

WITHLACOOCHEE TECHNICAL COLLEGE
2022-2023 SYLLABUS - ELECTRICITY

Instructor Name
John Woythaler

Instructor Contact Information
Phone – 352-726-2430 ext. 4323
Email – woythalerj@citruschools.org

Program Length
1200 hours

Program 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.

State Curriculum Frameworks
Detailed information about the program’s standards can be found at the Florida Department of Education website. The link below will access the curriculum frameworks for this program:
[Electricity Curriculum Framework](#)

Physical Requirements
There are 120 graded, hands-on job sheets as well as work orders related to real field experiences that will include lifting tools and equipment used in the industry, up to 50 lbs., working from 6’, 8’, 10’ & 12’ ladders and working in confined spaces.

Dress Code
Full cover shoes such as work boots or sneakers, full cover shirt, no tank tops, long pants such as jeans, Dickies, Duluth or Carhart. Safety eyewear is required in the shop area. No shorts permitted. No sweat pants. No holes in pants.

Attendance
Attendance is an integral part of this program. Attendance is 18% of your grade. Attendance should be treated as if I am your employer and you are the employee. If you are going to miss a day you are expected to call in as you would at your place of employment. Failure to do so will affect your grade. See the student handbook regarding attendance. Refer to the WTC Student Handbook.

How you are evaluated & Assessments (as seen in Canvas & Focus)

OCP A	OCP B	OCP C
Attendance 18%	Attendance 18%	Attendance 18%
Productivity 4%	Productivity 4%	Productivity 4%
Safety 4%	Safety 4%	Safety 4%

OCP A	OCP B	OCP C
Professionalism 4%	Professionalism 4%	Professionalism 4%
CORE Reviews and Quizzes 6%	Level 2 Reviews and Quizzes 7.5%	Level 3 Reviews and Quizzes 7.5%
Level 1 Reviews and Quizzes 6%	EWR Reviews 7.5%	Level 4 Reviews and Quizzes 7.5%
EWR Reviews 6%	EWR Tests 7.5%	NO EWR anymore
NCCER Core & Level 1 Exams 12%	NCCER Level 2 Exams 7.5%	NCCER Level 3 & 4 Exams 15%
Job Sheets 1 to 30 40%	Job Sheets 31 to 90 40%	Job Sheets 91 to 120 40%
Total: 100%	Total: 100%	Total: 100%

Grade Scale

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

Courses and Timeline

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

Industry Certifications

All students are required to take the proctored NCCER Core and Electricity Level exams for course completion and to receive the certifications associated with this curriculum.

Safety

All students are required to follow safe work habits, and to wear appropriate clothing and safety glasses. All safety rules and requirements will be discussed in class.

Discipline

Refer to the WTC Student Handbook for school rules and expectations. Program specific rules and expectations will be discussed in class.

Housekeeping Tasks

All students are required to keep their work & desk areas clean every day. On Fridays, students will stop working at 2:30 and will all participate in cleaning the common areas of our shop. This is our shop and we will keep it clean.

Remote Learning

This program is taught face-to-face on campus; however, there may be times when remote learning is necessary. During such times, students need access to an internet connection and sufficient technology in order to access the program's online learning modules.

WITHLACOOCHEE TECHNICAL COLLEGE

2022-2023 ELECTRICITY POST-SECONDARY LESSON PLANS / PACING GUIDE

These are the minimum pacing requirements for Weekly Classroom and Homework Assignments for the year

Lectures loop each 18 weeks for incoming students

OCP A: Electrician Helper

Week	Lesson	Textbook & Chapters	Job Sheets	EWR Modules
1	Shop Safety & Orientation	Core, Chapters 1 & 2	1-2	Not Applicable
2	Drawings	Core, Chapters 3, 4 & 5	3-4	Not Applicable
3	Box Fill	Core, Chapters 6, 7 & 8	5-8	1 & 2
4	Electrical Theory Report/Presentation Due	Level 1, Chapters 1 & 2	9-12	3 & 4
5	Ohms Law – series circuit	Level 1, Chapters 3 & 4	13-16	5 & 6
6	Ohms Law – parallel circuit	Level 1, Chapters 5 & 6	17-20	7 & 8
7	Ohms Law – series/parallel	Level 1, Chapters 7 & 8	21-24	9 & 10
8	Review	Level 1, Chapters 9 & 10	25-28	11 & 12
9	Make up if needed OCP A Completion	Level 1, Chapters 11 & 12	29-30	13 & 14

OCP B: Residential Electrician

Week	Lesson	Textbook & Chapters	Job Sheets	EWR Modules
10	Conduit Bending	Level 2, Chapters 1 & 2	31-33	15-16
11	Conduit Sizing	Level 2, Chapters 3 & 4	34-36	17-18
12	Ampacity Correction	Level 2, Chapters 5 & 6	37-39	19-20
13	Voltage Drop	Level 2, Chapter 7	40-42	21
14	Single Phase Transformers	Level 2, Chapter 8	43-45	22-24
15	Service Sizing Standard Calculation	Level 2, Chapter 9	46-48	25-27
16	Motor Circuit Design	Level 2, Chapter 10	49-51	28-30
17	Control wiring / ladder diagrams	Level 2, Chapter 11	52-55	31-32
18	Motor Control Review	No Textbook Required	56-60	33-34
19	Lessons begin to loop	No Textbook Required	61-65	35-36
20	No Formal Lesson	No Textbook Required	66-68	
21	No Formal Lesson	No Textbook Required	69-73	
22	No Formal Lesson	No Textbook Required	74-76	
23	No Formal Lesson	No Textbook Required	77-79	
24	No Formal Lesson	No Textbook Required	80-84	
25	OCP B Completion	Level 3, Chapters 1 & 2	85-90	

OCP C: Commercial Electrician

Week	Lesson	Textbook & Chapters	Job Sheets	EWR Modules
26	No Formal Lesson	Level 3, Chapters 3, 4 & 5	91-92	
27	No Formal Lesson	Level 3, Chapters 6 & 7	93-95	
28	No Formal Lesson	Level 3, Chapters 8 & 9	96-98	
29	No Formal Lesson	Level 3, Chapters 10 & 11	99-100	
30	No Formal Lesson	Level 4, Chapters 1 & 2	101-102	
31	No Formal Lesson	Level 4, Chapters 3 & 4	103-105	
32	No Formal Lesson	Level 4, Chapters 5 & 6	106-109	
33	No Formal Lesson	Level 4, Chapters 7 & 8	110-112	
34	No Formal Lesson	Level 4, Chapters 9 & 10	113-115	
35	No Formal Lesson	Level 4, Chapters 11 & 12	116-118	
36	Make up, testing OCP C Completion	Level 4, Chapters 13	119-120	