



Building  
the foundation  
for Oregon's future

## Residential Electrical Inspector Cross-training Course Syllabus – Fall 2023

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 4 & 6)

**December 4: 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 11 & 13)

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

### Week 3 (December 18 & 20)

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

**Winter Break: No class between 12/25/23 – 01/01/24**

**2024**

### Week 4 (January 3)

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

### Week 5 (January 8 & 10)

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

**January 15: No class**

### Week 6 (January 17)

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

### Week 7 (January 22 & 24)

- **Lesson 6: (Continued)**

### Week 8 (January 29 & 31)

- Review lessons 1-6

**January 29: 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 5 & 7)

- **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 (February 12 & 14)

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

**February 19: No class**

### Week 11 (February 21)

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

### Week 12 (February 26 & 28)

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

### Week 13 (March 4 & 6)

**March 4: 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 (March 11 & 13)

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

### Week 15 (March 18 & 20)

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

**Spring Break: No class between 3/25/23 – 3/29/23**

### Week 16 (April 1 & 3)

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

### Week 17 (April 8 & 10)

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

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

### Week 18 (April 15 & 17)

- **Lesson 18: (Continued)**

### Week 19 (April 22 & 24)

**April 22: 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 (April 29 & May 1)

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

### Week 21 (May 6 & 8)

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

### Week 22 (May 13 & 15)

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

### Week 23 (May 20 & 22)

- **Exam Review**

**May 20: 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

**May 27: No class**

### Week 24 (May 29)

**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 mid-April.**