

## Northeast Wisconsin Technical College

### *Land Acknowledgement Statement*

The region served by NWTC **occupies the ancestral home** of the Menominee Nation, who have **persisted here** in Northeast Wisconsin from **before recorded history** to the present day. The College's Green Bay campus exists **upon lands ceded from the Menominee Tribe to the Oneida Nation**. We acknowledge this land we stand upon today as sacred, historical, and significant to the Menominee and Oneida Nations as are the **lands of all First Nations People**.

See more detail at <https://tinyurl.com/244wh3xf>

## Intro to ACDC SYLLABUS

### Catalog #10-660-116

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### **Starts: Refer to Student Schedule**

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Welcome to NWTC! It is a privilege to be your college of choice. Our staff and faculty are excited about what is ahead of you. We welcome your unique perspectives and experiences and ask that you respect the backgrounds and experiences of others as we learn together. College can be challenging at times so please reach out to our staff and faculty. We are here to help you learn and support your success. We believe you can be successful!

#### **INSTRUCTOR INFORMATION & RESPONSIBILITIES**

<b>Instructor</b>	As posted
<b>Office</b>	As posted
<b>Telephone</b>	As posted
<b>Email</b>	See Canvas
<b>Availability</b>	By appointment

#### *To help you be successful, I will*

- Maintain an inclusive, safe learning environment
- Provide open and frequent communication regarding your progress in this class.
- Reply to communications within 48 business hours.
- Grade assignments regularly and provide feedback to guide you toward improvement of your coursework.
- Communicate changes due to student and instructor needs, class cancelations, or college closures in a timely manner.

## CLASS INFORMATION

- **Class Schedule & Meeting Location:** This class follows the schedule found on your student schedule. All labs will be completed in either ET120 or ET129. Please refer to those rooms for the current scheduled times.

**Course Description:** This course provides the opportunity for the student to develop the knowledge, skills, process and understanding of fundamental electrical properties such as voltage, current, resistance, using digital multimeters, and perform related wiring and troubleshooting of electrical circuits.

**Credits:** 1

**Pre-requisites/Corequisites:** None

**Textbooks:** Ugly's Electrical Reference 2020 Edition: ISBN 978-1-284-19453-1

To order your course materials from the NWTC Bookstore for shipping to your home or pick up, please [click here](#) to find the instructions to start your order.

### Supplies/Technology:

ACDC Wiring Kit (Purchased in ET129)

Terminating Screwdriver (**ONLY needed if Automation Wiring Kit is not purchased as part of Automtion 1**)

Access to a calculator

This class will require you to utilize a computer to access Blackboard to complete assigned work. You may also need to communicate with your instructor via email if any other questions come up.

**Course Competencies:** Upon successful completion of this course, you will be able to:

1. Demonstrate use of Digital Multimeter (DMM) to test electrical circuits
2. Demonstrate use of Oscilloscope to test electrical circuits
3. Apply Ohm's Law to circuit measurements
4. Verify voltage, current, and resistance properties of series and parallel circuits
5. Demonstrate proper connection of transformers using connection diagram
6. Verify proper operation of transformers
7. Troubleshoot basic electrical circuits
8. Measure reactive properties of capacitors and inductors in AC circuits
9. Calculate reactive and resistive impedance in AC circuits
10. Measure steady state and instantaneous values of inductive loads
11. Verify thermal sensor properties of Thermistors and Thermocouples
12. Configure Thermistor Bridge circuit for temperature control

**Employability Skills:** In addition to specific job-related training, NWTC has identified the following transferrable employability skills reaching beyond the context of a specific course:

1. Communicate Effectively
2. Work Cooperatively and Professionally
3. Think Critically and Creatively
4. Solve Problems Effectively
5. Value Individual Differences and Abilities
6. Demonstrate Personal Accountability

## 7. Demonstrate Community and Global Accountability

### Course Engagement:

- **Attendance and Participation:** Attendance is an important part of success in the course. Missing class may impact opportunity to learn and/or grade. All students are expected to attend all the scheduled sessions. If a student is unable to attend the lecture, he/she must coordinate with the instructor in advance, watch all media site recordings on the internet via Blackboard access, complete all homework assignments, labs, and quizzes by the due dates set by the instructor in accordance with the weekly planner.
- **Honesty and integrity** are integral components of the academic process. Students are expected to be always honest and ethical in their pursuit of academic goals in accordance with Northeast Wisconsin Technical College Student Handbook, Cheating/Plagiarism section. Any student found in violation of the policy will be punished in accordance with the NWTC Student Handbook.
- **Estimated number of hours required to be successful in the class, (class hours and outside hours for homework, readings, etc.)** 60 hours total

**Use of Technology in Class:** Use of cell phones, personal computers and other irrelevant electronic devices are not permitted in the classroom. Please set the cell phones in silent mode.

