

# General Information

## Instructor Information and Availability

Instructor: Denny Wood

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## Course Information

Course name: Specialized Systems

Section number: APR 221 CRN: 331449 Number of credits: 4

Scheduled time/days: See Moodle Classroom(s): On Moodle/Zoom and Rm IA213

### Prerequisites:

Limited Electrical Apprenticeship registration, APR 121, APR 122, APR 123

## Course Materials

Required:

- Contren Learning Series, Electronic Systems Technician, Level 4, Edition 3
- NFPA 70 2020 Edition
- OAR, ORS, and other code test related material

### Technology Recommendations

It is possible that LBCC campuses will need to be closed to the public at times during fall term, depending on public health directives. If this does occur, our class will be delivered fully remotely and we won't be able to meet face-to-face. LBCC is encouraging students to be as prepared as possible for this possibility by encouraging you to obtain the equipment you will need in order to be successful in any modality. Please see the recommended list of equipment below. Students who cannot afford these resources can contact the [Roadrunner Resource Center](#) about funding.

\*Note to faculty: Include either list of equipment recommendations below, based on anticipated instructional needs. For information to help you make that choice, consult this document on [student technology recommendations](#).

### Standard equipment recommendation

- Broadband internet
- A computer with 256g SSD, 8G RAM, i5 6th gen processor (or equivalent functionality)
- Device with a microphone and speaker

- Device with a camera
- Students can consult [Standard Recommendation 1](#) or [Standard Recommendation 2](#) if they are looking for a product recommendation

#### Minimum equipment recommendation

- A wifi hotspot
- A computer with 128g SSD, 4G RAM, i3 6th gen processor (or equivalent functionality)
- Device with a microphone and speaker
- Device with a camera
- Students can consult [Minimum Requirement 1](#) if they are looking for a product recommendation

## Course-Specific Requirements

Limited Energy Technician program requirements. See Lena Gates for details.

## Course Description

Designed for the apprentice working/studying to become a licensed Limited Energy Technician. The wide range of topics covered in this class include: Specialty Transformers, Medical Systems, Sound and Signal Systems, and an introduction to both HVAC and Boiler systems. The National Electrical Code (NEC) requirements regarding the safe installation of each of these systems will be emphasized. Recommended: MTH 075 Variable and Linear Equations.

## Student Learning Outcomes

Upon successful completion of this course, students will be able to: Identify and describe the functions and applications of a variety of specialty transformers. Identify the essential electrical systems for hospitals, nursing homes, and limited care facilities. Describe the installation, basic operation and troubleshooting procedures for the following systems: Sound; Nurse Call; Clock; Access Control; Security.

## Class Policies

### Behavior and Expectations

Use your LB email! You can set it to 'Forward' to a different email and you can leave groups so you don't get as much junk mail. This is required.

During live Zoom sessions, please raise your hand so that we can maintain some order, I will respond to you as soon as possible. Otherwise, please keep your microphone muted.

Please ask class related questions! If you aren't sure what you are doing, ask me, or when we have the final, you may not know what you are doing, and not do well enough to pass the class, which is even less fun.

Do share with the class, but please keep it related to Limited Electrical. Please share tricks you learned. Remember that 1 Journeyman that showed you to tape from 1 direction, so the edges

of the tape run opposite the pull, to pull the tape tight, to use regular scissors to cut labels. These are the types of tricks of the trade I want you all to share so you can all be better than ALL of your journeymen combined!

You are held accountable to the [Student Code of Conduct](#), which outlines expectations pertaining to academic honesty (including cheating and plagiarism), classroom conduct, and general conduct.

## Use of cell phones

If you have to take a work related call, please be prepared to share with the class. It is important to share things like this with the class, so they are aware of what may happen to them at some point in the future.

## Attendance/Tardiness Policy

Attendance will be measured in participation. Please attend live Zoom sessions, and 'Share your stories.'

## Testing

Final is going to be during our regular Wednesday class time from 5 to 9 via in rm IA213. This is subject to change.

