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#### **Northeast Wisconsin Technical College**

#### **Land Acknowledgement Statement**

The region served by NWTC occupies the ancestorial 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 ENERGY MANAGEMENT SYLLABUS

Catalog #10-481-114 & Class #81832

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



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

InstructorJohn HippensteelOfficeEE101 Cubicle GTelephone920-559-3337

Email John.Hippensteel@NWTC.edu

**Availability** Please make an appointment. Feel free to call, email, or text message.

#### As a NWTC instructor, I am expected to:

- 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
		12:30-3:20PM				
		Room EE116 & Online				

Class Delivery Mode & How to Participate: This class meets in an 8-Week format with both in-person and online components. For a definition of Blended 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 introduces the basic concepts of energy, utility systems and utility rate structures; defines the need for energy management as an integral part of society at all levels. The course will present the various opportunities available to energy management students.

Credits: 3

Pre-requisites/Corequisites: None

Textbooks: Capehart, B., Turner, W., and Kennedy, W. Guide to Energy Management

**Supplies/Technology:** Access to a computer for accessing Blackboard, websites, as well as word processing and spreadsheet apps like Microsoft Word, PowerPoint, and Excel.

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

- 1. Describe energy and its different forms.
- 2. Explore the history of energy production and cost in the U.S. and Wisconsin since 1900
- 3. Define units of measuring energy and convert between them.
- 4. Explain how energy is billed by utilities.
- 5. Identify how and where energy is used in buildings.
- 6. Examine the social and environmental impacts of energy production and consumption.
- 7. Determine Codes and Standards applicable to energy use and buildings.
- 8. Describe the energy auditing process.
- 9. Create an outline of an effective energy management program.
- 10. Investigate monitoring techniques used to measure and monitor energy use in buildings.
- 11. Explore career and educational opportunities for energy management professionals.

**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 <u>supportservices@nwtc.edu</u> or in-person. For more information, please visit us at <u>www.nwtc.edu/student-experience/student-support-services</u>.

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 <a href="www.nwtc.edu/students">www.nwtc.edu/students</a>. 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 <a href="https://www.nwtc.edu/academiccoaching">www.nwtc.edu/academiccoaching</a>

#### **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 <a href="mailto:mohammed.bey@nwtc.edu">mohammed.bey@nwtc.edu</a> 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 <u>Academic Calendar page</u> 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:** We learn from each other in an interactive, real-time format, and we need to make the most of this opportunity. Responsible participation includes preparing for class, attending each class, contributing positively to class discussions and other activities, turning in assignments on time and following the course calendar. Please limit side conversations during class lecture/discussions.

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. Weekly, students should expect to spend three to six hours outside of the class time studying and completing online activities.

**Technology Skills & Assistance:** Assignments and activities in this course will use word, presentation and spreadsheet apps like Microsoft Word, PowerPoint, and Excel.

#### **Research Help**

Find resources through <u>Library Search</u>, the <u>online databases</u>, or your <u>program guide</u>. Visit the <u>Ask a Librarian FAQ site</u> to contact librarians, explore the <u>Research Skills Tutorial</u>, or learn to <u>Cite Sources</u>.

#### **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 <u>Technology</u> 101 video series or visiting the <u>Ask a Librarian FAQ site</u>.

Find out how to <u>Download Office 365 for Free</u> and access <u>Off-Campus Software</u>. Learn how to <u>borrow</u> equipment from NWTC.

**Appropriate Use of Technology in Class:** Please silence cell phones and other electronic devices to minimize distractions (to yourself or others) in class. If you have important matters to attend to while in class, please ensure video and sound are turned off while you handle those issues. You may use a laptop for taking notes and class-related work (please do not conduct non-class-related Web surfing in class).

Campus Closure Day(s) Procedure: In the event of a campus closure, we will still likely have class! If a campus closure is announced, please check your email and Blackboard announcements for a message that will indicate how we will conduct class. If campus is closed we will most likely meet via WebEx, <a href="https://nwtc.webex.com/meet/jenny.brinker">https://nwtc.webex.com/meet/jenny.brinker</a>.

**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:**

You can earn full credit for an assignment by submitting it in Blackboard by the assigned due date. If you submit an assignment late but within 7 days of the due date, you can earn up to 100% credit. After 7 days, you will not earn any credit.

#### **Grading Scale:**

Scale	Grade
91-100	А
81-90	В
71-80	C*
51-70	D
0-50	F

<sup>\*</sup>C is the minimum passing grade for this class in the Energy Management, Solar or other programs that require this course.

