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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>

Gas Field 2



Catalog #10-469-320 & Class #81858

Starts: August 15th Ends: October 10th

Welcome to NWTC! It is a privilege to be your College of choice. Our staff and faculty are excited for 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

Instructor Jason Nelson
Office EE101M
Telephone 920-498-6392
Email Jason.nelson@nwtc.edu
Availability 12:30-1:45 MTWR or email

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 & Class Meeting Location: 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 meets *in-person*. 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: 31-469-320 GAS UTILITY FIELD TRAINING 2 ...natural gas line installation standards for plastic pressure testing, fusion, leak detection procedures, general installation procedures and repair of plastic mains and services, introduction to propane gas systems and safety. (Prerequisite: 31-469-311, Gas Utility Field Training 1)

Credits: 5

Pre-requisites/Corequisites: *Gas Field 1*

Textbooks: *Energy-U Online Computer courses provided by Midwest Energy Association (MEA)*

National Fuel Gas Code Book – NFPA # 54 (Also used in Gas Field 3 & 4)

Supplies/Technology: *Computers personal or classroom provided* **Note: Students must have the materials listed below available every day and always use the proper PPE every day or their field grade will be affected.**

Supplies:

1. ANSI Approved Safety Glasses (clear and shaded)
2. ANSI Approved Work Shoes-Safety toes-(not low cut-at least 6" high for ankle support)
3. Rubber Boots – (over the shoe- knee high)
4. Rain Suit - Construction grade (jacket with hood preferred)
5. Pocket Knife or Leatherman style plier/knife combo
6. Watch – Digital or analog with second hand
7. ANSI Approved Hard Hat
8. ANSI Approved Traffic Vest – with reflective strips and/or High visibility cotton shirt
9. Steel Tape Measure – at least 12 foot
10. Work gloves (leather preferred)
11. Sunscreen
12. Hard Hat winter liner * winter
13. Insulated Coveralls * winter
14. Insulated Boots * winter
15. Black sharpie marker
16. Flashlight
17. Thumb Drive 4GB

Course Competencies: You can learn the following skills in this course:

1. Explain Gas Systems
2. Install PE gas mains
3. Install PE gas services
4. Install meters and regulators
5. Cross train with Electric Power Distribution
6. Install and Maintain Valves
7. Maintain Gas Systems
8. Mapping and record keeping
9. Gas System Upgrading
10. Abandoning Mains and Services

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.

Include any department-specific policies here.

CLASS SPECIFIC POLICIES

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

All Campus Rule: Smoking or chewing tobacco will not be allowed in the classroom, lab room or field lab.

Other Policies: Class size will be limited to 20 students.

Students are not allowed to wear sleeveless shirts or shorts for outside field or shop activities.

All students will conduct themselves as if this were a position in the gas industry. Consider this class as your job and act accordingly.

Most employers require our graduates to be able to obtain a Class A Commercial Driver's License. If your current driving record will not allow you to obtain a CDL your employment potential will be affected. It is important to maintain a clean driving record in this industry! Students should self-study the requirements needed for the CDL from the Wisconsin Motor Vehicle Department and take the test to get their permit as soon as possible, but no later than end of the summer semester in the year they enroll in the Gas Utility Program. Equipment is available to use to assist the student in practicing and taking the required driving test for the CDL license, so they have it upon graduating from the course.

Most positions in the Gas Utility field are classified as "safety sensitive positions" by the Federal regulations for this industry. This means that employees in these positions are subject to entry level and routine random drug testing. CDL licenses also random drug tests and have a .04 limit for alcohol testing in a DWI investigation. This threshold limit on your driver's license is when you are operating a company vehicle or your personal vehicle. NWTC does not require these tests as a prerequisite for this program but evidence of drug use or alcohol during attendance in the program labs or classroom will result in removal from the program.

Safety rules will be emphasized and strictly enforced throughout the course.

Safety Rule: Two Man Rule – When operating any excavation equipment there must always be two students. One student will always be the safety ‘spotter’ when the other student is operating the equipment. Also, when backing up any of the program vehicles there must always be a safety ‘spotter’ to direct the driver to prevent backing accidents.

Students are not allowed to wear sleeveless shirts or shorts for outside field or shop activities.

Campus Closure Day(s) Procedure:

In the event a campus closure occurs, there are two emergency closure dates built into the end of each 8-week session. Within 24-hours of a college cancellation, Instructors will provide detailed information regarding expectations for students.

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.

Attendance and Participation:

Attendance is imperative as demonstrations and practice labs build

accumulative skills and many times cannot be repeated due to guest speakers and/or specialized equipment furnished by the industry.

Homework assignments are due at the beginning of class on the date they are required to be completed.

