

DRAFT

Courses and Course Descriptions Dwayne Peaslee Technical Training Center Fall 2015

nc= noncredit

Courses Offered by the Peaslee Technical Training Center:

Custom Courses for Industry Partners (nc or credit)

The Peaslee Center can develop custom courses for individual business/industry partners or for a consortium of industry partners. Courses can focus on any type of training such as hydraulics, mechanical, reading plans, employability skills, leadership, tool usage, safety, and other important areas. Course duration depends on the training selected and can vary from a 1-hour seat-time course in a classroom to a full weeklong-course using hands-on shop or site problems and equipment for learning. Curriculum and instructional methods are agreed upon with Peaslee personnel and delivered according to the timing needs of industry partners. The Peaslee Center can manage logistics such as location, refreshments, food, curriculum materials, selection of expert instructors, etc. These courses may be delivered at the Peaslee Center location or at an appropriate partner site.

PC-101S, Building My Career (nc)

This course welcomes and orients trainees. Expectations of trainees and of Peaslee management are conveyed to each other. Industry partners participate in this course to provide trainees with a sense of their commitment to training and their support for skilled workforce. The Peaslee Center provides a career pathway model so that trainees understand the value of thinking about a career rather than simply getting a job. As the trainee moves through their skills training, industry continues to support training process through instruction, panels, roundtables, and other advising and mentoring interactions. Then, at the end of each semester or appropriate program end, industry representatives provide vision for engaging them for interviews and employment.

PC-201S, Creative Problem Solving (nc)

This course helps participants learn the advantages of structured problem-solving approaches. Participants learn how to identify core problems, solution options, and the impacts of decisions on work processes. Examples of problems found in industry-partner companies will be used.

PC-202S, Resolving Workplace Conflicts (nc)

This course helps participants understand conflict, viewpoints stemming from another person's perspective, how to manage anger, fair fighting guidelines, and argumentation. Emphasis is placed on conflict resolution methods, mediation, being an effective employee, and the role of human relations in a company.

PC-201M, Manufacturing Technician I Certificate Course/Program (nc, but articulation credit potential for up to 6 credits through community colleges or tech schools)

This training program addresses the core technical competencies required for skilled production occupations in all sectors of manufacturing. The core technical competencies certified are: 1) Math and Measurement, 2) Business Acumen and Quality, and 3) Spatial Reasoning and Manufacturing Technology. Training modules include safety, quality practices and measurement, manufacturing processes, electrical and mechanical basics, and maintenance awareness. This training can lead to two certificates, a Manufacturing Specialist Certificate and the full Manufacturing Technician 1 Certificate.

Courses Offered by Flint Hills Technical Training College at Peaslee Center:

IET-113, Industrial Electricity (4 cr hr)

Students will identify the proper equipment, materials and tools used in industrial settings. Students will be introduced to industrial electrical symbols and electrical schematics. The students will define current, voltage, and resistance as they relate to all values of electricity. Students will identify types of fuses and circuit breakers used in industrial settings. Alternating current will be explained. Control devices such as pushbuttons, selector switches, limit switches, photoeyes, and temperature switches will also be discussed and utilized

IET-114, Industrial Wiring (4 cr hr)

Students will learn the basics of control relays, solenoids, generators, motors, control relays, and transformers. Single phase motors will be covered, along with methods of troubleshooting for electrical circuits. Wiring AC circuits will include the wiring of industrial devices such as transformers, relays and timers. Emphasis will be on developing wiring competencies required by industrial equipment. Industrial power distribution will be among the final topics covered. Applied communications skills will be included. *Prerequisite: IET 113 Industrial Electricity*

Courses Offered by Neosho County Community College at Free State High School:

MFGT-114, Welding/Cutting Processes (3 cr hr)

In this core curriculum introductory welding course students will examine a variety of cutting processes used in the welding trade and experience within a lab or shop setting, safe practices, proper setup procedures and operation of cutting equipment. Learning activities will provide for practice and application of cutting process and students will also inspect metal cuts for quality and tolerance.

MFGT-118, Shielded Metal Arc Welding (3 cr hr)

In this course students will explore the tools, safety and operating procedures essential when working with Shielding Metal Arc Welding (SMAW) equipment. In a supervised setting, students will set up equipment, and build weld pads with selected electrodes in both the flat and horizontal positions. Students will also weld selected joints and inspect AMAW welds for uniformity and tolerance.

Courses Offered by Neosho County Community College at Peaslee Center:

CMCT-105, OSHA 10 Safety Orientation (1 cr hr)

This course provides students with the best practices for some of the most common and hazardous situations on the job site. It is designed for all students prior to working on the job site.