#### **Course Calendar:**

CLASS #81832

### **COURSE CALENDAR CHECKLIST:**

## Intro to Energy Management Learning Path in Blackboard > CLASS MATERIALS > Learning Plans

	Learning Path in Blackboard > CLASS MATERIALS > Learning Plans						
BLACKBOARD Learning Plan	ASSIGNMENTS AND ACTIVITIES	COMPETENCIES ASSESSED	EMPLOYABILITY SKILLS ASSESSED	POINTS	DUE DATE By 11:59 pm on the dates listed below		
Special Assignments	Check Box When Assignment is Submitted			LP TOTAL POINTS = 30			
	Article Summary	5, 8, 9, 10	1, 3, 7	20	8/31/23		
Special Assignments	Energy Efficiency Wall of Fame	4, 8, 9, 10	1, 3, 4, 7	10	Sign up for Presentation/Due Date		
1	Check Box When Assignment is Submitted			LP TOTAL POINTS = 50			
	Class Introduction & Forms of Energy in Everyday Life – Discussion Board	1	1, 3, 4, 5	15	8/23/23		
	What is Energy? worksheet	1, 2	3, 4	10	8/23/23		
Energy	Energy Conversion Matrix	1, 2	3, 4	10	8/23/23		
Overview	EPA Energy Star Website Questions & Pledge	4, 5, 6	1, 3, 4, 7	10	8/23/23		
	Read and Submit a Question re: 2020 Energy Audit Report of GLEE.	4, 5, 6	1, 3, 4, 7	5	8/23/23		
2	Check Box When Assignment is Submitted			LP TOTAL POINTS = 45			
Energy	Energy Conversions & Beyond Worksheet (watch video before class, work on during our in-person class)	1, 2, 3	3, 4	10	8/30/23		
Quantification	Case Study: Electric Appliance Calculator	2, 3, 4, 5	1, 3, 4	15	8/30/23		
	LP2 "Quiz"	1, 2, 3 4, 5	3, 4, 6	20	8/30/23		
3	Check Box When Assignment is Submitted			LP TOTAL POINTS = 65			
Electricity Basics & Utility Rates	Case Study: Utility Rates – Discussion Board	2, 3	1, 2, 3, 5	15	9/6/23		
	Electricity 101	2, 3, 5	1, 3, 4, 7	10	9/6/23		
	Utility Tariff Sheet Comparison	2, 3	3, 4	10	9/6/23		
	Commercial Electric Rate	2, 3	3, 4	10	9/6/23		
	LP3 "Quiz"	2, 3, 5	3, 4, 6	20	9/6/23		
4	Check Box When Assignment is Submitted			LP TOTAL POINTS = 45			
Energy Audits	Case Study: Standards & Tracking	5, 6	1, 2, 3, 5	15	9/13/23		
	Portfolio Manager	5, 6, 7, 8	1, 3, 4, 7	10	9/13/23		
	GLEE Path to Net Zero Paper: Each student creates an outline of their section of the	5, 6, 7, 8	1, 3, 4, 7	10	9/13/23		
	paper		I	1 10	l		

BLACKBOARD Learning Plan	ASSIGNMENTS AND ACTIVITIES	COMPETENCIES ASSESSED	EMPLOYABILITY SKILLS ASSESSED	POINTS	DUE DATE By 11:59 pm on the dates listed below
	LP4 Quiz	5, 6, 7, 8, 9	3, 4, 6	10	9/13/23
5	Check Box When Assignment is Submitted			LP TOTAL POINTS = 50	
Heat Transfer	Case Study: Insulation – Discussion Board	4, 6, 9	1, 2, 3, 5	15	9/20/23
Heat Transfer in Buildings	Heat Transfer Problems	4, 7, 9	3, 4	10	9/20/23
in buildings	Heat Transfer Worksheet	6, 7	3, 4	15	9/20/23
	LP5 "Quiz"	4, 6, 7, 8, 9	3, 4, 6	10	9/20/23
6	Check Box When Assignment is Submitted			LP TOTAL POINTS = 30	
	LP6 Motor Problems	4, 6, 7, 9	3, 4	10	9/27/23
Motors	GLEE Path to Net Zero Paper: Class submits draft paper for review	5, 6, 7, 8	1, 3, 4, 7	10	9/27/23
	LP6 "Quiz"	4, 6, 7, 9	3, 4, 6	10	9/27/23
7	Check Box When Assignment is Submitted			LP TOTAL POINTS = 20	
Heating & Cooling	Heating and Cooling Efficiency	4, 6, 7, 9	3, 4	10	10/4/23
Equipment	LP7 "Quiz"	4, 6, 7, 9	3, 4, 6	10	10/4/23
8	Check Box When Assignment is Submitted			LP TOTAL POINTS = 26	
Legacy of Energy	Employability Skills Assessment	10	1, 6	21	10/6/23
Savings at NWTC FINAL PROJECT	GLEE Path to Net Zero – Finalize Paper (Legacy of Energy Savings at NWTC)	3, 4, 5, 6, 7, 8, 9, 10	1, 2, 3, 4, 5, 6, 7	5	10/6/23
TOTAL	GRAND TOTAL OF ALL LEARNING PLANS				

**Student Agreement:** After you have read the syllabus, please send your instructor an e-mail with the following statement: I confirm that I have read the course syllabus and agree to the class policies, procedures, due dates, and all the other information communicated in the syllabus.