

WITHLACOOCHEE TECHNICAL COLLEGE
ELECTRICITY
I460312
POST-SECONDARY SYLLABUS/PACING GUIDE
2016-2017

Course Description

The purpose of this program is to prepare students for employment or advanced training in a variety of construction electrical industries.

This program focuses on broad, transferable skills, stresses the understanding of all aspects of the electricity industry, and demonstrates such elements of the industry as planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues

Textbooks

NCCER Core Curriculum	ISBN: 9780134130989
NCCER Electrical Level 1	ISBN: 9780133829594
NCCER Electrical Level 2	ISBN: 9780133830651
NCCER Electrical Level 3	ISBN: 9780133830828
NCCER Electrical Level 4	ISBN: 9780133823158
Electrical Wiring Residential 18 th Ed.	ISBN: 9781285170954
NEC 2014 Code Book	ISBN: 9781455906727

How You Are Graded

- 100 – 90 A
- 89 – 80 B
- 79 – 70 C
- 69 – 60 D
- Below 60 F

Florida DOE Occupational Completion Points

OCP	Course Number	Course Title	Length	SOC Code
A	BCV0603	Electrician Helper	300 Hours	47-3013
B	BCV0640	Residential Electrician	450 Hours	47-2111
C	BCV0652	Commercial Electrician	450 Hours	47-2111

Lessons loop each 18 weeks for incoming students

1st. Quarter

Week 1

Shop safety and Orientation
Core Book Chapters 1-2
Job Sheets 1 & 2,

Week 2

Core Chapters 3, 4 & 5
Job Sheets 3 & 4
Lesson on Drawings

Week 3

Core Chapters 6, 7 & 8
Job Sheets 5- 8
Lesson on Drawings,

Week 4

Electrical Level-1 Chapters 1 - 2
Job Sheets 9- 12
Electrical theory, report/presentation due

Week 5

Electrical Level - 1 Chapters 3 & 4
Job Sheets 13- 16
Lesson on Ohms Law-series circuit

Week 6

Electrical Level – 1 Chapters 5 & 6
Job Sheets 17- 20
Lesson on Ohms Law-parallel circuit

Week 7

Electrical Level –1 Chapters 7 & 8
Job Sheets 21 to 24
Lesson on Ohms Law-series/parallel

Week 8

Electrical Level –1 Chapters 9 & 10
Job Sheets 25 to 28
review

Week 9

Electrical Level –1 Chapters 11 & 12
Job Sheets 29 & 30
Make up if needed, quiz, **OCP A**

2nd Quarter

Week 10

Electrical Book Level - 2 Chapters 1, 2 & 3

Job Sheets 31 to 33
Lesson on Box fill

Week 11

E-2 Book Chapters 4, 5 & 6
Job Sheets 34 to 36
Lesson on conduit sizing

Week 12

E-2 Book Chapters 7, 8 & 9
Job Sheets 37 to 39
Lesson on conduit bending

Week 13

E-2 Book Chapters 10, 11 & 12
Job Sheets 40 to 42
Lesson on single phase transformers

Week 14

EWR Chapters 1, 2 & 3
Job Sheets 43 to 45
Lesson on Ampacity correction factors

Week 15

EWR Book 4, 5 & 6
Job Sheets 46 to 48
Lesson voltage drop

Week 16

EWR Book 7, 8 & 9
Job Sheets 49 to 51, controls
Lesson dwelling standard calculations

Week 17

EWR Book 10, 11 & 12
Job Sheets 52 to 55, controls
Lesson water heaters, soldering, grounded/grounding

Week 18

EWR Book 13, 14 & 15
Job Sheets 56 to 60, lesson motor circuit design
Review

3rd. Quarter

Week 19

EWR Book 16, 17
A-Controls lab 1-5

Week 20

EWR Book 18, 19, 20
A-Controls lab 6-10

Week 21
EWR Book 21,22,23
A-Controls lab 11-15 or job sheet 70-75

Week 22
EWR Book 24,25,26
A-controls lab 16-20 or job sheet 76-80

Week 23
EWR Book 27, 28,29
A-Controls lab 21-25 or job sheet 81-85

Week 24
EWR Book 30,31
A-Controls lab 26-30 or job sheet 86-90

Week 25
EWR Exam
B-Controls lab 1,2, or Job sheet 91-93, **OCP B**

Week 26
E3 1, 2, 3
B-Controls lab 3,4 or job sheet 94-98

Week 27
E3 4,5,6
B-Controls lab 5, or job sheet 99-104

4th. Quarter Week 28
Electrical Level –3 Chapters 7, 8, 9
B-Controls lab 6 - 10 or job sheet 105-110

Week 29
Electrical book Level –3 Chapters 10, 11, 12
B-Controls lab 11-13, Troubleshooting 1-25 or job sheet
111-116

Week 30
Electrical book Level- 4 Chapters 1, 2
Troubleshooting 26-100 or job sheet 117 & 118

Week 31
Electrical book Level –4 Chapters 3, 4
Troubleshooting 101 – 152 or job sheet 119 & 120

Week 32
Electrical Book Level –4 Chapters 5, 6
Electrical maintenance – 15 required throughout program

Week 33

Electrical Book Level –4 Chapters 7, 8
Electrical maintenance

Week 34

Electrical Book Level –4 Chapters 9, 10
Electrical maintenance

Week 35

Electrical Book Level –4 Chapters 11, 12
Electrical maintenance

Week 36

Chapter 13, Make up, testing, **OCP C**