CMCT-106, Intro to Craft Skills (3 cr hr)

This course explains the safety obligations of workers, supervisors, and managers to ensure a safe workplace. It discusses the causes and results of accidents and the impact of accident costs. It defines safe work procedures, proper use of personal protective equipment, and working with hazardous chemicals. It further identifies other potential construction hazards, including hazardous material exposures, welding and cutting hazards and confined spaces. *Prerequisite: high school students must complete Tech I prior to enrollment in the Construction Technology program.*

CMCT-107, Carpentry Basics (4 cr hr)

This course reviews the history of the trade and provides an overview of the building materials used in construction work, including lumber, sheet materials engineered wood products, structural concrete, and structural steel. It also describes the various fasteners and adhesives used in construction work. The course provides detailed descriptions of the hand tools and portable power tools used by carpenters. Emphasis is on safe and proper operation of tools, as well as care and maintenance. Trainees will learn the techniques for reading and using blueprints. *Prerequisite: high school students must complete Tech I prior to enrollment in the Construction Technology program.*

HVAC-101, Workplace Skills (1 cr hr)

This course provides students with the skills necessary to succeed in the work environment. Students will learn how to listen attentively, communicate in written and verbal formats, solve problems, think critically, and participate in team project coordination. Additionally, students will learn time management, ethics, and interview skills.

HVAC-102, General Construction Skills (4 cr hr)

This course, serving as a pre-requisite to the subsequent trade courses, explains the safety obligations of workers to ensure a safe workplace and discusses the causes and results of accidents and the dangers of rationalizing risks. It also reviews basic mathematical functions used in the construction industry, identifies hand and power tools widely used, and familiarizes trainees with basic blueprint terms and symbols, and material handling techniques

HVAC-103, Electrical Fundamentals in HVAC (4 cr hr)

This course teaches power generation and distribution, and electrical components; explains the theory of solid-state electronics, Ohm's Law, wiring diagrams, as well as the operation, use and testing of the various electronic components used in HVAC; and covers transformers, single-phase and three-phase power distribution, capacitors, the theory and operation of induction motors. Students will construct and test both series and parallel circuits. Additionally, the student learns how to solve problems involving the measurement of lines, area, volume, weights, angles, pressure, vacuum, and temperature.

Courses Offered through Johnson County Community College at Peaslee Center:

INDT-155, Workplace Skills (1 cr hr)

Upon successful completion of this course, the student should be able to identify the job skills necessary to have a successful career in the field of his or her choosing. Topics include listening skills, oral communication, human relations, decision making/problem solving, how to work as a team, time and resource management, work ethics and career planning. (Note: This course has the same name as HVAC 101 on prior page but they are two different courses. This course is more general and can be applied to any working situation. HVAC 101 is more geared towards workplace skills within a construction career.)

CPCA-105, Introduction to Personal Computers: Windows (1 cr hr)

This introductory course is designed to give the beginning computer user an overview of the personal computer. The student will gain confidence in basic computing skills and concepts through a hands-on approach. Topics include an introduction to computer terminology, hardware, system software, application software, e-mail, and the Internet. 1 hr. lecture /wk.

CPCA-128, PC Applications: MS Office (3 cr hr)

Upon successful completion of this course, the student should be able to use the current version of Windows to create and organize files and folders and perform essential file management procedures such as copying, moving, deleting and renaming files and folders. An in-depth proficiency will also be attained with the use of the current version of MS Office Suite, word processing, spreadsheet, and presentation graphics applications. Hands-on, practical projects will be performed to reinforce the concepts taught. 3 hrs. lecture/wk.

MATH-130, Technical Mathematics I (3 cr hr)

This course is the first of a two-semester sequence that will introduce the mathematical skills and concepts necessary in technical work. It will focus on the basics of algebra, geometry and their applications. Topics will include operations with polynomials, linear equations, systems of equations, formulas and basic geometry. 3 hrs. lecture/wk. *Prerequisites: MATH 111 with a grade of "C" or higher or an appropriate score on the math placement test*

We may offer the entire Personal Computer Applications Specialist Certificate (15 cr hrs) through JCCC at the Peaslee Center. Below is the description of that Certificate:

Individuals with or without a college degree whose goal is to acquire or improve their personal computer application skills will accomplish their goals in this program. Emphasis is on acquiring results-oriented career business and industry skills. The program is intended for those seeking entry-level positions as well as those currently employed who desire to enhance their job skills and take MOUS (Microsoft Office User Specialist) certification tests. It provides employers and current prospective employees with tangible evidence of computer competencies. See the following web site:



**DRAFT: Courses and Course Descriptions
Dwayne Peaslee Technical Training Center
Spring 2016**

THE TEXT BELOW WAS MOSTLY COPIED FROM FALL 2015 SO CHECK ALL RED TEXT BEFORE CONFIRMING!

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NOTE TO SELF: INDICATE PRE-REQUISITE COURSE!

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PC 201S, Creative Problem Solving (nc)

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PC 202S, Resolving Workplace Conflicts (nc)

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Courses Offered by Flint Hills Technical Training College at Peaslee Center:

IET 213

IET 120

Courses Offered by Neosho County Community College at Free State High School:

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Courses Offered by Neosho County Community College at Peaslee Center:

CMCT 105, OSHA 10 Safety Orientation (1 cr hr)

This course provides students with the best practices for some of the most common and hazardous situations on the job site. It is designed for all students prior to working on the job site.

