

# Construction Career Pathways

Fall 2009 Northwest College of Construction Course Schedule  
A Special Supplement to DJC | Monday, August 10, 2009



**Heroes Memorial and Tribute, Gresham, OR**  
Project built by NWCC Apprentices, instructors, Affiliated Contractors and Suppliers



register online at [www.nwccoc.com](http://www.nwccoc.com)

- SAFETY TRAINING & CERTIFICATION
- CRAFT & TECHNICAL TRAINING
- SUPERVISORY & MANAGEMENT EDUCATION

Photos by Wendy Whitacre [www.wwphotography.info](http://www.wwphotography.info)

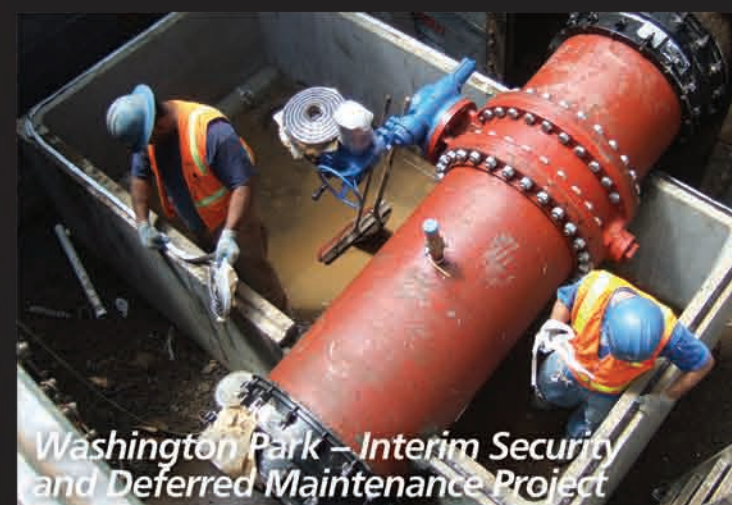




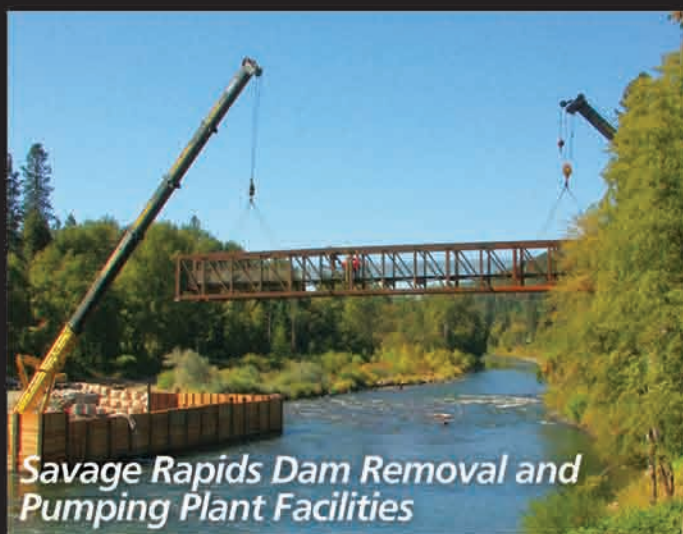
*OR 38: Elk Creek to Hardscrabble Creek Crossing No. 3 Rapid Replacement*



*Lassen Volcanic National Park Visitors Center*



*Washington Park – Interim Security and Deferred Maintenance Project*



*Savage Rapids Dam Removal and Pumping Plant Facilities*



*US 101: Spencer Creek Bridge*



*OR 38: Elk Creek to Hardscrabble Creek Crossing No. 4*



*NCCWC Sunrise Water Treatment Plant Expansion*

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**Registration:**

Register for classes using the Registration Form at the back of the schedule or by visiting us online at www.nwccoc.com

**Our Mission:**

Northwest College of Construction is a privately funded, non-profit technical facility promoting life-long learning by delivering craft, supervisory, management education and career placement services to the construction industry.

**Governance:**

NWCC is governed by a Board of Directors consisting of members of the four business associations that sponsor the school. The Board consists of the following: Associated Builders and Contractors-Pacific Northwest (ABC), Associated General Contractors-Northwest Chapter (AGC), The Home Builders Association of Portland (HBA), and the National Utility Contractors Association of Oregon and SW Washington (NUCA).

**Accreditation:**

NWCC is accredited by the **National Center for Construction Education and Research (NCCER)** that was created to address the critical workforce shortage facing the construction industry and to develop industry driven standardized craft training programs with portable credentials.

The **NCCER Mission** is to assure that industry clients receive quality services and industry workers have rewarding, progressive careers. The NCCER provides world-class craft training materials, opportunities for leadership growth, and effective safety training that will enhance productivity, cost-effectiveness, and the image of the construction and maintenance industry.

The quality and standardization of NCCER's Contren® Learning Series and Skills Assessments is accomplished through a formal accreditation process. Through this process, participants receive quality training based on uniform standards and criteria. These standards are presented as policies in the NCCER "Accreditation Guidelines".

**Licensing and Registration:**

Programs licensed and subject to Oregon Department of Education Private Career School regulation: Carpentry, Concrete Finishing, Construction Craft Laborers, Heating, Ventilation & Air Conditioning (HVAC), Heavy Equipment Operations, Masonry, and Sheet Metal.

Programs of study registered with the Oregon State Apprenticeship and Training Council: Carpentry, Concrete Finishing, Heavy Equipment Operations, Heating, Ventilation & Air Conditioning (HVAC), Heavy Equipment Operations, Masonry, Tile Trades and Sheet Metal. (Some programs are approved by the Washington State Apprenticeship Training Council - Call for details.)

Courses for personal and professional development are not subject to licensure or regulation.

**Legal Structure:**

The Northwest College of Construction is a non-profit 501(c)(3) corporation formed under the laws of the State of Oregon.

**Campus Locations:**

NWCC = Northwest College of Construction  
8111 N.E. Holman Street, Portland Oregon 97218  
(503) 256-7300

LCC = Lane Community College  
4000 East 30th Avenue, Eugene Oregon 97405  
(541) 463-3000

**Overview:**

NWCC provides open enrollment and admits students of any race, color, national origin, and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, national origin, and ethnic origin in administration of its educational policies, admission policies, scholarship and loan programs, and other school-administered programs. NWCC delivers courses for students seeking education to fulfill the following career needs: apprenticeship, career track, personal development, continuing education, supervision and management.

It is not necessary to be a registered apprentice to take courses at NWCC. Apprentices, however, must take classes as mandated by the Standards of Apprenticeship for their craft to receive a Journey Card from the Bureau of Labor and Industries.

Refund and withdrawal policies apply to all students. (See Registration Form for Refund Policy)

**Customized Training Program:**

Customized Training is becoming a popular option for employers and Operations Managers. These programs are tailored for either on-site company meetings, or may be facilitated at the Northwest College of Construction in Portland. Some Customizable programs available include:

- OSHA 10-hour
- First Aid/CPR
- Flagging Certifications
- Light Equipment Operations
  - Counterbalanced Forklifts
  - Rough-Terrain Forklifts
  - Skid Steer Loaders
  - Scissor Lifts
  - Boom Trucks
  - Boom Lifts
- Management Seminars including:
  - Construction Law, Planning & Scheduling
  - Productivity Improvement
  - Estimating and Cost Control
  - Contract Documents

Pricing and availability may vary depending on the nature of the program, size of group, location, length of the program and other variables. Please call NWCC for further details.

