

**NORTHEAST COMMUNITY COLLEGE
COURSE SYLLABUS**

**INDT 1025
INTRODUCTION TO INDUSTRIAL SAFETY**

FALL 2016

NORTHEAST COMMUNITY COLLEGE INTRODUCTION TO INDUSTRIAL SAFETY COURSE SYLLABUS

I. CATALOG DESCRIPTION:

COURSE NUMBER: INDT 1025

COURSE TITLE: Introduction to Industrial Safety

PRE-REQUISITES: None

CO-REQUISITES: None

DESCRIPTION: This course covers OSHA policies, procedures, and standards, as well as general safety and health principles. Topics include the scope and application of the OSHA general industry standards. Special emphasis is placed on those topics that are required in the 10- hour program as well as on those that are the most hazardous, using OSHA standards as a guide. In addition, students will complete the AHA Heartsaver critical skills needed to respond to and manage a first aid, choking, or sudden cardiac arrest emergency through CPR and AED usage.

CREDIT/CONTACT HOUR DESIGNATION:

Credits: 2 Lecture: 30 Lab: 0 Clinical: 0 Coop: 0

TERM: Fall 2016

II. COURSE OBJECTIVES:

Course will:

1. Connect students to the importance of OSHA and the OSH Act in providing a safe and healthful workplace to workers covered by OSHA.
2. Enable students to understand one's rights and an employee, employer responsibilities, and how to file a safety related complaint.
3. Emphasize and employ hazard identification, hazard avoidance, hazard control, and hazard prevention.
4. Provide an overview and review of safety regulations applicable to general industry with emphasis on those topics required for the 10-hour general industry certification card.
5. Enhance student's knowledge of the interaction of safety and operations on daily activities.
6. Allow the student to apply and develop technical skills for implementing and instituting safety practices and procedures into their everyday working environment.
7. Provide a foundation for understanding of various safety processes.
8. Improve upon students' understanding of the safety applicability and options.

9. Allow students experiences in safety

III. STUDENT LEARNING OUTCOMES:

The student will be able to:

1. Describe the purpose of the OSH Act.
2. Provide a brief overview of the Department of Labor's relationship to OSHA, Code of Federal Regulations, and Titles.
3. Explain the codification system for General Industry standards.
4. Understand the rights and responsibilities of the employee, employer, and supervisors.
5. Identify the common safety hazards that are associated with workplace safety and means of protection from these hazards.
6. Realize the importance of practicing safe work habits.
7. Identify conditions that can affect a workers fitness for duty.
8. Discuss the cost of accidents.
9. Discuss OSHA related alliances.
10. Discuss an employees need and right to know about hazards in the workplace.
11. Use and understand labels and safety data sheets.
12. Demonstrate an understanding of regulations pertaining to walking and working surfaces, fall protection, fire protection, electrical, and personal protective equipment, and more.
13. Demonstrate the proper means to audit safety equipment and programs.
14. Read and understand emergency action plans, fire prevention plans, and hazards ratings.
15. Demonstrate proficiency in performing CPR and AED usage and basic first aid measures.

IV. CONTENT/TOPICAL OUTLINE:

A. SYLLABUS AND COURSE INFORMATION

1. Examine the Course Syllabus
2. Review Course Requirements
3. Succeeding in Class

B. INTRODUCTION TO SAFETY

1. Introduction to Safety
2. OSHA Act
3. Roles and Responsibilities
4. Regulation Development
5. Filing a Complaint
6. General Duty Clause

C. ACCIDENTS

1. The Cost of Accidents
2. Accident Causes
3. Stress and Safety

D. ACCIDENT INVESTIGATIONS

1. Job Hazard Analysis
2. Accident Classification
3. Accident Investigation and Reporting

E. HAZARD COMMUNICATION

1. Safety Data Sheet
2. Warning Labels
3. Interpreting Hazard Terminology

F. WALKING AND WORKING SURFACES

1. Differentiate Between Openings and Holes
2. Requirements for Stairways, Railings, and Aisles.
3. Identify the Requirements Related to Ladders.
4. Discuss the Importance of Housekeeping.

