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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>

Line Electrician Field Training 2A

Catalog #31-413-336 & Class #81842

Starts: August 14th 2023 Ends: October 9th 2023



INSTRUCTOR INFORMATION & RESPONSIBILITIES

Instructor Peter Mleziva
Office EE101
Telephone Office - (920)498-5621 Cell – (920)422-2056
Email peter.mleziva@nwtc.edu
Availability By appointment

As a NWTC instructor, I am expected to: (You can choose to include some, all, none, or your own language here. This same information can also be included in your Blackboard shell)

- Maintain a professional, safe learning environment while adhering to the policies of the college.
- Provide open and frequent communication with learners regarding their progress in this class.
- Reply to communications within 48 business hours.
- Grade assignments and post scores in Blackboard regularly.
- Provide feedback to guide learners toward improvement of their coursework.
- Post information about assignments in Blackboard Learning Plans and Grade Center.
- (In the event of a college level cancellation) Communicate with learners a detailed plan regarding expectations for responding to the cancellation within 24-hours.

CLASS INFORMATION

Class Schedule:

This class meets on the following days/times:

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
7:00-11:30	7:00-11:30	7:00-11:30	7:00-11:30			

Class Delivery Mode & How to Participate: This class will be taught in a classroom.

Class Meeting Location: Green Bay Campus EE204/EE107

Course Description: This course focuses on the installation of underground lines and equipment, underground troubleshooting, and trencher operation. Student will also learn the construction and design of single phase transformers.

Credits: 5

Pre-requisites/Corequisites: Line Electrician - Field Training 1

Textbooks: The Guidebook for Linemen and Cablemen, Electrical Power Distribution - Construction Standards, EnergyU Online Course and (ISPC) T&D PowerSkills Workbooks and Videos on Blackboard.



Lineman Training material furnished through a grant from the Institute for Safety in Powerline Construction.

Supplies/Technology: Required program tools and textbooks.

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

1. Layout of the Underground Distribution (UD) system
2. Operate Underground Distribution (UD) excavating equipment
3. Install Underground Distribution (UD) transformers/equipment
4. Demonstrate proper procedure for entering manhole
5. Demonstrate proper work procedures inside manhole
6. Install poles in single/three-phase system
7. Frame poles for single/three-phase
8. Perform proper pole climbing
9. Perform proper truck operation
10. Use hand and power tools
11. Tie knots and splice ropes
12. Demonstrate rigging techniques
13. Install low pressure natural gas line
14. Operate construction equipment
15. Perform plastic pipe heat fusion procedures

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 and/or class participation is required. Failure to attend classes may affect your grade and/or program status. NWTC reserves the right to impose class attendance restrictions in courses and programs, based on administrative guidelines. Attendance ethics are important, as potential employers will investigate attendance records and transcripts. A phone call to the instructor prior to the start of the class is required if the student will be absent or late.

Estimated number of hours required to be successful in the class, (class hours and outside hours for homework, readings, etc.) The amount of time you spend on reading, completing course assignments and activities will differ. Typically students spend 6-8 hours outside of the course studying.

Technology Skills & Assistance:

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 in Class: Cell phone use will be not allowed during Line Electrician Safety 1 Monday - Thursday from 12:30pm to 5:20pm. If you need to use the phone other than an emergency, you

shall get permission from me prior to making your phone call. Failure to follow this rule will result in a loss of a week's worth of points in your Modeling Responsible Behavior grade. If cell phone use continues past one warning you will be asked to leave and will not be allowed back into any of my classes until you meet with the programs associate dean and a NWTC counselor.

Dress Code: Students are to look as if they were going to their place of employment and look like a professional. This means all pants must be worn at the waist line and no undergarments can be seen, shirts must have sleeves, no shorts and no jewelry. Failure to follow this rule will result in the student being asked to leave the class and a days' worth of points will be lost in the Modeling Responsible Behavior grade.

Inappropriate Language: Use of inappropriate language will not be tolerated. Failure to follow this rule will result in a loss of a week's worth of points in your Modeling Responsible Behavior grade. If inappropriate language continues past one warning you will be asked to leave and will not be allowed back into any of my classes until you meet with the programs associate dean and a NWTC counselor.

Campus Closure Day(s) Procedure: In the event of a campus closure, classes will be made up based on the amount of time or days missed.

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: Grades will be computed by compiled test and quiz grades, and classroom participation. Attendance is imperative as demonstrations and practice labs build accumulative skills and many times cannot be repeated.