Academic Calendar  
(Classes start throughout each term)

	Fall 2009	Winter 2010
Course Schedules Available	July 24	Nov. 23
Registration Begins	Open	Open
Classes begin	Sept. 21	Jan. 4
Campus Closed	Nov. 23-27 Dec. 21-Jan. 1	Jan. 18
Finals Week	Dec. 14-19	Mar. 22-27
Last Day of Term	Dec. 19	Mar. 27
Grades available	Dec. 28	Apr. 5

# Welcome to NWCC



Dan Graham  
President

Northwest College of Construction is a professional-technical college created by the construction industry to meet the workforce needs of our industry. Our goal as a private, non-profit educational organization is to provide the highly-skilled workers needed in order for the Oregon and Southwest Washington construction industry to continue to build the homes, office towers, small business facilities, shopping centers, and the myriad structures that make up our communities. Of course we also must educate and train the workers who tie it all together with water, power, and communication utilities, not to mention the roads, light-rail lines and bridges that make it all work. In other words, we play a critical role in our northwest economy.

We recruit and train entry-level students who are "Born-To-Build!" and are seeking their first job in the construction industry, as well as provide continuing education for incumbent workers with years in the industry. Many of our students are registered in formal apprenticeship programs while others are open-enrollment students who need just a few courses to fill in a specific skill gap in their trade, craft or specialty.

Most truly skilled workers understand that on-the-job-training isn't enough. After all, construction products and methods continue to change and develop, sometimes at a rapid pace. This makes it imperative for workers to obtain the latest theory and technical knowledge available if they wish to compete for the top-tier positions in the industry. NWCC's combination of the latest curriculum, taught by experienced instructors, using lecture and hands-on application methods create the optimal learning environment for students at all levels of their career.

We also provide the courses needed by those in the industry who are advancing into supervisory and management level responsibilities and offer important certification classes such as OSHA, first aid, flagging, and other specialty courses needed by the industry.

NWCC is in the business of building successful careers in the northwest construction industry. Be sure to take a look at our course selections and contact us or visit us on the internet at www.nwccoc.com today for more information.

## 2009 FALL SCHEDULE CONTENTS

★ Indicates a class that offers certification

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**CONSTRUCTION CRAFT TRAINING**

★ Indicates a class that offers certification

**JUMP START ★**

A 7-day pre-career/pre-apprenticeship course for individuals with no construction experience that is designed to "jump start" their career. Some NWCC apprenticeship programs require successful completion of this course to qualify for entry into the apprenticeship program.

CRN #3793  
Date: Fri, 9/11-Fri, 9/18, 8:00 AM-4:30 PM, No class Sun, 9/13. Class starts at 12:00 PM on Fri, 9/11. Location: NWCC  
Member: Tuition: \$425.00 Lab Fee: \$10.00 Books: \$80.00 Total: \$515.00  
Non-Member: Tuition: \$425.00 Lab Fee: \$14.00 Books: \$114.00 Total: \$553.00

CRN #4350  
Date: Fri, 10/9-Fri, 10/16, 8:00 AM-4:30 PM, No class Sun, 10/11. Class starts at 12:00 PM on Fri, 10/9. Location: NWCC  
Member: Tuition: \$425.00 Lab Fee: \$10.00 Books: \$80.00 Total: \$515.00  
Non-Member: Tuition: \$425.00 Lab Fee: \$14.00 Books: \$114.00 Total: \$553.00

CRN #2644  
Date: Fri, 11/6-Fri, 11/13, 8:00 AM-4:30 PM, No class Sun, 11/8. Class starts at 12:00 PM on Fri, 11/6. Location: NWCC  
Member: Tuition: \$425.00 Lab Fee: \$10.00 Books: \$80.00 Total: \$515.00  
Non-Member: Tuition: \$425.00 Lab Fee: \$14.00 Books: \$114.00 Total: \$553.00

**OSHA 10-Hour Certification**  
**Introduction to Construction Math**  
**Introduction to Hand Tools**  
**Introduction to Power Tools**  
**Introduction to Blueprints**  
**First Aid/CPR Certification**  
**Flagging Certification**

**CARPENTRY**

This program is licensed by the Oregon Department of Education. OAR 581-045-0033(6)(7)

**Carpentry Level 1 Full Term**

CRN #3421  
Date: Mon, 9/21-12/14 6:00 PM -10:00 PM, No Class Mon, 11/23. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$170.00 Total: \$700.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$243.00 Total: \$794.00

**Carpentry Level 1 Full Term Lane County**

CRN #3878  
Date: Tue, 9/22-12/15 6:00 PM-10:00 PM, No class Tue, 11/24. Location: LCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$170.00 Total: \$700.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$243.00 Total: \$794.00

Module #00108-04 **Basic Employability Skills**  
Module #00107-04 **Communication Skills**  
Module #27101-06 **Orientation to the Trade**  
Module #27103-06 **Hand and Power Tools**  
Module #27102-06 **Building Materials, Fasteners, and Adhesives**  
Module #00105-04 **Introduction to Blueprints**  
Module #27104-06 **Reading Plans and Elevations**

**Carpentry Level 2 Full Term**

CRN #3445  
Date: Tue, 9/8-12/15 6:00 PM-10:00 PM, No Class Tue, 11/24. Location: NWCC  
Member: Tuition: \$560.00 Lab Fee: \$58.00 Books: \$138.00 Total: \$756.00  
Non-Member: Tuition: \$560.00 Lab Fee: \$83.00 Books: \$197.00 Total: \$840.00

**Carpentry Level 2 Full Term Lane County**

CRN #4456  
Date: Tue, 9/22-12/15 6:00 PM-10:00 PM, No Class Tue, 11/24. Location: LCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$138.00 Total: \$668.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$197.00 Total: \$748.00

Module #27205-07 **Cold-Formed Steel Framing**  
Module #27206-07 **Drywall Installation**  
Module #27207-07 **Drywall Finish**  
Module #27208-07 **Doors and Door hardware**

**Carpentry Level 3 Full Term**

CRN #3459  
Date: Wed, 9/23-12/16 6:00 PM-10:00 PM, No class Wed, 11/25. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$138.00 Total: \$668.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$197.00 Total: \$748.00

**Carpentry Level 3 Full Term Lane County**

CRN #4472  
Date: Wed, 9/23-12/16 6:00 PM-10:00 PM, No class Wed, 11/25. Location: LCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$138.00 Total: \$668.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$197.00 Total: \$748.00

Module #27301-07 **Rigging Equipment**  
Module #27302-07 **Rigging Practices**  
Module #27303-07 **Properties of Concrete**  
Module #27306-07 **Trenching and Excavating**

**Carpentry Level 4 Full Term**

CRN #3472  
Date: Thr, 9/24-12/17 6:00 PM-10:00 PM, No Class Thr, 11/26. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$138.00 Total: \$668.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$197.00 Total: \$748.00

**Carpentry Level 4 Full Term Lane County**

CRN #3977  
Date: Wed, 9/23-12/16 6:00 PM-10:00 PM, No class Wed, 11/25. Location: LCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$138.00 Total: \$668.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$197.00 Total: \$748.00

Module #27401-08 **Site Layout One - Distance Measurement & Leveling**  
Module #27403-08 **Advanced Roof Systems**  
Module #27404-08 **Advanced Wall System**

**HEATING, VENTILATION & AIR CONDITIONING (HVAC)**

This program is licensed by the Oregon Department of Education. OAR 581-045-0033(6)(7)

**HVAC Level 1 Full Term**

CRN #3488  
Date: Tue, 9/22-12/15 5:30 PM-10:00 PM, No class Tue, 11/24. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$170.00 Total: \$700.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$243.00 Total: \$794.00

Module #00101-04 **Basic Safety**  
Module #00102-04 **Introduction to Construction Math**  
Module #03101-07 **Introduction to HVAC**  
Module #03102-07 **Trade Mathematics**  
Module #00106-04 **Basic Rigging**  
Module #03103-07 **Copper and Plastic Piping Practices**  
Module #00105-04 **Introduction to Blueprints**

**HVAC Level 2 Full Term**

CRN #3513  
Date: Wed, 9/23-12/16 5:30 PM-9:30 PM, No Class Wed, 11/25. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$138.00 Total: \$668.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$197.00 Total: \$748.00