Attendance records will be made available to potential employers.

Labs are considered part of the class and all students are expected to participate. Labs are will not be complete until all material, tools and equipment has been properly stored and the work area cleaned. Students will not be allowed to leave until formally dismissed by the instructor. It will be counted as an absence for the day when a student leaves without notifying the instructor.

Any student who misses 4 or more days will drop a letter grade.

The student will be required to call the instructor prior to the class start time if they will be absent. This notification will result in an excused absence. If no prior notification is given it will be recorded as unexcused. All absences will be recorded and made available to potential employers upon request.

CLASS SPECIFIC POLICIES

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

Appropriate Use of Technology:

Cell Phone Usage:

Cell phone usage is prohibited during all class sessions, shop and field activities. This includes both cell phone calls and text messaging. Your cell phone should be set on the 'silent mode' at all times so an incoming call will not disrupt the class. The only exception is if you have an emergency then advise your instructor of your need to use cell phone. Refer to written cell phone use policy that was used in Gas Field Training 1 class.

Grading Scale:

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

* C is the minimum passing grade for this class.

Field Evaluation Core Abilities: This core abilities are used by both the

instructors and students for evaluation

Safety

purposes.

Attitude

Teamwork

* Worth 15% of grade = instructor/ lab aide evaluations

Initiative/Motivation

* Worth 5% of grade = peer evaluations

Responsibility

Quality/Performance

Grades will be computed by the following guidelines:

Test and quiz grades = 20%

Field work evaluations (instructors) = 15%

Field work evaluations (peers) = 5%

Lab/fieldwork assignments = 20%

Energy-U Online course scores = 20%

CDL = 5%

Final exam = 15%

Assignments turned in after the due date will have points deducted.

Daily (pop) quizzes will not be available to be made up.

Energy-U online courses must be completed in the allotted time period to receive credit.

GAS FIELD 2

WEEK 1

1. Review Syllabus and Gas Field 1 grades Summer Assignments
2. **Power Point** – Excavation
3. Types of wire connections DEMO cad weld
4. Handout cad weld procedure
5. Handout loading and unloading info
6. Handout EnergyU list
7. Handout Squeeze tool procedure static electricity
8. **LAB** – Locating at the Annex DEMO (no sheet)
9. **LAB** – Main hand Excavation, Bell hole, Squeeze, and Fusion lab
10. **LAB** – Loading, Unloading, and Tiedown (no sheet)
11. **LAB** – Plowing with the RT55
12. **LAB** – Road Bore and Handout
13. **EnergyU – 192-2011** Prevention of Accidental Ignition
14. **EnergyU – 192-0804** Damage Prevention During Excavation

WEEK 2

1. **Power Point** – Installation of Mains
2. Handout Forman, Tailboard, and Safety sheets
3. **LAB**- Larson Rd. Project
4. Review and Handout Installation of Mains Procedure
5. **TEST** – Excavation (student graded written test)
6. **TEST** – Diggers Hotline (student graded written test)
7. **WPS – Mapping (depnds on their schedule)**
8. **EnergyU 192-1408** Installing Pipe
9. **EnergyU 192-1405** Underground Clearances

WEEK 3

1. **LAB** – Main Project discuss and assign
2. **QUIZ** – Installation of Mains (student graded written tests)

3. EnergyU 192-1410 Cover Service Lines and Mains/Trans
4. EnergyU 192-1417 Protection when Minimum Cover Not Met

WEEK 4

1. WPS – Gate Station Field trip (depends on their schedule)
2. DEMO - Pigging of mains
3. DEMO - Pressure Testing
4. DEMO – Purging
5. Handout Gas Main Worksheets #1 and #2
6. LAB – Pigging field line (no sheet)
7. EnergyU 192-1415 Protection from Hazards
8. EnergyU 192-1301 Pressure / Leak Testing.

WEEK 5

1. Finish up Main LAB
2. Power Point – Installation of Services
3. LAB – Hand Dig to locate Gas Main
4. TEST – Installation of Mains
5. EnergyU 192-1418 Purging
6. EnergyU 192-1004 Sidewall/Saddle fusion

WEEK 6

1. LAB – Service Project discuss and assign
2. Review Saddle Fusion Procedure and DEMO Saddle Fusion
3. EnergyU 192-1402 Backfilling
4. EnergyU 192-1413 Line Markers

WEEK 7

1. TEST – Work Zone Safety – open book
2. INSTALLATION OF GAS SERVICES- WORKSHEET #1
3. Power Point – Regulator Testing

WEEK 8

1. Handouts flow, lock, and leak
2. Preview Day
3. EnergyU 192-0701 Installation of Meters and Regulators
4. EnergyU 192-2401 – Welding
5. TEST - Final