G. FALL PROTECTION

1. Fall Hazards
2. Danger of Falls
3. Fall Equipment
4. Fall Systems

H. PPE & RESPIRATORS

1. Important of PPE
2. Types of PPE
3. Types of Respirators
4. Respirator Use and Care

I. HEARING CONSERVATION

1. Dangers of Noise
2. Noise Control
3. Hearing Protection
4. Hearing Attenuation

J. ELECTRICAL

1. Design Safety
2. Markings
3. Guarding Live Parts
4. Wiring Design and Protection
5. Cords and Cables
6. De-energized Parts

K. LOCKOUT/TAGOUT

1. Lockout/Tagout Devices
2. Lockout/Tagout Procedures

L. FIRE PROTECTION

1. Types of Fires
2. Extinguisher Selection and Use
3. Maintenance and Inspection

M. EMERGENCY ACTION PLANS AND EXIT ROUTES

1. Life Safety Code and Means of Egress

2. Exit Requirements
3. Lighting and Markings
4. Elements of Emergency Action Plans

N. CONFINED SPACE

1. Defining Confined Spaces
2. Dangers of Confined Space
3. Roles and Responsibilities

O. MACHINE GUARDING

1. Types of Hazards
2. Requirements for Safe Guards
3. Types of Safe Guards
4. Guarding Methods
- 5.

P. BACK AND LIFTING SAFETY (Student Present)

1. Lifting Techniques
2. Lifting Safety

Q. BLOODBORNE PATHOGENS (Student Present)

1. Bloodborne Pathogens Defined
2. Responsibilities

R. CPR/AED

1. Adult CPR/AED
2. Child CPR/AED

S. FIRST AID

1. Broken Bones
2. Cuts
3. Stokes
4. Concussions
5. More

Note: The course schedule and topic order is subject to change at any time without advance notice.

V. INSTURCTIONAL MATERIALS:

A. Required Text:

1. No text is required for this course

VI. METHOD OF PRESENTATION:

A. Methods of presentation typically include a combination of the following:

1. Presentation Methods
 - a. Lecture

- b. Demonstration
 - c. Exhibit
 - d. Indirect Discourse
 - e. Assigned Reading
 - f. Interview
2. Student Verbal Interaction
- a. Questioning
 - b. Programmed Questioning
 - c. Student Query
 - d. Seminar
 - e. Discussions
3. Knowledge Applications
- a. Performance through student interaction, gaming, equipment interaction, and electronic simulation.
 - b. Case Study

VII. METHOD OF EVALUATION:

A. Methods of evaluation typically include a combination of the following:

- 1. Hands-on Practicum (Participation) = 25%
 - a. Computer Simulation and Exercises
 - b. Laboratory or Field Exercises
 - c. Problem Solving
 - d. Reflective Learning Statements
 - e. Self-exams
 - f. Class Participation
- 2. Written/Oral = 50%
 - a. Exams and Quizzes
 - b. Essays
 - c. Assignments
 - d. Field Reports/Forms/Case Studies
 - e. Article Review
 - f. Portfolios and Projects
 - g. Presentations
- 3. Team = 25%
 - a. Group Projects
 - b. Contribution and Collaboration
 - c. Attendance
 - d. Professionalism

B. Grading Scale:

A+	100.0%	(4.0)
A	99.94% - 90.0%	(4.0)
B+	89.9% - 84.5%	(3.5)

B	84.4% - 80.0%	(3.0)
C+	79.9% - 75.0%	(2.5)
C	74.9% - 70.0%	(2.0)
D+	69.9% - 65.0%	(1.5)
D	64.9% - 60.0%	(1.0)
F	below 60.0%	(0.0)

VIII. COURSE REQUIREMENTS:

A. Attendance and Participation

1. You are expected to attend every class. For each unexcused absence a 3% penalty will be assessed to your final grade. For instance if you have a grade of 90% but have one unexcused absence your final grade will be reported as an 87%. Two or more unexcused absences will result in automatic failure for the course. If you experience life-altering circumstances and cannot attend class, seek advice from the NECC Student Academic Support Center or your advisor regarding options or withdrawing from the course.
2. An absence is excused if:
 - a. You are required to participate in an official NECC activity (documentation required).
 - b. You are under a doctor's care (documentation required)
 - c. You are granted a leave of absence from NECC for reasonable cause by an academic dean or associate dean (documentation required).
 - d. You have discussed the matter received prior approval from the instructor.
3. Per regulatory requirements those seeking the OSHA 10-hr **cannot miss any** of the lecture topics. Students will be allowed to make up 1 missed class period to meet certification requirements by making prior arrangements with the instructor. Students that do not make prior arrangements will not receive their 10 hour certificate.
4. It is at the discretion of the instructor to allow makeup for missed speeches, exams, assignments, and/or activities.
5. Attendance and punctuality are basic requirements for an effective discussion and team based course. Beyond that, each person's frequency and quality of contribution to the class discussion will be assessed and reflected in the class participation score. If you cannot attend a class it is a courtesy to inform your group or team members and your professor in advance, if possible. Students may contact the instructor by telephone, cell phone, or email.
6. Class participation is measured based upon the following criteria: arriving to class on time; paying attention during lectures; attentive watching and listening to screenings of films, or other media; respectful listening when I or your peers are speaking; your ability to be fully engaged in your learning without texting, checking your phone or email, or participating in other

digital distractions that are not related to the course materials; your ability to stay awake, etc. If you are unable to meet the above criteria, I will take away participation points throughout the semester. Keep in mind you start the semester with ALL your points, so don't lose them! If you are distracting others in your lack of participation, you will hear from me via email or in a short face-to-face conference before or after class.