Module #03201-07 **Commercial Airside Systems**  
Module #03204-07 **Air Quality Equipment**  
Module #03202-07 **Chimneys, Vents and Flues**  
Module #03203-07 **Introduction to Hydronic Systems**  
Module #03205-07 **Leak Detection, Evacuation, Recovery, and Charging**

**HVAC Level 3 Full Term**

CRN #3533  
Date: Thr, 9/24-12/17 5:30 PM-10:00 PM, No class Thr, 11/26. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$138.00 Total: \$668.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$197.00 Total: \$748.00

Module #03301-08 **Refrigerants and Oils**  
Module #03302-08 **Compressors**  
Module #03304-08 **Retail Refrigeration**  
Module #03303-08 **Metering Devices**

**HVAC Level 4 Full Term**

CRN #3550  
Date: Mon, 9/21-12/14 5:30 PM-10:00 PM, No class Mon, 11/23. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$138.00 Total: \$668.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$197.00 Total: \$748.00

Module #03401-03 **Construction Drawings and Specifications**  
Module #03402-03 **Indoor Air Quality**  
Module #03403-03 **Energy Conservation Equipment**  
Module #03405-03 **Water Treatment**

**HEAVY EQUIPMENT OPERATIONS**

This program is licensed by the Oregon Department of Education. OAR 581-045-0033(6)(7)  
Participants may register for the full term or by the week.

**HEO Level 4 Full Term**

CRN #3767  
Date: Mon, Tue, Wed, Thr, 11/9-12/10 7:30 AM-5:30 PM. Location: NWCC  
Member: Tuition: \$3520.00 Lab Fee: \$1040.00 Books: \$241.00 Total: \$4801.00  
Non-Member: Tuition: \$3520.00 Lab Fee: \$1486.00 Books: \$344.00 Total: \$5350.00

**HEO Level 4-1**

CRN #3768  
Date: Mon, Tue, Wed, Thr, 11/9-11/12 7:30 AM-5:30 PM. Location: NWCC  
Member: Tuition: \$880.00 Lab Fee: \$260.00 Books: \$95.00 Total: \$1235.00  
Non-Member: Tuition: \$880.00 Lab Fee: \$371.00 Books: \$136.00 Total: \$1387.00

Module #36101-01 **Introduction to the Trade**  
Module #36108-01 **Paving**  
Module #36107-01 **Plant Operations**  
Module #36104-01 **Cranes**  
Module #44101-08 **Introduction to Project Management**

**HEO Level 4-2**

CRN #3769  
Date: Mon, Tue, Wed, Thr, 11/16-11/19 7:30 AM-5:30 PM. Location: NWCC  
Member: Tuition: \$880.00 Lab Fee: \$260.00 Books: \$95.00 Total: \$1235.00  
Non-Member: Tuition: \$880.00 Lab Fee: \$371.00 Books: \$136.00 Total: \$1387.00

Module #44105-08 **Construction Documents**  
Module #44106-08 **Construction Planning**  
Module #36109-01 **Structures**

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2009 Fall Schedule

**HEO Level 4-3**

CRN #3771  
Date: Mon, Tue, Wed, Thr, 11/30-12/3 7:30 AM-5:30 PM. Location: NWCC  
Member: Tuition: \$880.00 Lab Fee: \$260.00 Books: \$146.00 Total: \$1286.00  
Non-Member: Tuition: \$880.00 Lab Fee: \$371.00 Books: \$209.00 Total: \$1460.00

Module #44107-08 **Estimating and Cost Control**  
Module #44108-08 **Scheduling**  
Module #44109-08 **Resource Control**

**HEO Level 4-4**

CRN #3770  
Date: Mon, Tue, Wed, Thr, 12/7-12/10 7:30 AM-5:30 PM. Location: NWCC  
Member: Tuition: \$880.00 Lab Fee: \$260.00 Books: \$146.00 Total: \$1286.00  
Non-Member: Tuition: \$880.00 Lab Fee: \$371.00 Books: \$209.00 Total: \$1460.00

**Project Management; Theory and Application**

Look for Heavy Equipment Operations Levels 1, 2 and 3 in the Winter Schedule, available November 23.

**LABORERS**

This program is licensed by the Oregon Department of Education. OAR 581-045-0033(6)(7)

**Laborers Level 1 Full Term**

CRN #110108  
Date: Tue, 9/22-12/15 6:00 PM-10:00 PM, No class Tue, 11/24. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$159.00 Total: \$676.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$227.00 Total: \$778.00

Module #00108-04 **Basic Employability Skills**  
Module #00107-04 **Communication Skills**  
Module #27101-06 **Orientation to the Trade**  
Module #27102-06 **Building Materials, Fasteners, and Adhesives**  
Module #00103-04 **Introduction to Hand Tools**  
Module #00104-04 **Introduction to Power Tools**  
Module #27103-06 **Hand and Power Tools**  
Module #00102-04 **Introduction to Construction Math**

**Laborers Level 2 Full Term**

CRN #L20108  
Date: Mon, 9/21-12/14 6:00 PM-10:00 PM, No class Mon, 11/23. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$146.00 Total: \$676.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$209.00 Total: \$760.00

Module #23101 **Introduction to Concrete Construction and Finishing**  
Module #23203 **Forming**  
Module #OSHA-CPT **Competent Person; Trenching and Excavation**  
Module #OSHA-HAZ **HAZMAT**  
Module #OSHA-CSE **Confined Space Entry**  
Module #MT101 **Introductory Skills for the Crew Leader**

**SHEET METAL**

This program is licensed by the Oregon Department of Education. OAR 581-045-0033(6)(7)  
Sheet Metal apprentices are required to attend an orientation on Thursday, September 17 at 5:30 PM.

**Sheet Metal Level 1 Full Term**

CRN #4046  
Date: Mon, 9/21-12/14 5:30 PM-10:00 PM, No class Mon, 11/23.  
**Mandatory Orientation, Thr, 9/17.** Location: NWCC  
Member: Tuition: \$585.00 Lab Fee: \$61.00 Books: \$170.00 Total: \$816.00  
Non-Member: Tuition: \$585.00 Lab Fee: \$87.00 Books: \$243.00 Total: \$915.00

Module #00101-04 **Basic Safety**  
Module #00108-04 **Basic Employability Skills**  
Module #00107-04 **Communication Skills**  
Module #04101-08 **Introduction to the Sheet Metal Trade**  
Module #00103-04 **Introduction to Hand Tools**  
Module #00104-04 **Introduction to Power Tools**  
Module #04102-08 **Tools of the Trade**  
Module #00102-04 **Introduction to Construction Math**  
Module #04103-08 **Introduction to Sheet Metal Layout and Processes**

**Sheet Metal Level 2 Full Term**

CRN #4130  
Date: Tue, 9/22-12/15 5:30 PM-10:00 PM, Students will attend HVAC Level 2 class on Wed, 10/14 and 10/21 5:30 PM-10:00 PM. No class Tue, 11/24.  
**Mandatory Orientation, Thr, 9/17.** Location: NWCC  
Member: Tuition: \$665.00 Lab Fee: \$69.00 Books: \$194.00 Total: \$928.00  
Non-Member: Tuition: \$665.00 Lab Fee: \$99.00 Books: \$277.00 Total: \$1041.00

Module #04201-08 **Trade Math Two**  
Module #03204-07 **Air Quality Equipment**  
Module #03202-07 **Chimneys, Vents and Flues**  
Module #04202-08 **Plans and Specifications**  
Module #04205-08 **Air Properties and Distribution**

**Sheet Metal Level 3 Full Term**

CRN #4273  
Date: Wed, 9/23-12/16 5:30 PM-10:00 PM, No class Wed, 11/25.  
**Mandatory Orientation, Thr, 9/17.** Location: NWCC  
Member: Tuition: \$585.00 Lab Fee: \$61.00 Books: \$138.00 Total: \$784.00  
Non-Member: Tuition: \$585.00 Lab Fee: \$87.00 Books: \$197.00 Total: \$869.00

Module #04301-09 **Trade Math Three-Field Measuring and Fitting**  
Module #04302-09 **Air Systems**  
Module #04303-09 **Principles of Air Flow**  
Module #04304-09 **Louvers, Dampers, and Access Doors**

**Sheet Metal Level 4 Full Term**

CRN #SM40108  
Date: Thr, 9/17-12/17 5:30 PM-10:00 PM, Students will attend HVAC Level 4 class on Mon, 9/21, 9/28, 10/5 and 10/12, 5:30 PM-10:00 PM. No class Thr, 11/26.  
**Mandatory Orientation, Thr, 9/17.** Location: NWCC  
Member: Tuition: \$745.00 Lab Fee: \$77.00 Books: \$166.00 Total: \$988.00  
Non-Member: Tuition: \$745.00 Lab Fee: \$110.00 Books: \$237.00 Total: \$1092.00

Module #04305-03 **Principles of Airflow**  
Module #04401-03 **Shop Production and Organization**  
Module #04402-03 **Air Balance**  
Module #03401-03 **Construction Drawings and Specifications**

**TILE FINISHING**

This course is open to NWCC registered apprentices and current trade workers only. Participants may register for the full term or by the week.