CMCT 106, Intro to Craft Skills (3 cr hr)

This course explains the safety obligations of workers, supervisors, and managers to ensure a safe workplace. It discusses the causes and results of accidents and the impact of accident costs. It defines safe work procedures, proper use of personal protective equipment, and working with hazardous chemicals. It further identifies other potential construction hazards, including hazardous material exposures, welding and cutting hazards and confined spaces.

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HVAC 103, Electrical Fundamentals in HVAC (4 cr hr)

This course teaches power generation and distribution, and electrical components; explains the theory of solid-state electronics, Ohm's Law, wiring diagrams, as well as the operation, use and testing of the various electronic components used in HVAC; and covers transformers, single-phase and three-phase power distribution, capacitors, the theory and operation of induction motors. Students will construct and test both series and parallel circuits. Additionally, the student learns how to solve problems involving the measurement of lines, area, volume, weights, angles, pressure, vacuum, and temperature.

Courses Offered through Johnson County Community College at Peaslee Center:

INDT 155, Workplace Skills (1 cr hr)

Upon successful completion of this course, the student should be able to identify the job skills necessary to have a successful career in the field of his or her choosing. Topics include listening skills, oral communication, human relations, decision making/problem solving, how to work as a team, time and resource management, work ethics and career planning. (Note: This course has the same name as HVAC 101 on prior page but they are two different courses. This course is more general and can be applied to any working situation. HVAC 101 is more geared towards workplace skills within a construction career.)

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MATH 131

Prerequisites: [MATH 130](#) with a grade of "C" or higher or an equivalent course with a grade of "C" or higher

This course is the second of a two-semester sequence on the mathematical skills and concepts necessary in technical work. It will focus on more advanced algebraic skills, solving equations, and trigonometry. The topics will include polynomials, rational expressions, radical expressions, complex numbers, solving quadratic, rational, radical, exponential and logarithmic equations, and working with basic trigonometry. 3 hrs. lecture/wk.

The Personal Computer Applications Specialist Certificate (15 cr hrs) may be attained through JCCC at the Peaslee Center. Below is the description of that Certificate:

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<http://catalog.jccc.edu/spring/degrecertificates/computerinformationsystems/personal-comp-app-specialist-cert/>



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DWAYNE PEASLEE TECHNICAL TRAINING CENTER CERTIFICATES

In Association with Partners

Several certificates may be attained by trainees including the following partial list:

Occupational Safety and Health Administration (OSHA), DOL:

- **OSHA 10 Certificate:** Attained by taking Fall 2015 courses in Construction or HVAC through Neosho County Community College. The OSHA 10 will be available each semester thereafter.

Construction:

- **Level I Construction Certificate** by NCCC will be available after two semesters/16 cr hrs.
- **National Center for Construction Education and Research (NCCER) Level I Core Curriculum Certificate** within two semesters through NCCC
- **NCCER Advanced Certification—Carpentry I:** Competency based—typically attained during the second level of NCCC certificate, which is four semesters totaling 36 credit hours

Heating, Ventilation, and Air Conditioning (HVAC):

- **OSHA 10, NCCER Level I Core, and NCCER HVAC Level I:** Competency based and typically attained during the first two NCCC semesters of 9 credit hours each totaling 18 credits.

Manufacturing:

- **Industrial Engineering Technology Level I** through Flint Hills Tech: Certificate after 4 semesters
- **Manufacturing Technologist 1 (MT1)** through Peaslee, competency based national test, potential in one semester, if offered.

Welding:

- **Welding Level I through NCCC, coincides with a national Entry Level Certificate by the American Welding Society's Schools Excelling through National Standards (SENSE).** Competency testing after 2-3 semesters.
- **Welding Level II through NCCC, coincides with the AWS's SENSE Advanced Welder Certificate.** Competency testing after 5-6 semesters.

Career Building:

- Peaslee Center's **Building My Career Certificate:** Requires successful completion of the Building My Career Course, including orientation and industry sessions, 8 seat hrs
- Peaslee Center's **Building My Career PLUS Certificate:** Requires successful completion of the Resolving Workplace Conflicts and Creative Problem Solving courses, 32 seat hrs

Computer:

- **Personal Computer Applications Specialist Certificate (PCAS),** through Johnson County Community College. Requires 11 credit hours, 2-3 semesters. Competency testing required for the **Microsoft Office User Specialist Certificate (MOUS).** Pending final decisions with JCCC.

SUMMARY

One Semester:	Building My Career – Peaslee Center Building My Career PLUS – Peaslee Center OSHA 10 - National MT1 – Peaslee Center (if offered)
Two Semesters:	Level I Construction - NCCC Level I NCCER Core - National NCCER Level I HVAC - National SENSE Level I Welding - National PCAS/MOUS (May require 3 or more semesters) - National
Four Semesters:	NCCER Advanced Certification-Carpentry I - National Industrial Engineering Technology Level I - FHTC
Five/More Semesters:	SENSE Level II Welding – National