Assignments turned in after the due date will have points deducted. A time to make-up the missed test must be arranged the next day that school is attended (*this is your responsibility*), or five points will automatically be deducted from the test score. Students with an un-excused absence on test days will not be allowed to make up tests and will result as a zero grade.

It will be the responsibility of the student to get notes from fellow classmates and to make arrangements for makeup tests. Daily quizzes will not be available to make up.

Assignments/EnergyU course tests must be submitted on the due date prior to the start of class.

Grading Components

Classroom Component 40% of Grade	Points Earned		Points Possible		Weighted Percent		Grade
EnergyU Online Course - Tests		/	1000	x	22		
Weeks 1-4 Test		/	100	x	7.5	=	
Field Training 1 and 2A Final Test		/	100	x	15.5		
Modeling Responsible Behavior		/	96	x	15	=	
Lecture Totals			1290	x	60	=	

Field Lab Component 60% of Grade	Points Earned		Points Possible		Weighted Percent		Grade
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Safety – Competencies		/	100	x	7.5	=	
Field Lab Grade		/	500	x	25	=	
Knot Tying – Ropes & Rigging - Competencies		/	100	x	7.5		
Field Lab Totals		/	700	x	40%	=	

Grading Scale:	
Scale	Grade
100 - 90	A
89 - 80	B
79 - 70	C
69 - 60	D
59 – 0	F

Classroom Course Calendar: Line Electrician Field Training 2A

Week 1 (Aug 14th – Aug 17th) URD Cable and Terminations

Day 1 = Welcome Back/ Course Syllabus Review

Day 2 = Field Day

Day 3 = Discuss URD equipment

Day 4 = Discuss URD equipment

Week 2 (Aug 21st – Aug 24th) URD Systems

Day 1 = Discuss URD equipment

Day 2 = EnergyU Online Course: 03300 – Underground Systems Theory Basics

Discuss URD Lab Layout

Day 3 = EnergyU Online Course: 03302 – Underground Equipment Recognition

Discuss URD Lab Layout

Day 4 = Weekly Review

Week 3 (Aug 28th – Aug 31st) URD Distribution

Day 1 = The Guidebook for Linemen and Cablemen Ch. 9 pages 301-321

Day 2 = The Guidebook for Linemen and Cablemen Ch. 10 pages 351 – 372, 380 and 381

Day 3 = URD Notes

Day 4 = Weekly Review

Week 4 (Sept 4th – Sept 7th) URD Cable Installation

Day 1 = No School (Labor Day)

Day 2 = EnergyU Online Course: 03046 – Direct Burying Primary and Secondary Cables

Day 3 = EnergyU Online Course: 03040 – Pulling Primary Cable Underground

Day 4 = Week 1- 4 Test

Week 5 (Sept 11th – Sept 14th) URD Transformers and Switchgear

Day 1 = The Guidebook for Linemen and Cablemen Ch. 11 pages 417 – 426

Day 2 = EnergyU Online Course: 03301 – Transformer Basics – Underground Distribution

Day 3 = EnergyU Online Course: 03101 – Pad Mounted Switchgear Maintenance

Day 4 = Weekly Review

Week 6 (Sept 18th – Sept 21st) URD Locating and Troubleshooting

Day 1 = EnergyU Online Course: 11201 – Locating URD Distribution Circuits and Services

Day 2 = EnergyU Online Course: 03106 – Troubleshooting and Fault Locating URD Cables

Day 3 = EnergyU Online Course: 03060 – Underground Conductors: Repair and Replace

Day 4 = Weekly Review

Week 7 (Sept 25th – Sept 28th) Single Phase Transformers

Day 1 = The Guidebook for Linemen and Cablemen Ch. 14 pages 517-541 and 579

Day 2 = Transformer notes

Transformer Drawings

Day 3 = Transformer Drawings

Day 4 = Weekly Review

Week 8 (Oct 2nd – Oct 5th) Single Phase Transformers

Day 1 = EnergyU Online Course: 02020 – Pole Mounted Transformer Basics

Day 2 = All EnergyU's and assignments are due

Day 3 = Review

Day 3 = Test on Field Training 2A and 1

Week 9 (Oct 9th)