**Tile Finishing Full Term**

CRN #4508  
Date: Fri, Sat, 8:00 AM-4:30 PM on 9/18-9/19, 10/16-10/17, and 11/13-11/14. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$190.00 Total: \$720.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$271.00 Total: \$822.00

**Tile Finishing 1-1**

CRN #4513  
Date: Fri, Sat, 9/18-9/19 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$56.00 Total: \$233.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$80.00 Total: \$264.00

Module #00108-04 **Basic Employability Skills**  
Module #MEDIC First Aid **First Aid/CPR**  
Module #00107-04 **Communication Skills**

**Tile Finishing 1-2**

CRN #4509  
Date: Fri, Sat, 10/16-10/17 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$56.00 Total: \$233.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$80.00 Total: \$264.00

Module #27103-06 **Hand and Power Tools**  
Module #28102-04 **Masonry Tools and Equipment**

**Tile Finishing 1-3**

CRN #4510  
Date: Fri, Sat, 11/13-11/14 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$78.00 Total: \$255.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$111.00 Total: \$295.00

Module #ST CH. 3 **Setting Materials**  
Module #31105 **Stationary Scaffolds**  
Module #31102 **Scaffolding; Trade Safety**

**TILE SETTING**

This course is open to NWCC registered apprentices and current trade workers only. Participants may register for the full term or by the week.

**Tile Setting Level 1 Full Term**

CRN #4336  
Date: Fri, Sat, 8:00 AM-4:30 PM on 9/25-9/26, 10/23-10/24 and 11/20-11/21. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$62.00 Total: \$592.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$89.00 Total: \$640.00

**Tile Setting 1-1**

CRN #4339  
Date: Fri, Sat, 9/25-9/26 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Personal Protective Equipment**  
**Responsibilities of the Apprentice Tiler**  
**Lifting Basics**  
**Material Safety Data Sheets: The Basics**  
**(F113-09) Dryset Mortar or Latex Portland Cement Mortar, Floors Exterior**  
**(F102-09) Dryset Mortar or Laytex Portland Cement Mortar, Floors Interior**

**Tile Setting 1-2**

CRN #4337  
Date: Fri, Sat, 10/23-10/24 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Reading and Understanding Material Safety Data Sheets**  
**Ceramic Tile Finishes, Sizes, and Shapes**  
**Material Handling**  
**(F142-09) Organic Adhesive over Wood Subfloors, Interior Residential Traffic**  
**(F144-09) Dry-Set Mortar or Latex-Portland Cement Mortar over Cementitious Backer Units on Plywood Subfloor, Floors Interior**

★ Indicates a class that offers certification



**Building the Northwest One Tile at a Time**

Just like the NWCC, Paragon Tile & Stone is in the business of building successful careers.

Our merit shop apprenticeship program helps train those with talent. The end result is some of the finest tile trades people around. And because Paragon is instrumental in the Oregon Tile Trade Association (Oregon-Columbia Tile Trades JATC), we help keep new professionals entering the workforce.

**For your career. For your project.**

Whether you're looking to grow your career, or searching for a company to get your project done right, you've found it. We're Paragon Tile & Stone.

**Exceeding Every Expectation**

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**Tile Setting 1-3**

CRN #4338  
Date: Fri, Sat, 11/20-11/21 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Ceramic Tile in History**  
**Ceramic Tile in Construction**  
**(W243-09) Dry-Set Mortar or Latex-Portland Cement Mortar over Gypsum Board on Wood or Metal Studs, Interior Walls**  
**(W202-09) Dry-Set Mortar or Latex-Portland Cement Mortar over Cementitious Backer Units on Plywood Subfloor, Floors Interior**  
**(W223-09) Organic Adhesive Over Solid Backing, Interior Walls**

**Tile Setting Level 2 Full Term**

CRN #4367  
Date: Fri, Sat, 8:00 AM-4:30 PM on 10/2-10/3, 10/30-10/31 and 12/4-12/5. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$62.00 Total: \$592.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$89.00 Total: \$640.00

**Tile Setting 2-1**

CRN #4379  
Date: Fri, Sat, 10/2-10/3 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Responsibilities of the Apprentice Tiler**  
**Material Safety Data Sheets: The Basics**  
**Reading and Understanding MSDS's**  
**(F141-03) Cement Mortar over Wood Subfloor, Floors Interior**  
**(F101-03) Cement Mortar Bonded over Concrete Slab, Floors Exterior**

**Tile Setting 2-2**

CRN #4380  
Date: Fri, Sat, 10/30-10/31 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Using Ladders and Scaffolding Safety**  
**Using Power Tools Safety**  
**(W221-09) Cement Mortar over Solid Backing, Walls Interior**  
**(W211-09) Cement Mortar Bonded to Concrete or Masonry, Walls Interior and Exterior**  
**(W222-09) Cement Mortar over Solid Backing, Walls Interior**

**Tile Setting 2-3**

CRN #4382  
Date: Fri, Sat, 12/4-12/5 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Fire Safety on the Jobsite**  
**Effective Communication: Surviving Evaluations**  
**(F201-09) Cement Mortar over Concrete or Masonry, Walls Interior and Exterior**  
**(W211-09) Cement Mortar Bonded to Concrete or Masonry, Walls Interior and Exterior**

**Tile Setting Level 3 Full Term**

CRN #4399  
Date: Fri, Sat, 8:00 AM-4:30 PM on 10/9-10/10, 11/6-11/7 and 12/11-12/12. Location: NWCC  
Member: Tuition: \$480.00 Lab Fee: \$50.00 Books: \$62.00 Total: \$592.00  
Non-Member: Tuition: \$480.00 Lab Fee: \$71.00 Books: \$89.00 Total: \$640.00

**Tile Setting 3-1**

CRN #4400  
Date: Fri, Sat, 10/9-10/10 8:00AM-4:30PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Responsibilities of the Apprentice Tiler**  
**(F114-09) Cement Mortar over Concrete Subfloor with epoxy or Furan Grout, Floors Interior**  
**(F122-09) Thinset with Waterproof Membrane, Floors Interior**

**Tile Setting 3-2**

CRN #4401  
Date: Fri, Sat, 11/6-11/7 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Personal Protective Equipment**  
**Protective Equipment You Need**  
**(F103-09) Reinforced Cement Mortar Bed over Filter Fabric, Drainage Layer, and Roof Membrane, Roofs and Decks Exterior**  
**(S151-09) Cement Mortar Concrete, Metal, or Wood Stairs, Interior or Exterior**

**Tile Setting 3-3**

CRN #4402  
Date: Fri, Sat, 12/11-12/12 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Lab Fee: \$17.00 Books: \$62.00 Total: \$239.00  
Non-Member: Tuition: \$160.00 Lab Fee: \$24.00 Books: \$89.00 Total: \$273.00