B. Professionalism

1. Bear in mind you are now in a professional school, and a member of a learning community. Thus you are expected to conduct yourself as a professional person. For instance, be on time for class, do not leave the class while it is in progress for other than emergencies, turn off cell phones and personal computers unless otherwise required as part of the class, be respectful of others' viewpoints even if you disagree with them, and dress appropriately for a professional activity.
2. As this is a web-enhanced class use professionalism both in person and online. Use academic language:
 - a. No curse words, cursing symbols, or offensive language.
 - b. No personal attacks or insults.
 - c. No "flaming" (an aggressively inflammatory response only intended to provoke a fight)
 - d. Beware your sense of humor – not everyone may find you witty; some may be offended.
 - e. Disagreements are stated with respect for those with whom you disagree.
 - f. Your opinions are supported with legitimate sources.
 - g. Compose messages in complete sentences without mechanical, grammatical, & spelling errors.
 - h. Avoid using instant messaging abbreviations/emoticons.
 - i. Type in a standard font without creative styling (avoid bolding, italicizing).
 - j. Typing in all-caps implies you are yelling.

Impropriety will result in the student losing posting privileges (thus making it impossible to complete certain tasks). Review the most current edition of the [*NECC Student Handbook & Planner*](#); pay special attention to the Student Code of Conduct.

C. Plagiarism

1. Plagiarism is defined as the use of ideas, data, or language of another without providing specific acknowledgement of the work of the author. By presenting someone's words, thoughts, ideas, or data as your own, you are committing plagiarism. No matter where you obtain your information (i.e. Internet, book, journal, etc.), you must cite the original author every time. Students caught plagiarizing may face either academic or disciplinary negative consequences. Instructors who determine that a paper includes plagiarized material can take

academic measures, such as giving a failing grade for the paper or taking additional measures as outlined in the student handbook.

2. To avoid plagiarism cite the author each time you (Writing and Humanistic Studies (n.d.):
 - a. Use an author's exact written or spoken words. In this case, you must also identify those words by enclosing them with quotation marks or indenting the quote on both margins if it contains greater than 40 words.
 - b. Paraphrase someone's written or spoken words.
 - c. Use facts provided by someone else that are not considered common knowledge.
 - d. Make significant use of someone's ideas or theories.

Reference: Writing and Humanistic Studies (n.d.). Avoiding Plagiarism. MIT. Retrieved from <http://writing.mit.edu/wcc/avoidingplagiarism>.

IX. SUPPORT SERVICES:

B. Required Text:

1. Building Science Professional review handout

VII. METHOD OF PRESENTATION:

B. Methods of presentation typically include a combination of the following:

1. Handouts of all printed material covered in class.
2. Audiovisual aids (smart board and videos)
3. Independent study (reading of handouts, text, and preparing for tests).
4. Informal lectures (casual communication of knowledge).
5. Demonstrations (the use of testing equipment).

VII. METHOD OF EVALUATION:

B. Methods of evaluation typically include a combination of the following:

1. Written tests 60%
2. Quizzes 40%
3. Student evaluation is done through completed assignments, quizzes, and tests.
4. Jupiter Grades will be used to view assignments and grades.

C. Grading Scale:

95 - 100	A+
90 - 94	A
85 - 89	B+
80 - 84	B
75 - 79	C+
70 - 74	C

65 - 69	D+
60 - 64	D
Below 60	F

VIII. COURSE REQUIREMENTS:

A. Attendance

1. Students are expected to attend class. Quizzes will be given and cannot be made up unless approval from instructor. If you cannot attend class, see or call instructor (phone number 402-844-7230). Your grade will start dropping by a letter grade for each day after three days.

B. Student Conduct

1. Students are expected to complete your own work. Students will also be expected to conform to the Student Code of Conduct that was handed out.

IX. SUPPORT SERVICES:

A. Disabilities:

Students with a documented disability may be eligible for certain accommodations that support their success in the classroom. Please contact Mary Balaski, Disability Services Coordinator, for further information. Her office is located in CWC- 1263; also, she may be reached at 402-844-7343 or mary@northeast.edu.

B. Service Center:

Students may get assistance with computer-related problems through the College's Service Center; help@northeast.edu. It is strongly advised that a student participate in on-line training via a formal course or the [on-line tutorials](#) available through Northeast Community College's homepage.