Day 1 = Test on Field Training 2A and 1

Field Lab Course Calendar: Line Electrician Field Training 2A

Week 1 (Aug 14th – Aug 17th) URD Cable and Terminations

Day 1 = URD Overview

Day 2 = Elbow Termination – Equipment Operation

Day 3 = Elbow Termination – Equipment Operation

Day 4 = Elbow Termination – Equipment Operation

Week 2 (Aug 21st – Aug 24th) URD Systems

Day 1 = Elbow Termination – Trencher

Day 2 = Padmount Transformer Termination – URD Troubleshooting

Day 3 = Padmount Transformer Termination – URD Troubleshooting

Day 4 = Padmount Transformer Termination – URD Troubleshooting

Week 3 (Aug 28th – Aug 31st) URD Distribution

Day 1 = Padmount Transformer Termination – URD Troubleshooting

Day 2 = Padmount Transformer Termination – URD Troubleshooting

Day 3 = Elbow Termination Assessment – Equipment Operation Assessment

Day 4 = Elbow Termination Assessment – Equipment Operation Assessment

Week 4 (Sept 4th – Sept 7th) URD Cable Installation

Day 1 = No School (Labor Day)

Day 2 = Elbow Termination Assessment – Equipment Operation Assessment

Day 3 = URD Installation Assessment

Day 4 = URD Installation Assessment

Week 5 (Sept 11th – Sept 14th) URD Transformers and Switchgear

Day 1 = URD Installation Assessment

Day 2 = URD Installation Assessment

Day 3 = URD Troubleshooting Assessment – Confined Space

Day 4 = URD Troubleshooting Assessment – Confined Space

Week 6 (Sept 18th – Sept 21st) URD Locating and Troubleshooting

Day 1 = URD Troubleshooting Assessment – Confined Space

Day 2 = URD Troubleshooting Assessment – Confined Space

Day 3 = Single Phase Transformer Installation

Day 4 = Single Phase Transformer Installation

Week 7 (Sept 25th – Sept 28th) Single Phase Transformers

Day 1 = Single Phase Transformer Installation

Day 2 = Single Phase Transformer Installation

Day 3 = Single Phase Transformer Installation – Assessment

Day 4 = Single Phase Transformer Installation – Assessment

Week 8 (Oct 2th – Oct 5th) Single Phase Transformers

Day 1 = Single Phase Transformer Installation – Assessment

Day 2 = Knot assessment

Day 3 = Finish all hands-on assessments

Day 4 = Finish all hands-on assessments

Week 9 (Oct 9th)

Day 1 = Test on Field Training 2A and 1

**NORTHEAST WISCONSIN TECHNICAL COLLEGE
ELECTRICAL POWER PROGRAM
MODELING RESPONSIBLE BEHAVIOR RUBRIC**

Modeling Responsible Behavior Grades

- 5% of grade in Safety Courses
- 5% of grade in Construction Standards Course
- 15% of grade in Field Training Courses

The Modeling Responsible Behavior Rubric is based on 3 different components: Promptness, Participation, and Professionalism. The criteria for evaluation may be different from one course to another; however you will be evaluated on the same components and in all your courses, each time your class meets. You will obtain either a 0 or a 1 in each component. The total possible points available are dependent on the number of times the class meets.

(Criteria)	Behavior	Points	Available
Promptness:	<ul style="list-style-type: none"> • <i>Demonstrates personal accountability</i> Present and on time Prepared and alert, mentally and physically Present for entire session 	0	1
Participation:	<ul style="list-style-type: none"> • <i>Thinks critically and creatively</i> Shares experiences applicable to current content • <i>Value individual differences and abilities</i> Doesn't interrupt or distract other students, verbally or non-verbally • <i>Work cooperatively and professionally</i> Displays eagerness for learning/experiences • <i>Communicate effectively</i> Asks appropriate questions Positive mannerisms-No negativity Does not monopolize class discussion Contributes appropriately with relevant information Uses proper communication, language, pronunciations, Grammar, spelling, etc... • <i>Solve problems effectively</i> Offers answers, Offers opinion Completes lab projects with minimal guidance 	0	1
Professionalism:	<ul style="list-style-type: none"> • <i>Demonstrates personal accountability</i> Cell phones and pagers are off during class, lab and field trips Complies with all NWTC Code of Conduct policies • <i>Demonstrates community and global accountability</i> Courteous and respectful to all, verbally and/or non-verbally, without bias or discrimination Recognize personal responsibility in making decisions that utilize resources in a sustainable manner 	0	1