**Lifting Review**  
**(C311-09) Ceramic Tile on Ceilings and Soffits over a Mortar Bed, CBU's, Concrete or Masonry, or Lath Attached to Wood Joists.**  
**(C312-09) Ceramic Tile on Ceilings and Soffits on Gypsum Board over wood or metal framing.**

**COMMUNITY EDUCATION**

**Welding Fundamentals for Homeowners**

Fundamentals of welding appropriate for the hobbyist and do-it yourselfers. This course will stress basic operation of welding equipment, welding safety, set-up and nomenclature of equipment and welding/cutting technique. Vendor representatives will be available to discuss equipment options and costs.  
CRN #4689

Date: Sat, 9/12-9/19 8:00 AM-12:00 PM Location: NWCC  
Tuition: \$139.00

**PROFESSIONAL DEVELOPMENT**

★ Indicates a class that offers certification

**CCB 16-HOUR CONTRACTOR'S LICENSE TRAINING & TEST PREPARATION**

This 16-hour course meets the Construction Contractors Board (CCB) requirements for license applicants training. The course is taught by a CCB approved trainer and covers all the training subjects required by OAR 812-006-0250. The Northwest College of Construction provides training only, testing is performed by others. This course meets the Oregon Construction Contractors Board (CCB) continuing education requirements of key employees. ORS 701.124, OAR 812-020-0065 and 812-020-0070.

CRN #3627  
Date: Fri, Sat, 10/2-10/3 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$232.00 Books: \$63.00 Total: \$295.00  
Non-Member: Tuition: \$232.00 Books: \$97.00 Total: \$329.00

CRN #3628  
Date: Fri, Sat, 11/6-11/7 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$232.00 Books: \$63.00 Total: \$295.00  
Non-Member: Tuition: \$232.00 Books: \$97.00 Total: \$329.00

CRN #3629  
Date: Fri, Sat, 12/4-12/5 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$232.00 Books: \$63.00 Total: \$295.00  
Non-Member: Tuition: \$232.00 Books: \$97.00 Total: \$329.00

**CFC CERTIFICATION ★**

This ACCA program will allow the student to prepare and become certified as required by law for Section 608 for the EPA Refrigerant Handling Certification. The student will be trained and tested in the Level I, Level II and Level III programs. Passing all three levels will grant the student the Universal Certification. This program is a comprehensive look at the Montreal Protocol, dates and timelines, CFC/HCFC handling requirements, certification requirements, documentation, and "Best Practices."

CRN #4733  
Date: Sat, 12/5 8:00 AM-2:30 PM Location: NWCC  
Member: Tuition: \$60.00 Books: \$100.00 Total: \$160.00  
Non-Member: Tuition: \$60.00 Books: \$143.00 Total: \$203.00

**CONTRACTOR'S FRIDAY FOCUS**

This program provides opportunities for contractors and industry professionals to share best-practices in an environment facilitated by respected industry experts in the fields represented. Participants may register for the full term, or for individual topics of interest.

**Contractor's Friday Focus- Full Term**

CRN #4743  
Date: Fri, 9/25-11/13 7:00 AM-9:00 AM Location: NWCC  
Tuition: \$256.00

**Contractor's Business Strategies**

CRN #3704  
Date: Fri, 10/16-10/30 7:00 AM-9:00 AM Location: NWCC  
Tuition: \$96.00

**Green Building 101**

CRN #3705  
Date: Fri, 11/6-11/13 7:00 AM-9:00 AM Location: NWCC  
Tuition: \$64.00

**Risk and Claim Management**

CRN #4742  
Date: Fri, 9/25-10/9 7:00 AM-9:00 AM Location: NWCC  
Tuition: \$96.00

**CREW LEADERSHIP**

This 16-hour course teaches the basic leadership skills required to supervise personnel. It discusses principles of project planning, scheduling, estimating, management, and presents several case studies for student participation.

CRN #4221  
Date: Fri, Sat, 10/16-10/17 8:00 AM-4:30 PM Location: NWCC  
Member: Tuition: \$160.00 Books: \$62.00 Total: \$222.00

★ Indicates a class that offers certification



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2009 Fall Schedule

Non-Member: Tuition: \$160.00 Books: \$89.00 Total: \$249.00

## FIRST AID/CPR ★

The MEDIC FIRST AID Training Program covers first aid, CPR, AED, blood-borne pathogens, emergency oxygen, and OSHA safety compliance. Successful participants receive basic First Aid/CPR Certification. Successful completion of OSHA 10-hour and First Aid/CPR meets and exceeds the minimum requirement for successful completion of the apprentice Basic Safety.

CRN #3371

Date: Fri, 9/18 8:00 AM-12:00 PM Location: NWCC  
 Member: Tuition: \$40.00 Books: \$11.00 Total: \$51.00  
 Non-Member: Tuition: \$40.00 Books: \$16.00 Total: \$56.00

CRN #4370

Date: Fri, 10/16 8:00 AM-12:00 PM Location: NWCC  
 Member: Tuition: \$40.00 Books: \$11.00 Total: \$51.00  
 Non-Member: Tuition: \$40.00 Books: \$16.00 Total: \$56.00

CRN #4371

Date: Fri, 11/13 8:00 AM-12:00 PM Location: NWCC  
 Member: Tuition: \$40.00 Books: \$11.00 Total: \$51.00  
 Non-Member: Tuition: \$40.00 Books: \$16.00 Total: \$56.00

## FLAGGING ★

Successful participants of the flagging training class receive a Flagging Certification.

CRN #3374

Date: Fri, 9/18 12:30 PM-4:30 PM Location: NWCC  
 Tuition: \$110.00

CRN #4385

Date: Fri, 10/16 12:30 PM-4:30 PM Location: NWCC  
 Tuition: \$110.00

CRN #4386

Date: Fri, 11/13 12:30 PM-4:30 PM Location: NWCC  
 Tuition: \$110.00

## INSTRUCTOR CERTIFICATION TRAINING PROGRAM ★

The Instructor Certification Training Program (ICTP) was designed by the National Center for Construction Education and Research (NCCER) as a Train-the-Trainer program. The program is taught by an NCCER Certified Master Trainer. Successful participants receive recognition and certification by NCCER in a specific program of study, provided the minimum NCCER qualifications are met. This course is required by all NWCC instructors, as well as secondary school teachers desiring articulation with the college.

CRN #3387

Date: Class meets Fri, 8/21 2:00 PM-7:00 PM and Sat, 8/22 8:00 AM-7:00 PM Location: NWCC  
 Member: Tuition: \$250.00 Books: \$78.00 Total: \$328.00  
 Non-Member: Tuition: \$250.00 Books: \$111.00 Total: \$361.00

CRN #2813

Date: Class meets Fri, 10/2 2:00 PM-7:00 PM and Sat, 10/3 8:00 AM-7:00 PM Location: NWCC  
 Member: Tuition: \$250.00 Books: \$78.00 Total: \$328.00  
 Non-Member: Tuition: \$250.00 Books: \$111.00 Total: \$361.00

## MANUAL J TEST PREPARATION

This ACCA program will introduce the student to the ACCA Manual J heating/cooling load calculation process. The Manual J is the industry standard for heating and cooling load calculations and as the consumer becomes more and more educated, will not only be a huge asset in eliminating competition, but will help both the person doing the calculation and the end-user see the additional options in energy conservation, demand-analysis, and "comfort heating and cooling". The student will be taught the basics of calculating the heating and cooling demand of the home room by room, up to the advanced evaluation of insulation values, R values, U values, directional exposures, degree-days and so on. This is a preparation class for the ACCA Manual J test, and is a precursor to the ACCA Manual S program where the loads from Manual J are used in selection of the properly sized equipment.