Email: help@northeast.edu

Phone number: 402-844-HELP (4357)

In person: The Service Center is located in the Library on the Norfolk campus

Service Center Hours of Operation:

Sunday 1:00 p.m. - 9:00 p.m.

Monday - Thursday 7:00 a.m. to 10:00 p.m.

Friday 7:00 a.m. to 5:00 p.m.

If you have technical questions regarding the My Classes Online environment you need to contact the Service Center. Questions regarding the course content need to be directed to the instructor via My Classes Online Course Mail (email).

C. Advising & Academic Support Center (CWC 1284)

This is a one stop shop for all students. Advisors are available to assist with schedules, career planning, transfer questions, change of majors, academic recovery and other issues impacting academic success. Located in CWC 1284, students will

find a study space, lounge area and computers. Direct contact information is as follows:

Amanda Engelhart – 402.844.7125 or amandae@northeast.edu

1. Tutoring – CWC 1284
2. Writer's Clinic – CWC 1284

D. Library Service:

The Northeast Community College Library Resource Center provides students with tools to conduct scholarly research and increase knowledge. Through the library's subscription databases, students have access to millions of current and credible resources not available through Google, Yahoo, and other search engines. Links to online databases and the library's online catalog can be found at <http://www.northeast.edu/Library-Resources/>. Students who would like assistance in utilizing the library's resources are encouraged to contact the library for further information and personal service at 402-844-7131 or email marylouise@northeast.edu.

E. Title IX:

While I want you to feel comfortable coming to me with issues you may be struggling with or concerns you may be having, please be aware that I have reporting responsibilities that are part of my job requirements at Northeast Community College.

For example, if you inform me of an issue of sexual harassment, sexual assault, intimate partner violence, stalking and/or discrimination I will keep the information as private as I can, but I am required to bring it to the attention of Northeast's Title IX Coordinator. If you need help, you can also report an incident directly to the Title IX Coordinator, Craig Garrett, Associate Vice President of Human Resources, at 402-844-7046 or you could contact the Deputy Title IX Coordinator, Vice President of Student Services, at 402-844-7273. You can also report incidents or complaints to the Dean of Student Life by calling 402-844-7722.

I do not consider disclosures made in class writing assignments or discussions to require me to report, but I will contact the Title IX Coordinator about such disclosures if you make it clear that you want me to do so. Additionally, Northeast offers many resources and support through the Title IX Coordinator if you are struggling academically as a result of some form of sexual misconduct or discrimination. Title IX also provides you with significant protections if you experience complications with a pregnancy or childbirth. Please contact me as soon as you are able to discuss a plan for successful completion of this course. A secondary contact would be the Disability Services Coordinator at 402-844-7343.

Another common example is if you are struggling with an issue that may be traumatic or unusually stress producing, I will likely inform the Northeast Counseling Services office. If you would like to reach out directly to the Counseling Office, the contact number is 402-844-7277.

Finally, know that if, for some reason, our interaction involves a disruptive behavior or potential violation of policy, I will inform the Director of Student Conduct even when you and I may have reached a resolution to the incident. The purpose of this is to keep the Director apprised of any concerning behaviors and what was done to resolve them.

F. **Applied Technology Division Safety Statement**

Through the course of the semester you will be working with and around equipment that can be dangerous. The inherent dangers include both kinetic and potential energy; examples include, but are not limited to, high voltages, rotating equipment, high pressure hydraulics, compressed air, items that are heavy and/or hot, and the risk of fall or shock. Every effort has been made to minimize these risks and you will receive instruction and training as a part of this course (and related courses) in the proper safety procedures and equipment operation protocols. If you have a health condition or physical limitation that may affect you or another student's safety, you are to consult with the instructor prior to beginning to work with the equipment or undertaking a task involving the equipment. It is the student's responsibility to be able to follow all safety procedures and equipment operation protocols. Failure to abide by safety practices, procedures, or equipment protocols could result in serious injury or death. Failure to follow these safety practices / procedures or equipment protocols will not be tolerated and the student could face student disciplinary action including reduction of grade and possible removal from the course. Removal from the course could also result in loss of credit for the course and affect a student's financial aid.

X. **INSTRUCTOR NAME AND CONTACT INFORMATION:**

Instructor: Steve Wagner

Office: APT 106

Phone: 402-844-7723

Email: steve@northeast.edu

Office Hours:

10am – 11am & 3pm – 4pm (CST) Monday & Wednesday

8am – 3pm (CST) Friday or by appointment

XI. **GRANT STATEMENT:**

This document was developed as part of Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program Round 2 Grant, Innovations Moving People to Achieve Certified Training (IMPACT): TC-23752-12-60-A-31.



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