

HMI212
Installation Methods II – Course Plan

Week	Outcomes	Format	Hrs	Topic/Content	Readings	Assignments	Assessment	Resources
1, 2	1	Lecture	4	<p><i>Review of HMI 202</i></p> <p><i>Demonstrate the ability to correctly select and size overcurrent protection</i></p> <p><i>Demonstrate installation common to residential electrical wiring systems and equipment in compliance with the CEC.</i></p>	Review codes sect. 6,8,10,26 and HMI 202 Unit 16	Questions from text as assigned by instructor	Hand in and/or take up	CEC, Residential Electrical Wiring for all classes
		Lab (cont. in week 3)	4	<p><i>Apply: Demonstrate</i> the correct installation procedures and wiring connections for common residential switching devices and outlets with strict adherence to the CEC and NBC.</p>	Code Sec. 14	Lab assignment	Evaluation of practical lab assignment	
				<p><i>Demonstrate</i> proper installation procedures required for the following wiring methods while insuring strict adherence to CEC regulations: non-metallic sheathed cable, armoured cable, mineral-insulated cable, metallic sheathed cable, rigid / flexible conduit, rigid metallic tubing, and electrical non-metallic tubing. (Section 12)</p> <p><i>Demonstrate</i> the proper use of common hand tools in the electrical trade.</p>	Ref. unit 17		Evaluation of practical lab assignment	
3	1	Lecture	2	<p><i>General regulations regarding Class 2 signal and remote control circuits (Sect. 16 of CEC).</i></p>	Unit 22 Sect. 16	Questions as assigned by instructor	Hand in and/or take up	
		Lab	2	Continue labs as indicated in weeks 1,2		Lab assignment		

4	1	Lecture	4	<i>Review / Test #1</i>			Test # 1	
5,6, ½ of 7	1	Lecture	5	<i>Identify installation requirements for electric heating installed in single dwelling occupancies as specified in the installation of electrical equipment, section 62 of the CEC</i> <i>Apply</i> <i>Prepare a layout drawing for mast and installation.</i>	Unit 22 Code sec. 62	Questions as assigned by instructor	Hand in and/or take up	
		Lab	5	<i>Demonstrate the ability to install a complete 100 amp residential service including the following circuits: hot water heaters, range outlets, dryer outlet, split duplex receptacle, bathroom outlet, outside weather-proof receptacle and general branch circuits, etc. (Sections 6, 12, 26)</i>	Section 14, 16	Lab assignment	Evaluation of practical lab assignment	
½ of 7 8, 9	1	Lecture	5	<i>Identify requirements for the installation of pools, tubs and spas (Section 68).</i> <i>Describe enclosures and fittings to electrical installations.</i>	Units 13, 23 Unit 20	Questions as assigned by instructor	Hand in and/or take up	
		Lab	5	<i>Apply</i> <i>Demonstrate requirements for the installation of pools, tubs and spas (Section 68) including the proper installation of enclosure and fittings common to the electrical trade.</i>		Lab assignment	Evaluation of practical lab assignment	
10	1	Lecture	4	<i>Review / Test #2</i>			Test #2	

11	1	Lecture	2	<i>Interpret the CEC regulations regarding the installation of fire alarms, smoke, heat and carbon monoxide detectors located in dwelling units. (sec. 32)</i> <i>Describe</i> <i>The CEC regulations for fire alarms.</i>	Unit 21 Unit 24	Questions as assigned by instructor	Hand in and/or take up	
		Lab	2	<i>Demonstrate</i> the CEC regulations regarding the installation of fire alarms, smoke, heat and carbon monoxide detectors located in dwelling units.		Lab assignment	Evaluation of practical lab assignment	
12, 13	1	Lecture	4	<i>Identify installation requirements for lighting installed in single dwelling occupancies as specified in the installation of electrical equipment (section 30 of the CEC)</i> <i>Identify switch control of lighting circuits, receptacle bonding and induction heating resulting from unusual switch connections.</i>	Unit 10 Unit 8	Questions as assigned by instructor	Hand in and/or take up	
		Lab	4	<i>Demonstrate</i> the correct installation procedures and wiring connections for common residential switching devices and outlets ensuring strict adherence to the CEC and to National Building Code (NBC) regulations. <i>Demonstrate</i> switch control of lighting circuits		Lab assignment	Evaluation of practical lab assignment	
14	1	Lecture	2	<i>Identify requirements for television, phone, data and home automation systems (Sections 54 & 60).</i> <i>Identify temporary wiring installations requirements for building or project under construction or demolition (section 76) of the CEC.</i>	Unit 24 Sect. 54, 60	Questions as assigned by instructor	Hand in and/or take up	

		Lab	2	<u>Apply</u> Install / prepare for television outlets, antennas, cable, etc. Install / prepare for CATV installation requirements. Prepare conduit for telephone conductors, boxes and outlets.		Lab assignment	Evaluation of practical lab assignment	
15	1	Lecture	4	<i>Review / Test # 3</i>			Test #3	
16	1			Take up test #3				