CRN #4736

Date: Sat, 12/19-12/19 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$80.00 Books: \$100.00 Total: \$180.00  
 Non-Member: Tuition: \$80.00 Books: \$143.00 Total: \$223.00

## NATE TEST PREPARATION

The NATE program is designed to help the student study the correct materials and gain the knowledge necessary to pass the NATE test. The student should have a minimum of five years in field service or installation experience prior to taking the test. These classes will review the CORE materials during the first two hours of class, and then focus on the materials needed for the specialty exam in which the student seeks certification for the remainder of the class. In order to become certified in a specialty the student must pass the CORE test. The specialty portions of these classes will give the student an outline of the "testable" materials for their certification tests. The classes will be presented for the technician to take the "Service Technician" exam which will also grant them the "Installation Technician" certification upon passing the test. It is highly suggested that installers test at this level as well as the "Service Technician" certification will cover all materials that will be on the "Installation Technician" exam.

### Core + Air Conditioning Service

CRN #4692

Date: Sat, 9/26 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00  
 Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

### Core + Air Distribution Service

CRN #4695

Date: Sat, 10/3 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00  
 Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

### Core + Air to Air Heat Pump Service

CRN #4698

Date: Sat, 10/10 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00

Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

### Core + Gas Heating (Air) Service

CRN #4701

Date: Sat, 10/17 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00  
 Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

### Core + Oil Heating (Air) Service

CRN #4704

Date: Sat, 10/24 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00  
 Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

### Core + Hydronics Gas Service

CRN #4707

Date: Sat, 10/31 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00  
 Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

### Core + Hydronics Oil Service

CRN #4710

Date: Sat, 11/7 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00  
 Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

### Core + Light Commercial Refrigeration Service

CRN #4713

Date: Sat, 11/14 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00  
 Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

### Core + Commercial Refrigeration Service

CRN #4716

Date: Sat, 11/21 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$99.00 Books: \$38.00 Total: \$137.00  
 Non-Member: Tuition: \$99.00 Books: \$54.00 Total: \$153.00

## ORACCA BRAZING CERTIFICATION ★

This training takes place over the course of two Saturday sessions. The first session prepares students for the Brazing Certification test. The brazing certification tests, written and practical, are administered during the second session. Successful participants will receive an ORACCA Brazing Certification.

CRN #4721

Date: Sat, 12/12 8:00 AM-4:30 PM Location: NWCC  
 Member: Tuition: \$80.00 Books: \$23.00 Total: \$103.00  
 Non-Member: Tuition: \$80.00 Books: \$33.00 Total: \$113.00

## OSHA 10-HOUR ★

This class meets OSHA's requirements for a 10 hour construction industry training program. This 10-hour course provides participants with best practices for some of the most common and hazardous situations on the job site. This class is designed for all employees on the job site. Students who successfully complete this training will receive an OSHA-10 Hour card. Successful completion of OSHA 10-Hour and First Aid/CPR meets and exceeds minimum criteria for successful completion of the apprentice required Basic Safety.

CRN #3377

Date: Class meets Fri, 9/11, 12:00 PM-5:00 PM and Sat, 9/12, 8:00 AM-1:00 PM Location: NWCC  
 Member: Tuition: \$185.00 Books: \$18.00 Total: \$203.00  
 Non-Member: Tuition: \$185.00 Books: \$26.00 Total: \$211.00

CRN #4355

Date: Class meets Fri, 10/9, 12:00 PM-5:00 PM and Sat, 10/10, 8:00 AM-1:00 PM Location: NWCC  
 Member: Tuition: \$185.00 Books: \$18.00 Total: \$203.00  
 Non-Member: Tuition: \$185.00 Books: \$26.00 Total: \$211.00

CRN #4356

Date: Class meets Fri, 11/6, 12:00 PM-5:00 PM and Sat, 11/7, 8:00 AM-1:00 PM Location: NWCC  
 Member: Tuition: \$185.00 Books: \$18.00 Total: \$203.00  
 Non-Member: Tuition: \$185.00 Books: \$26.00 Total: \$211.00

## PROJECT MANAGEMENT

Participants may register for the full two-term course, or for the selected individual topics of interest.

### Project Management Full Course (Fall/Winter)

This is a twenty-four week, two-term course that meets during the fall and winter terms.

CRN #3640

Date: Class meets Mon 9/21/09-3/22/10, 6:00-10:00 PM, No class 11/23. No class 1/18. Class will meet 1/19.  
 Location: NWCC  
 Member: Tuition: \$1472.00 Books: \$146.00 Total: \$1618.00  
 Non-Member: Tuition: \$1472.00 Books: \$209.00 Total: \$1681.00

Module #44101-08

Module #44102-08

Module #44103-08

Module #44104-08

Module #44105-08

Module #44106-08

Module #44107-08

Module #44108-08

Module #44109-08

Module #44110-08

Introduction to Project Management

Safety

Interpersonal Skills

Issues &amp; Resolutions (Negotiations)

Construction Documents

Construction Planning

Estimating and Cost Control

Scheduling

Resource Control

Quality Control

★ Indicates a class that offers certification

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Module #44111-08 **Continuous Improvement**

**Construction Planning**

Discusses the importance of formal job planning and creating a performance based work environment. Discusses the Work Breakdown Structure (WBS) as the foundation that identifies deliverables, tasks and time. Introduces the basics of quality control and defines the roles and responsibilities of an effective team and how to allocate resources.

CRN #3646  
Date: Mon, 11/30-12/14 6:00 PM-10:00 PM Location: NWCC  
Member: Tuition: \$216.00 Books: \$146.00 Total: \$362.00  
Non-Member: Tuition: \$216.00 Books: \$209.00 Total: \$425.00

**Estimating and Cost Control**

Emphasizes the importance of accurate estimating and summarizes the estimating process and the steps in developing an estimate. Defines the purpose of a cost control methodology, explains how to perform simple cost analysis, and covers the project manager's role in controlling cost and tracking rework cost.

CRN #3647  
Date: Mon, 1/4-1/25 6:00 PM-10:00 PM Location: NWCC  
Member: Tuition: \$288.00 Books: \$146.00 Total: \$434.00  
Non-Member: Tuition: \$288.00 Books: \$209.00 Total: \$497.00

**Scheduling**

Provides instruction in the basics of scheduling from simple to-do lists through bar charts, network diagrams, and methods of managing resources. Discusses the importance of formal schedules, job planning, and establishing priorities. Describes alternative scheduling methods.

CRN #3648  
Date: Mon, 2/1-2/22 6:00 PM-10:00 PM Location: NWCC  
Member: Tuition: \$288.00 Books: \$146.00 Total: \$434.00  
Non-Member: Tuition: \$288.00 Books: \$209.00 Total: \$497.00

**SUPERVISORY TRAINING PROGRAM ★**

Supervisory skills, or the lack thereof, directly affect every company's bottom line. Decisions are made every day by foremen and superintendents that are crucial to the success or failure of every construction project. The Supervisory Training Program (STP) developed by the Associated General Contractors, is designed specifically to meet the needs of the construction industry. Developed, updated, and field-tested by and for contractors, the STP Program is ten seminar courses that focus on the knowledge and skills that every supervisor needs in order to be an effective manager of people, time, equipment and materials. Units may be taken consecutively or independently. No prerequisites are required.

**Unit 1: Leadership and Motivation ★**

This course will teach the value of effective supervision of workers and improve the construction supervisor's ability to lead and motivate others.

CRN #3409  
Date: Thr, Fri, 9/10-9/11 8:00 AM-4:00 PM Location: NWCC  
Member: Tuition: \$240.00 Books: \$154.00 Total: \$394.00  
Non-Member: Tuition: \$240.00 Books: \$220.50 Total: \$460.50

- Dollars and sense of people in construction
- The role of the construction supervisor
- Helping people perform better
- Motivating others
- Leading others
- You get what you expect
- Positive feedback
- Training and orienting crew members
- Teams and team building
- Leadership skills in action

**Unit 2: Oral and Written Communication ★**

This course presents a body of knowledge and skills that today's construction supervisors need in order to be effective communicators on their job site.

