

- **Lesson 18:** Calc's and box fil

Week 19 (April 20 & 22)

- **Lesson 18:** (Continued)
- **Review Lessons 13-18**

Week 20 (April 27 & 29)

- **Review Lessons 13-18**

April 29: 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 21 (May 4 & 6)

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

Week 22 (May 11 & 13)

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

Week 23 (May 18 & 20)

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

May 25: No class

Week 24 (May 27)

- **Lesson 23a:** MHI-electrical
- **Exam review:** if time allows

Week 25 (June 1 & 3)

- **Lesson 23b:** MHI-plumbing
- **Lesson 23c:** MHI-structural

Week 25 (June 8 & 10)

- **Exam Review**

June 10: attendance via webcam & mic required, 8-12 p.m. (exam may be bumped forward)

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

Week 26 (June 15 & 17)

- Review progress exam
- **Lesson 24:** Solar panels
- **Lesson 25:** Virtual Inspection
- Course review

Possible extension of course of up to two weeks – TBD by May.