

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>

AC2: Reactance SYLLABUS

Catalog # **10660108**

Class # **See your class schedule**

Starts: (refer to student schedule for dates)



INSTRUCTOR INFORMATION & RESPONSIBILITIES

Instructor	as posted
Office	as posted
Telephone	as posted
Email	see Blackboard
Availability	By Appointment

CLASS INFORMATION

Class Schedule & Class 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 open scheduled times.

Class Delivery Mode & How to Participate: This class is Blended. For a definition of this delivery mode, please see information on the [Ways of Learning](#) page. For a detailed explanation of class participation and expectations, please see the Attendance & Participation section.

Course Description: This course provides the opportunity for the learner to develop the fundamental principles and measurement skills required to work safely in jobs using electricity or electronics.

Credits: 1 Credit

Pre-requisites: AC 1

Class Schedule: See your schedule in Blackboard.

Location: Green Bay campus, ET129 lab. Lecture as per schedule.

Textbook: None

Supplies/Technology: Supplies will be required for this course. Parts kit is purchased through the vending machine located at the entrance to ET129 ("the Tech Hall"). The vending machine takes cash, credit and debit cards.

Headphones or ear buds are also needed to listen to lectures in the Lab so that others are not disturbed.

At a minimum, students would need access to a computer for email and Blackboard. You will also need a calculator. Refer to the Technology Skills & Assistance for additional support on hot spots/laptop checkout or technical assistance with Blackboard and email.

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

1. Demonstrate the use of complex numbers in AC reactive circuits
2. Investigate capacitive reactance in series and parallel circuits
3. Investigate inductive reactance in series and parallel circuits
4. Examine the circuit characteristics of reactive components in parallel with resistive components
5. Investigate the AC circuit characteristics of series RLC circuits

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

Student Services to Support You:

Being in college is an exciting time to develop skills, further your career path, and build community. We don't want financial challenges to get in your way! Our team is ready to support basic needs such as groceries, housing assistance, transportation assistance, and more. Our goal is to keep you on track with your studies and educational goals. If you are experiencing a financial emergency or an unexpected event in your life, let us help. Support services are available at all NWTC locations. Our main office is located on the Green Bay campus in SC133. We can be reached by phone (920) 498-6258, email supportservices@nwtc.edu or in-person. For more information, please visit us at www.nwtc.edu/student-experience/student-support-services.

Additionally, NWTC provides many services and support networks to assist our students. Descriptions of these services can be found in the NWTC Student Handbook or at www.nwtc.edu/students. We encourage you to learn about the resources available to you, ranging from student involvement and personal counseling to academic, financial aid, or career advising. When you are looking for services, please contact your instructor or academic advisor via Starfish, or by calling (920) 498-5444.

Academic Coaching (Tutoring) at NWTC: Academic Coaching provides an additional layer of support to ensure students achieve their 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 receive content help, but also gain 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

NWTC ALL-COLLEGE POLICIES

These policies are in effect for all classes at NWTC.

This syllabus is a learning contract between you and your instructor. In addition to your syllabus, there are policies and procedures listed in the NWTC Student Handbook that all students must uphold. Please refer to the NWTC Student Handbook to raise your awareness and understanding of the College's expectations.

[NWTC Student Handbook](#)

- [Academic Integrity \(includes Plagiarism, cheating and collusion\)](#)
- [Drop from a Class or Program](#)
- [Student Academic Grievance](#)
- **Discrimination and Harassment Prevention:** NWTC is committed to embracing the worth of every individual and promoting a respectful environment. Discrimination and harassment of protected categories in its employment and educational programs is prohibited. For questions or concerns, contact Mohammed Bey, Chief Diversity Officer, by email at mohammed.bey@nwtc.edu or by phone at (920) 498-6826.
- **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, please call Disability Services at (920) 498-6904 to begin a conversation regarding the support services available to you or to request an official accommodation.
 - [Accessibility & Data Privacy](#)

Student Academic Calendar: Visit [Academic Calendar page](#) for important College dates you should add to your personal calendar.

CLASS SPECIFIC POLICIES

In addition to the college policies referenced, the following instructor policies also apply to this course.

Attendance and Participation: Attendance is an important part of the 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.