CRN #3410  
Date: Thr, Fri, 10/8-10/9 8:00 AM-4:00 PM Location: NWCC  
Member: Tuition: \$240.00 Books: \$154.00 Total: \$394.00  
Non-Member: Tuition: \$240.00 Books: \$220.50 Total: \$460.50

- Effective communication
- Supervisors as effective communicators
- Learn to listen
- Carrying on conversations
- Persuasion, negotiation, and confrontation
- Communicate with your crew
- Put it in writing
- Meetings that work
- Electronic communication
- Improving communication

**Unit 3: Problem Solving and Decision Making ★**

This course will help construction supervisors identify problems and how they occur and learn techniques for solving them in the construction industry. Supervisors will learn how to use the decision making process and the important considerations to take into account.

CRN #3411  
Date: Thr, Fri, 11/5-11/6 8:00 AM-4:00 PM Location: NWCC  
Member: Tuition: \$240.00 Books: \$154.00 Total: \$394.00  
Non-Member: Tuition: \$240.00 Books: \$220.50 Total: \$460.50

- Problems in the construction industry
- Establishing a problem solving environment
- Human performance problems
- The problem identification process
- The decision making process
- Labor costs and subcontractors
- Effective production planning
- Production process improvement
- Project-wide applications
- Risk, emergencies, and crisis situations

**Unit 4: Contract Documents and Construction Law ★**

This course will provide information about contract documents and construction law to help supervisors recognize the roles and responsibilities of all contracted parties, to develop an understanding of how contract documents can be helpful to solve problems and resolve conflicts, and to develop positive relationships between all parties in the construction process.

CRN #3412  
Date: Thr, Fri, 12/3-12/4 8:00 AM-4:00 PM Location: NWCC  
Member: Tuition: \$240.00 Books: \$154.00 Total: \$394.00  
Non-Member: Tuition: \$240.00 Books: \$220.50 Total: \$460.50

- Introduction to contract documents and construction law
- Creating a positive environment through partnering
- Contractual relationships
- Contract forms and documents
- Managing general conditions
- Good documentation practices
- Changes
- Differing site conditions
- Time impacts
- Negotiation of resolutions

**CUSTOMIZED TRAINING PROGRAM**

Customized Training is becoming a popular option for employers and Operations Managers. These programs are tailored for either on-site company meetings or may be facilitated at the Northwest College of Construction in Portland. The customizable programs that are available include:

- OSHA 10-hour
- First Aid/CPR
- Flagging Certifications
- Light Equipment Operations, including:
  - Counterbalanced Forklifts
  - Rough-Terrain Forklifts
  - Skid Steer Loaders
  - Scissor Lifts
  - Boom Trucks
  - Boom Lifts
- Management Seminars, including:
  - Construction Law, Planning & Scheduling
  - Productivity Improvement
  - Estimating and Cost Control
  - Contract Documents

Pricing and availability may vary depending on the nature of the program, size of group, location, length of the program and other variables. Please call NWCC for further details.

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# NWCC NORTHWEST COLLEGE OF CONSTRUCTION

## 2nd Annual NWCC Golf Tournament

August 28, 2009

7:30 AM 4 Person Shotgun Scramble  
BBQ Immediately following

Stone Creek Golf Course  
Oregon City, Oregon

Show your support by registering  
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Sponsorship Opportunities available now

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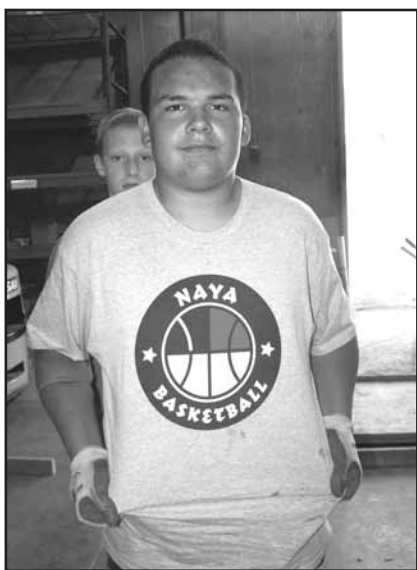
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Please contact Tiffany Kriesel at [tiffanyk@nwcc.com](mailto:tiffanyk@nwcc.com)  
(503) 256-7300

or visit [www.nwcc.com](http://www.nwcc.com) to register

## NAYA Youth Try on a Construction Career at NWCC

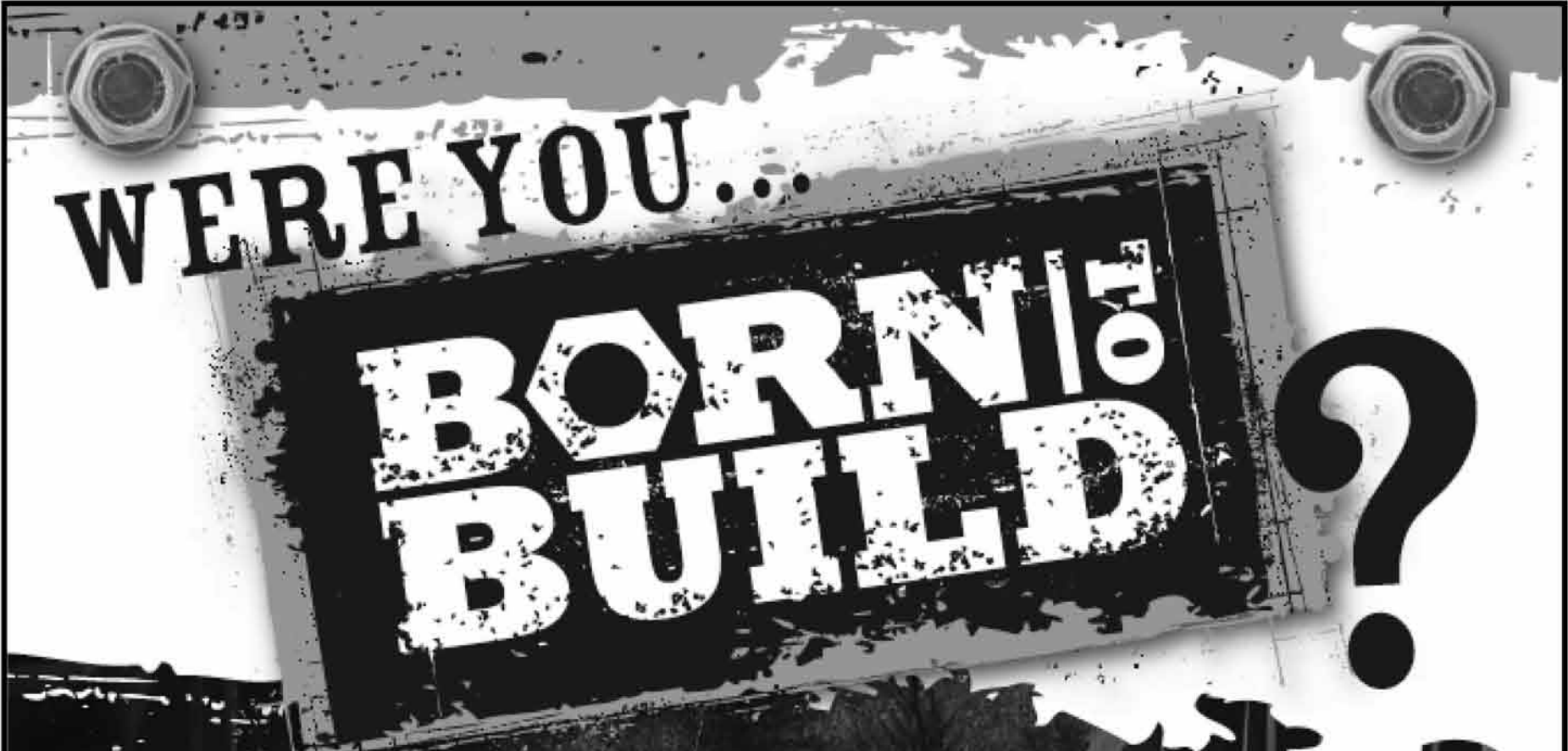


*Thank you NWCC for hosting this event for our kids, they had such a wonderful time there and they learned a lot too! Many of our students are very excited to pursue a career in construction after getting the hands on experience that the NWCC has to offer.*

