

# TRADE RELATED LEARNING (TRL)

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## **TRL 100 Green Technologies for Roofing (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will be introduced to green technologies in the roofing/waterproofing industry. Through classroom and hands-on training, students will be provided with an in-depth study of the concept, installation, and maintenance of green roofing systems including vegetable roofs, photovoltaics, water retention systems and building envelopes. Students will also be provided with online resources and materials to use as a reference to create a course for their local training center. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

## **TRL 101 Signal Person Qualification (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will recognize and demonstrate the proper methods and use of hand, voice and system-generated crane signaling according to OSHA 29CFR part 1926 and ASME Standards 830.23, 830.3, and 830.5. Students will also be able to identify and demonstrate various aspects of crane dynamics and crane movements while signals are given. Students will prepare a lesson plan for presenting the 8-hour Qualified Signal Person course at their training center. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

## **TRL 102 Single-Ply Roofing (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will be introduced to the methods for installation, maintenance, and repair of single-ply roof systems. Through classroom and hands-on activities, students will learn installation and waterproofing techniques currently available in the industry, such as layup and detailing methods for Thermoplastic Polyolefin (TPO)/Polyvinyl Chloride (PVC) and Ethylene Propylene Diene Terpolymer (EPDM) roofing. Students will use online material and resources to develop a lesson plan that can be presented to their local training center. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

## **TRL 103 Competent Person Fall Protection (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will focus on techniques and procedures for a Competent Person in Fall Protection classification. Students will identify policy and procedures through OSHA (Occupational Safety and Health Administration) regulations and ANSI (American National Standards Institute) Z359.2 standards which are used in the roofing/waterproofing industry. Upon successful completion, students will be able to instruct the Competent Person in Fall Protection at their local training facility. Students will navigate online resources that can be used to develop these courses at their local Training Center as well. This course incorporates both classroom and extensive hands-on training using proper personal protective equipment (PPE). Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

## **TRL 104 Understanding the Student Portal (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will recognize the Portal functions of the Roofers and Waterproofers Research and Education Joint Trust Fund (RWREJTF) website. Participants will review classes, courses, curriculum, and exam management from the perspective of both a student and an administrator. Students will identify the tools needed to fully navigate, manage and train users to use the Student Portal website. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

## **TRL 105 Qualified Rigger Person (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will recognize and demonstrate the proper methods and procedures used in the set-up, inspection, and operation of rigging equipment as used in overhead material lifting according to Occupational Safety and Health Administration (OSHA) and American Society of Mechanical Engineers (ASME) construction standards. Attendees will also prepare a lesson plan for presenting the 8-hour Qualified Rigger course at their local Training Center. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

## **TRL 110 Internal and External Communications (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will analyze effective and efficient communication skills as they apply to workplace and classroom environments. Students will develop strategies to plan, prioritize, and complete tasks; make decisions; and communicate effectively. All students will create communications and a priority matrix that they can utilize at their local business facility and training center. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

## **TRL 140 Apprenticeship Standard Guidelines & Policies (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will review the policies, liabilities, and fiduciary responsibilities required for Training Directors, Coordinators, and Joint Apprenticeship Training Committee (JATC) members to operate a jointly managed training program in accordance with the Roofer and Waterproofer National Guideline Standards. Students will discuss legal documentation, the updating of policy, and prohibited transactions while reviewing the Code of Federal Regulations (CFR) under the U.S. Department of Labor 29 CFR 29 and 29 CFR 30. Discussions will also focus on local Training Center apprenticeship standards, JATC meetings, and their compatibility with the National Standards. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

## **TRL 148 Intermediate Computer Skills for the Trade Teacher (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students continue to develop computer skills needed for teaching in the trades. Students acquire skills in document and spreadsheet creation using MS Word and MS Excel, respectively. In addition, students explore the benefits of using web-based applications such as Google Docs and Google Sheets. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 160 Hazard Communication and Radio Frequency (RF) Radiation (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will identify and discuss the five key elements of the Occupational Safety and Health Administration's (OSHA) regulations related to Hazard Communication Standards and Radio Frequency (RF) Radiation hazards. Students will identify, review, and calculate the risk of these safety hazards and the personal protection equipment (PPE) required by utilizing Safety Data Sheets (SDS) provided on job sites in the construction industry. Upon class completion, students will be prepared to develop a related course curriculum that can be used at their local Training Centers. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 162 Occupational Safety and Health (3 Credits)**

45 lecture, 3 lab, 3 total contact hours

In this course, students will identify the Occupational Safety and Health Administration (OSHA) 510 Standards and locate resources to supplement safety programs at their local Training Center. Topics include the application of the OSHA Construction Standards for safety and health with an emphasis on construction hazards. Students will define construction terms, identify hazards which occur in the construction industry as well as determine appropriate OSHA policies and procedures in a classroom and hands-on environment. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 189 Study Problems (1-8 Credits)**

15 to 120 lecture, 1 to 8 total contact hours

**TRL 211 Planning, Teaching, and Assessing Effective Lessons - Beginning (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

This is an introductory course for students to become familiar with skills needed to effectively teach adult learners, as well as accommodate and identify different learning skills and levels. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 212 Planning, Teaching, and Assessing Effective Lessons - Intermediate (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this intermediate course, students continue to develop skills to effectively teach adult learners. Students create lesson plans for various student learning styles and develop key instructional strategies such as requiring group work and incorporating visuals. In addition, they write clear and measurable objectives and design ways to assess them. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 213 Planning, Teaching, and Assessing Effective Lessons - Advanced (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will develop teaching skills by designing courses and using interactive teaching techniques. Students will review strategies for working with various learning skill levels, including ideas and procedures for working one-on-one with students. Classroom questioning strategies and discussions will also be explored. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 214 Developing and Presenting Effective Lesson Plans (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will organize and plan a course by developing a situational analysis as well as identifying course outcomes and objectives. Students will also create an assessment plan and schedule while designing rubrics and a course syllabus. Students will then use an eight-step problem-solving model to develop action plans for their own teaching programs. Students will present a short teaching demonstration of a lesson plan and learned material. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 222 Basic Computer for the Trade Teacher (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will be introduced to the basics of computers by producing professional looking documents using a personal computer. Students will also create spreadsheets to help prepare budgets and manage numerical information. In addition, students will be provided an overview of hardware and software, creating course handouts, spreadsheets and presentations using Word, Excel and PowerPoint. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 223 Basic Computer for the Trade Teacher II (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will continue to develop and execute computer functions in an office setting. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6

**TRL 314 Infection Control and Risk Assessment (1.5 Credits)**

22.5 lecture, 1.5 lab, 1.5 total contact hours

In this course, students will identify procedures for the American Society for Sanitary Engineering (ASSE) Infection Control Risk Assessment (ICRA) to perform construction and renovation tasks in healthcare or other occupied facilities. Topics will include practical uses of ICRA tools including containment, negative air flow, high-efficiency particulate air (HEPA) filtration and safe work practice techniques. In addition, students will recognize the policies and procedures related to building life safety systems during construction and renovation services. Students will also review and take the ASSE ICRA Certification Exam as well as develop instructional activities that can be used for training at local Training Centers. Limited to approved union program participants. Level I Prerequisite: Academic Reading and Writing Levels of 6