Estimated number of hours required to be successful in the class, (class hours and outside hours for homework, readings, etc.): 30

Technology Skills & Assistance: 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.

Research Help:

Find resources through [Library Search](#), the [online databases](#), or your [program guide](#). Visit the [Ask a Librarian FAQ site](#) to contact librarians, explore the [Research Skills Tutorial](#), or learn to [Cite Sources](#).

Technology Help

Get technical assistance by calling the Student Help Desk at (920) 498-6900 or 1-866-235-5037.

Learn more about the technology skills needed to be successful at NWTC (such as sending email, using software for assignments, submitting online work, and using test monitors) by watching the [Technology 101 video series](#) or visiting the [Ask a Librarian FAQ site](#).

Find out how to [Download Office 365 for Free](#) and access [Off-Campus Software](#). Learn how to [borrow equipment from NWTC](#).

Appropriate Use of Technology:

When in class lecture please turn off, or disable, all electronic devices which may cause a disturbance—be courteous. When in lab, please use headphones to listen to any electronically transmitted audio.

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 retain the right to make changes based on the timeline of the class, feedback from learners and/or logistical issues. Students 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 student's responsibility to insure that all work is submitted before 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:

Percentage	Grade
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 Blackboard for calendar

REFERRALS

If the instructor observes that a particular student is having unusual difficulty with any of the elements of course work, a referral form will be compiled, discussed with the student and forwarded to the Advising Department.

INSTRUCTOR POLICY

The Syllabus and Proposed Timeline are subject to review and revision as required to better accommodate particular conditions associated with the students knowledge level and ability, or any of the course content and equipment availability.

HOMEWORK

Weekly homework assignments are in Blackboard. A paper copy of the questions can be printed out and worked on to calculate the answers. A quiz with the same questions, then are in Blackboard with up to 4 attempts possible.

LABORATORY

Laboratory groups will be set up taking into account the equipment to be used. There will be one experiment per week and the report must be turned in at the lab of the following week. All labs will have questions to answer as part of the required work. Every effort must be made to be at and complete each lab. Lab reports will be graded 50% for completion and turning report in on time. The other 50% will be for the value of the report and correct results.

FINAL EXAM

Instructions for the final exam will be given in Blackboard.

If the final exam is to be taken at the Assessment Center through Blackboard, the exam must be scheduled through a Starfish Appointment. Instructions for scheduling are included in the Blackboard Class Shell.

If the final exam is a written exam, it will be administered in the Tech hall. Ask an instructor for the test and you will take the exam in the exam room (ET129B)

Student Agreement: To confirm that you have read and agree to the class policies, procedures, due dates, and terms communicated in this syllabus, please sign into blackboard and complete the What are my course due dates? section under the Course Syllabus tab. *You will not be able to start your class until you complete the agreement.*

Note: The completed by dates, unless specified by the instructor, are due before the start of the next scheduled class. For video section students they are due one week apart from each other, starting with the end of the first week of the semester for all of learning plan 1.

Class Outline: (Next page)

	INSTR LED ACTIVITIES	READING	HOMEWORK	LAB	GOAL
1	Electromagnetism Inductor characteristics Inductive reactance	None	Homework problems in Blackboard. Print and answer on-line.	Do lab activities 1,2, and 3 for lesson 1.	Learning Plan 1 complete by: _/_/_
2	1-Series RL circuits 2-parallel RL circuits	None	Homework problems in Blackboard. Print and answer on-line.	Do lab activities 1 and 2 for lesson 2	Learning Plan 1 complete by: _/_/_
3	1-Series RLC circuits 2- Parallel RLC circuits	None	Homework problems in Blackboard. Print, get the coaching sign-off and answer on-line for grading.	Do lab activities 1 and 2 for lesson 3	Learning Plan 1 complete by: _/_/_
4	1-Transformers 2-Loaded transformers	None	Homework problems in Blackboard. Print and answer on-line.	Do lab activities 1 and 2 for lesson 4	Learning Plan 1 complete by: _/_/_
5	Finals		Take written final	Take Lab Final	Final complete by: _/_/_
	<i>Examination</i>			<i>Exam for AC 2</i>	<i>Total: _____</i>