**Campus Closure Day(s) Procedure:** In the event of a campus closure, you will be notified by NWTC Alerts (sign up here). Due to the flexibility of our lab space, there will be no scheduled make-up days. If you were to have lecture that day, you are to watch the prerecorded material and your instructor will communicate any changes as a result of the lost lecture day.

**Syllabus Changes:** Instructors may make changes to the syllabus based on the timeline of the class, feedback from learners and/or logistical issues. You will be informed as soon as a change is made. A current copy of the course syllabus will be maintained by the division office.

### Grading Policy:

- 1. All coursework (homework, lab work, quizzes, etc.) must be completed/submitted prior to final examination. It is the student's responsibility to ensure that all work is submitted before the final examination is taken.
- 2. All coursework (homework, lab work, quizzes, etc.) must be completed. If assignments are missing the minimum course competencies have not been met and the student will then receive an F at the end of the term. The student will then have to re-take the course to pass.
- 3. Students may have the option to withdraw from a course to avoid failure, please see "Withdrawal from Classes or Programs/Certificates" in the NWTC Student Handbook for details/limitations/implications related to withdrawing from a course.
- 4. Late work will be accepted

**Grading Scale:**

<b>Assignments and Assessments</b>	<b>% of Total Grade</b>	<b># of Activities</b>
Labs	60%	6
Lab Final Exam	20%	1
Written Final Exam	20%	1

<b>Percentage</b>	<b>Grade</b>
100% - 92%	A
91.99% - 84%	B
83.99% - 76%	C
75.99% - 68%	D*
<68%	F

\* D is the minimum passing grade for this class.

**Course Calendar:** see Canvas

**Student Services to Support You:** Being in college is an exciting time to develop skills, further your career path, and build community. We want to make certain that financial, physical and mental health, or technology challenges do not get in your way! Our staff and faculty at NWTC are ready to support your needs to help keep you on track with your studies and educational goals.

We encourage you to visit [www.nwtc.edu/current-students](http://www.nwtc.edu/current-students) or click on the Student Resources button in your Course Home Page on Canvas to learn more about the resources available to you, ranging from student involvement and personal counseling to academic, financial aid, and career advising, to food pantry, housing assistance, and transportation services.

Many students use these resources and services on a daily and weekly basis. Services are included in your tuition and are free to use! To access services, please contact your instructor or academic advisor via Starfish, or by calling (920) 498-5444.

**Academic Coaching and Tutoring:** Academic Coaching and Tutoring provides an additional layer of support to ensure you achieve your academic goals. Academic Coaching is committed to serving all students as an academic resource to promote student growth and success. Students who use Academic Coaching and tutoring receive course specific help along with practical experience with study skills, organization skills, time management, and confidence. We understand that school can be challenging; let us help you reach your academic goals at [www.nwtc.edu/academiccoaching](http://www.nwtc.edu/academiccoaching)

**Technology Skills & Assistance:** Everyone comes to class with a variety of technology skills and experience. If you have questions about the technology needed to be successful in this course, reach out to me. As your instructor, I will provide an overview of needed technologies and connect you to additional resources. You can also visit the Technology Resources at <https://www.nwtc.edu/current-students> or click on the Student

Resources button in your Course Home Page on Canvas for information on Canvas, printing and copying, and software or get technical assistance by calling the Student Help Desk at (920) 498-6900 or 1-866-235-5037.

The library is a great resource for learning how to navigate your classes. Visit the Library during [open hours](#) or schedule an [appointment](#).

**NWTC All College Policies:** In addition to your course policies, there are policies and procedures that apply to all students taking classes at NWTC. Please refer to the NWTC Student Handbook to raise your awareness and understanding of the College's expectations. The Handbook can be found at <https://www.nwtc.edu/current-students> or click on the Student Resources button in your Course Home Page. Policies you may want to learn about more include:

- Academic Integrity (includes Plagiarism, cheating and collusion)
- Drop from a Class or Program
- Student Academic Grievance
- **Discrimination and Harassment Prevention:** We are committed to creating a respectful environment for each member of our college community. We prohibit discrimination and harassment in our educational programs and employment. Please reach out to us if you have any questions or concerns. You will find the contact information by following these links for questions or concerns related to [discrimination or harassment](#) or specifically related to [sexual harassment](#).
- **Disability Act Statement:** NWTC is committed to creating a learning environment that meets the needs of its diverse student body. NWTC complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. If you have a disability or are experiencing difficulties with accessibility, please call Disability Services at (920) 498-6904 to begin a conversation regarding the support services available to you or to request official accommodation.

**Student Academic Calendar:** Visit the [Academic Calendar](#) for important College dates like registration, campus closings, and graduation. Add these important dates to your personal calendar.