## Grading

|              | Points | Times | Total | Percent |
|--------------|--------|-------|-------|---------|
| Attendance   | 4      | 11    | 44    | 22.56%  |
| Expectations | 4      | 1     | 4     | 2.05%   |
| Register     | 1      | 1     | 1     | 0.51%   |
| Chapters     | 4      | 1     | 4     | 2.05%   |
| Code Quiz    | 4      | 7     | 28    | 14.36%  |
| Assignment   | 16     | 3     | 48    | 24.62%  |
| Module       | 8      | 2     | 16    | 8.21%   |
| Final        | 50     | 1     | 50    | 25.64%  |
| <b>Total</b> |        |       | 195   | 100.00% |

How final grade is calculated (e.g. 75% = C)

Final Grade Calculation:

- A = 90-100% Excellent Work
- B = 80-89% Good Work
- C = 70-79% Average Work
- D = 60-69% Poor Work
- F = 0-59% Failing Work

### **Late Assignment Policy**

I will not accept late assignments. I have done so in the past, but due to abuse of this I have changed my mind. If you have a special circumstance, please contact me prior to this issue and I might allow individual accommodations. Working is not an exception, I give plenty of time to complete the assignments.

## **College Policies**

### **LBCC Email and Course Communications**

You are responsible for all communications sent via Moodle and to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College. You may access your LBCC student email account through Student Email and your Moodle account through Moodle.

### **Disability and Access Statement**

LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in this class, please contact your instructor as soon as possible to discuss your needs. If you think you may be eligible for accommodations but are not yet registered with CFAR, please visit the [CFAR Website](#) for steps on how to apply for services. Online course accommodations may be different than those for on-campus courses, so it is important that you make contact with CFAR as soon as possible.

### **Statement of Inclusion**

To promote academic excellence and learning environments that encourage multiple perspectives and the free exchange of ideas, all courses at LBCC will provide students the opportunity to interact with values, opinions, and/or beliefs different than their own in safe, positive and nurturing learning environments. LBCC is committed to producing culturally literate individuals capable of interacting, collaborating and problem-solving in an ever-changing community and diverse workforce.

### **Title IX Reporting Policy**

If you or another student are the victim of any form of sexual misconduct (including dating/domestic violence, stalking, sexual harassment), or any form of gender discrimination, LBCC can assist you. You can [report](#) a violation of our sexual misconduct policy directly to our Title IX Coordinator. You may also report the issue to a faculty member, who is required to notify the Coordinator, or you may make an appointment to speak confidentially to our Advising and Career Center by calling 541-917-4780.

## Public Safety/Campus Security/**Emergency Resources:**

In an emergency, call 911. Also, call LBCC Campus Security/Public Safety at 541-926-6855 and 541-917-4440.

From any LBCC phone, you may alternatively dial extension 411 or 4440. LBCC has a [public safety app](#) available for free. We encourage people to download it to their cell phones. Public Safety also is the home for LBCC's Lost & Found. They provide escorts for safety when needed. Visit them to learn more.

## Changes to the Syllabus

I reserve the right to change the contents of this syllabus due to unforeseen circumstances. You will be given notice of relevant changes in class, through Moodle, or through LBCC e-mail.

## Class Calendar or Schedule

| Week | Activities   | Due dates |
|------|--------------|-----------|
| 1    | Expectations |           |

|    | NFPA NEC Chapters               |  |
|----|---------------------------------|--|
| 2  | Module 33404-12<br>Code Quiz 1  |  |
| 3  | Assign 1 / Lab 1<br>Code Quiz 2 |  |
| 4  | Module 33405-12<br>Code Quiz 3  |  |
| 5  | Assign 2 / Lab 2<br>Code Quiz 4 |  |
| 6  | Code Quiz 5                     |  |
| 7  | Assign 3 / Lab 3<br>Code Quiz 6 |  |
| 8  | Code Quiz 7                     |  |
| 9  | TBD                             |  |
| 10 | TBD                             |  |
| 11 | Final Exam                      |  |