- Native American Youth Association Staff



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**NWCC** NORTHWEST COLLEGE  
OF CONSTRUCTION

**NWCC NORTHWEST COLLEGE OF CONSTRUCTION REGISTRATION FORM**

8111 NE Holman Street  
Portland, OR 97218  
Phone 503-256-7300  
Toll-free 800-309-1442  
Fax 503-252-9560

**NOTICE TO THE STUDENT: DO NOT SIGN THIS AGREEMENT BEFORE YOU READ IT OR IF IT CONTAINS ANY BLANK SPACES. THIS IS A LEGAL INSTRUMENT. THIS CONTRACT IS BINDING. READ ENTIRE FORM BEFORE SIGNING.**

This Enrollment Agreement, dated \_\_\_\_\_, is between Northwest College of Construction and:

**Name** \_\_\_\_\_  
**Address** \_\_\_\_\_  
**City/State/Zip** \_\_\_\_\_  
**Phone** \_\_\_\_\_  
**E-mail** \_\_\_\_\_  
**Social Security Number** \_\_\_\_\_  
**Birth Date** \_\_\_\_\_  
**Sex** \_\_\_ Male \_\_\_ Female  
**Employer** \_\_\_\_\_  
**Ethnic Origin** – Your response is voluntary and will not affect admission to NWCC  
 \_\_\_ Asian \_\_\_ Black \_\_\_ American Indian  
 \_\_\_ Hispanic \_\_\_ White \_\_\_ Other  
 \_\_\_\_\_  
**Emergency Contact** \_\_\_\_\_  
**Relationship** \_\_\_\_\_  
**Phone Number** \_\_\_\_\_

**Educational Goals** – Check one that applies to your current standing

- CONSTRUCTION CRAFT TRAINING (Apprentice)\*** **AP-CIT**  
(Carpentry, Laborers, HEO, Conc. Fin., Masonry, Sign Hangers, Tile)
- CONSTRUCTION CRAFT TRAINING (Apprentice)\*** **AP-ABC**  
(HVAC, Sheet Metal)
- CONSTRUCTION CRAFT TRAINING (Professional Enrichment)** **PE**
- CONSTRUCTION CRAFT TRAINING (Career Preparation)** **CP**
- COMMUNITY EDUCATION** **CE**
- PROFESSIONAL DEVELOPMENT** **PD**  
\* Orientation Required

**Course Information**

Member vs. Non-Member pricing: NWCC "Members" include students currently employed by a firm that is a member of any of NWCC's four founding sponsors. (See website or current schedule for pricing.)

**Registration Fee**

**\$10.00:** Community Education Classes, Jump Start, OSHA 10-hour, First Aid/CPR, Flagging, NATE Test Preparation, Manual J Test Preparation, CFC Certification, ORACCA Brazing Certification, Contractor's Friday Focus

**\$25.00:** All other classes

Title:	Tuition:
CRN:	Books:
Dates:	Lab Fee:
Times:	Registration Fee:
<b>Total:</b>	

Title:	Tuition:
CRN:	Books:
Dates:	Lab Fee:
Times:	Registration Fee:
<b>Total:</b>	

**TOTAL DUE \$** \_\_\_\_\_

**Payment** - Total amount is due no later than the first day of class.

Funded by Apprenticeship Trust: Program \_\_\_\_\_ **VISA/MC** \_\_\_\_\_ **Exp** \_\_\_\_\_  
 Cash \_\_\_\_\_ **Valid Signature** \_\_\_\_\_  
 Check # \_\_\_\_\_  
 Credit Card \_\_\_\_\_

**Agreement is Binding:**

This agreement will be binding only when officially accepted and the agreement is fully completed, signed and dated by the student and chief administrative officer or authorized representative of the school prior to the time instruction begins.

**EFFECTIVE DATE OF ACCEPTANCE:** I certify that (1) I have read and understood the cancellation and refund policy; (2) that I have received a copy of the school catalog or schedule of classes; and (3) that I AM ENTITLED TO AN EXACT COPY OF THIS ENROLLMENT AGREEMENT, SCHOOL CATALOG AND ANY OTHER PAPERS I MAY SIGN.

Any inquiry a student may have regarding this contract may be made in writing to the Northwest College of Construction or to the Superintendent of Public Instruction, Oregon Department of Education, 255 Capitol NE, Salem, OR 97310-0203 or by calling (503) 947-5751.

Additionally, I understand the following:

- 1) That tuition charges will accrue based on the hours that the program is offered by the school and that I have contracted/scheduled to attend, rather than my actual attendance;
- 2) That any refund calculation is based on my last date of physical attendance;
- 3) If a lab fee is included, the school must indicate what the lab fee covers; and
- 4) A Student may cancel enrollment by giving written notice to the school. If notice occurs:
  - a) Within five business days of the date of enrollment, all monies paid shall be refunded; or
  - b) After five business days of the date of enrollment and prior to the commencement of classes, the school may retain only the published registration fee.
- 5) If student withdraws prior to completion of 50% of the contracted instructional program, the student shall be entitled to a pro rata refund of the tuition charged and paid for such instructional program, less registration fees, supply fees, and any other charges owed by the student.
- 6) If student withdraws upon completion of 50% or more of the contracted instructional program, the student shall be obligated for the tuition charged for the entire instructional program and shall not be entitled to any refund.
- 7) The term "Pro rata refund" means a refund of tuition paid for that portion of the program beyond the last recorded date of attendance. The date for determining that portion shall be the published class schedule and the last recorded date of attendance by the student.

**MY SIGNATURE INDICATES THAT I HAVE READ ALL PAGES OF THIS DOCUMENT AND AGREE TO THE STATED STIPULATIONS.**

Signature of Student \_\_\_\_\_ Date \_\_\_\_\_  
 Signature of Parent/Guardian (if student is under 18) \_\_\_\_\_ Date \_\_\_\_\_  
 Signature of School Official \_\_\_\_\_ Date \_\_\_\_\_



**Northwest College of Construction Directors**

Name	Company	Representing	Membership
<b>Melinda Dailey</b>	Executive Director National Utility Contractors Association	National Utility Contractors Association	Northwest College of Construction Board
<b>Jim Fisher</b>	Prime Time Development	Home Builders Association of Metro Portland	Northwest College of Construction Board
<b>Ken Troyer</b>	Hydro-Temp Mechanical Inc.	Associated Builders & Contractors Association	Northwest College of Construction Board
<b>Dave Cutz</b>	Paragon Tile	Associated Builders & Contractors Association/Merit	Northwest College of Construction Board
<b>Thomas Liesy</b>	TA Liesy Homes Northwest	Home Builders Association of Metro Portland	Northwest College of Construction Board
<b>Roy Moore</b> <b>Alt. Barbara Miletich</b>	Moore Excavation	National Utility Contractors Association	Northwest College of Construction Board
<b>Brad Sullivan</b>	Hamilton Construction	Associated General Contractors Association/ Construction Industry Training Trust	Northwest College of Construction Board Chair
<b>Jeanne Staton</b>	Staton Companies	Associated General Contractors Association	Northwest College of Construction Board

**Northwest College of Construction Officers**

<b>Dan Graham</b> President	Northwest College of Construction	Northwest College of Construction	Northwest College of Construction President
<b>Kirk Matteson</b> Secretary/Treasurer	Foxhole Financial LLC	Northwest College of Construction	Northwest College of Construction Secretary/Treasurer



To reserve your space for the next issue, please call Sara Cameron at 503-802-7231 or sara.cameron@djcoregon.com

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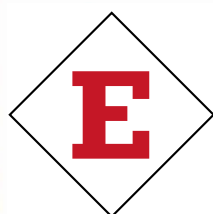
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