

**WITHLACOOCHEE TECHNICAL COLLEGE**  
**2021-2022 SYLLABUS**  
**ELECTRICITY**

**Instructor Name**

**John Woythaler**

**Instructor Contact Information**

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**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 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.

**Attendance**

Attendance is an integral part of this program. Attendance/employability is 30% 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%
Professionalism- 4%	Professionalism- 4%	Professionalism- 4%
CORE Reviews and Quizzes- 5%	Level 2 Reviews and Quizzes- 5%	Level 3 Reviews and Quizzes - 5%
Level 1 Reviews and Quizzes- 5%	EWR Tests- 5%	Level 4 Reviews and Quizzes- 5%
NCCER Core & Level 1 Exams- 20%	NCCER Level 2 Exams- 20%	NCCER Level 3 & 4 Exams- 20%
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 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.

**WITHLACOCHEE TECHNICAL COLLEGE  
ELECTRICITY  
POST-SECONDARY LESSON PLANS / PACING GUIDE  
2021-2022**

**This is the minimum pacing requirements for  
Weekly Classroom and Homework Assignments for the year**

*Lectures loop each 18 weeks for incoming students*

<b>Week</b>	<b>Dates</b>	<b>Lesson</b>	<b>Textbook &amp; Chapters</b>	<b>Job Sheets</b>	<b>EWR Modules</b>
1	8/10-14	Shop Safety & Orientation	Core, Chapters 1 & 2	1-2	Not Applicable
2	8/17-21	Drawings	Core, Chapters 3, 4 & 5	3-4	Not Applicable
3	8/24-28	Boxfill	Core, Chapters 6, 7 & 8	5-8	Not Applicable
4	8/30-9/3	Electrical Theory Report/Presentation Due	Level 1, Chapters 1 & 2	9-12	Not Applicable
5	9/8-11	Ohms Law – series circuit	Level 1, Chapters 3 & 4	13-16	Not Applicable
6	9/14-18	Ohms Law – parallel circuit	Level 1, Chapters 5 & 6	17-20	Not Applicable
7	9/21-25	Ohms Law – series/parallel	Level 1, Chapters 7 & 8	21-24	Not Applicable
8	9/28-10/1	Review	Level 1, Chapters 9 & 10	25-28	Not Applicable
9	10/5-9	Make up if needed <b>OCP A Completion</b>	Level 1, Chapters 11 & 12	29-30	Not Applicable
10	10/12-16	Conduit Bending	Level 2, Chapters 1, 2 & 3	31-33	Not Applicable
11	10/19-23	Conduit Sizing	Level 2, Chapters 4, 5 & 6	34-36	Not Applicable
12	10/26-30	Ampacity Correction	Level 2, Chapters 7, 8 & 9	37-39	Not Applicable
13	11/2-6	Voltage Drop	Level 2, Chapters 10, 11 & 12	40-42	Not Applicable

Week	Dates	Lesson	Textbook & Chapters	Job Sheets	EWR Modules
14	11/9-13	Single Phase Transformers	No Text Book Required	43-45	1-4
15	11/16-20	Service Sizing Standard Calculation	No Text Book Required	46-48	5-8
16	11/30-12/4	Motor Circuit Design	No Text Book Required	49-51	9-12
17	12/7-11	Control wiring / ladder diagrams	No Text Book Required	52-55	13-16
18	12/14-12/18	Motor Control Review	No Text Book Required	56-60	17-20
19	1/11-15/21	Lessons begin to loop	No Text Book Required	61-65	21-24
20	1/19-22	No Formal Lesson	No Text Book Required	66-68	25-28
21	1/25-29	No Formal Lesson	No Text Book Required	69-73	29-31
22	2/1-4	No Formal Lesson	No Text Book Required	74-76	32-34
23	2/8-12	No Formal Lesson	No Text Book Required	77-79	35-36 Exam 1
24	2/16-19	No Formal Lesson	No Text Book Required	80-84	Exams 2 & 3
25	2/22-26	<b>OCP B Completion</b>	Level 3, Chapters 1 & 2	85-90	Not Applicable
26	3/1-4	No Formal Lesson	Level 3, Chapters 3, 4 & 5	91-92	Not Applicable
27	3/8-12	No Formal Lesson	Level 3, Chapters 6 & 7	93-95	Not Applicable
28	3/15-19	No Formal Lesson	Level 3, Chapters 8 & 9	96-98	Not Applicable
29	3/22-26	No Formal Lesson	Level 3, Chapters 10 & 11	99-100	Not Applicable
30	4/5-8	No Formal Lesson	Level 4, Chapters 1 & 2	101-102	Not Applicable
31	4/12-16	No Formal Lesson	Level 4, Chapters 3 & 4	103-105	Not Applicable
32	4/19-30	No Formal Lesson	Level 4, Chapters 5 & 6	106-109	Not Applicable
33	5/3-6	No Formal Lesson	Level 4, Chapters 7 & 8	110-112	Not Applicable

<b>Week</b>	<b>Dates</b>	<b>Lesson</b>	<b>Textbook &amp; Chapters</b>	<b>Job Sheets</b>	<b>EWR Modules</b>
34	5/10-14	No Formal Lesson	Level 4, Chapters 9 & 10	113-115	Not Applicable
35	5/17-21	No Formal Lesson	Level 4, Chapters 11 & 12	116-118	Not Applicable
36	5/25-28	Make up, testing <b>OCP C Completion</b>	Level 4, Chapters 13	119-120	Not Applicable