

Red Hat Center of Practical Construction

CATALOG

OF CLASSES * Edition 1



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Red Hat Center of Practical Construction

560 SW "B" Ave * Corvallis, OR 97333
(541) 753-2902

Licensed by the Oregon Department of Education

Why choose the Red Hat Center of Practical Construction?

1. Our program is derived from the "school of hard knocks"- over 30 years and over 2500 projects.
2. Our primary goal is to train you well enough that you will be able to get a better-than-entry-level position.
3. We are going to put you in the field, working with people who do construction work for their livelihood. You will not only learn from our excellent in-house staff, but also from several entities outside this organization. We have arranged for you to work on their crews as if you were one of their staff. We also arrange for you to practice what you have learned in a one-on-one situation so that we can best evaluate your accomplishments.
4. Our program keeps you from having to be a "construction gypsy," endlessly chasing one type of work (i.e. framing, concrete, etc.) around the country. Instead, we provide you with the education and experience to go almost anywhere in the country and earn a living wage.

Information about the school

Owner

As owner of The Red Hat Center of Practical Construction, Robert K. Alexander possesses a wide range of experience. Starting as a field worker, he has performed all field and administrative duties of a construction company through those as a company president. He has owned and operated Red Hat Construction, Inc. since 1972.

Instructors

At Red Hat Center of Practical Construction, students learn up-to-date construction skills and take those skills out into the workforce. Selection of instructors is based both on their practical experience and specialized education. Each classroom instructor's qualifications are on file with the Oregon Department of Education.

Facility

The classroom center is located in downtown Corvallis, Oregon. It consists of an office, classroom, and shop area of approximately 3500 square feet and houses a large assortment of tools to perform both field and shop construction

functions (i.e. saws, joiner, planner, sanders, welders, etc.).

Student Housing

Red Hat's main center is located in Corvallis, Oregon, home of Oregon State University. For this reason, ample rental housing is available in the local area. Questions can be directed to Brown, Itzen, and Williams at 541-758-0511. Red Hat also has a limited amount of completely furnished housing; if interested, please contact our office at 1-800-854-1680.

Legal Holidays

The center will be closed New Year's Day, Memorial Day, Labor Day, Thanksgiving Day and the day after, and Christmas break (approx. 2 weeks).

Entrance Requirements

Only those 18 years of age with a high school diploma, who pass an entrance exam, will be admitted. The entrance exam includes the following components (passing grades are in parenthesis): Reading (90%+), Spatial

Relationships (90%+), Spelling (70%), Math (15/45), and an interview with our staff. All students must also possess a clean driving and criminal record as well as pass a physical and drug test. We also require that all students have a tetanus booster within the last five years.

Admission Procedure

All students desiring to enter our construction program should contact our main office at (541) 753-2902 to schedule an entrance exam and interview. Upon successful completion of the test and admittance, students will be able to enroll in a basic prerequisite class. This class is required by all students prior to entering the construction program. Partial course/seminar training options are available on a special needs basis and must be approved by school officials.

Enrollment Dates

Enrollment will be accepted at any time, as per our guidelines.

School Schedule

Classes begin the first Monday of each quarter. Other classes may be organized at the discretion of the school officials based on demand.

Class Schedule

Classes are typically conducted Monday through Friday 8 am to 5 pm; however, occasional night and weekend attendance is required.

Attendance Policy

Students shall be required to attend all school days from the date of enrollment to graduation. A leave of absence will be granted in case of illness, death in the family, or other cases where the school approves the absence. Three or more tardies and/or unexcused absences in one month are considered excessive and will result in one month probation. If attendance does not improve during the probationary period, the student will be dismissed, except for extenuating circumstances.

Conduct Policy

All students will be expected to be ethical, punctual, and polite at all times. Hair is to be cut short to collar, men are to be clean-shaven, and dress neat and professional. For a more detailed description of dress code and/or conduct policy please see the main office for an extensive copy of these policies.

Grading System

A	Excellent	90-100%
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B	Good	80-89%
C	Fair	70-79%
D	Poor	60-69%
F	Failure	Below 60%

Progress Standards

Students must maintain satisfactory progress while enrolled in training. Each student is evaluated continually. If a student's grades drop below 70%, he or she will be placed on probation for 30 days. If at the end of the probationary period, the student has not maintained passing grades of 70% or above, he or she will be terminated except for extenuating circumstances. Records are kept by the school and are available to the student.

Requirements for Graduation

For a two-year construction technician certificate, the student must pass grade requirements on homework assignments and competency tests in the areas studied. He or she must also have less than ten percent missed attendance. Reports from our field work associates must also show competency and suitable progress.

For a four-year construction supervisor certificate, the student must pass grade requirements on homework assignments and competency tests in the areas studied. He or she must also have less than ten percent missed attendance. The student must also pass evaluations of the accuracy of estimates including how close labor hours and materials/subcontractor invoices are to those projected in the estimates (with appropriate allowances for cost change orders).

Disciplinary Policy

Students shall be a credit to themselves and to the school. All school rules must be followed. The school administration maintains the right to dismiss students for violation of school rules or for conduct that reflects unfavorably on the reputation or operation of the school.

Reinstatement after Termination

If a student is terminated for any reason, readmittance will be evaluated on an individual basis according to the evaluation of the school officials.

Student Grievance Policy

Students aggrieved by actions of the school should attempt to resolve these problems with the appropriate school officials. If this procedure

fails, and if the allegation asserts that the school has violated an Oregon law, students may contact the Oregon Department of Education, Private Schools and Specialized Programs, 255 Capitol Street NE, Salem, OR 97310-0203 or phone 503-378-3600.

Certificate/Diploma

A two-year construction technician certificate shall be awarded to each student who completes all the course requirements for years one and two. A four-year construction supervisor certificate shall be awarded to each student who completes all the course requirements for years three and four.

Placement

Since we started our formal in-house field training program over 10 years ago, we have never had an employee who has failed to find a construction or construction-related job outside of our organization after completing only two years of courses.

We encourage anyone considering our center to take a listing of our curriculum to any local construction company, and ask if they would hire someone with knowledge and experience in all of these areas. Most companies have never heard of a construction school teaching such a wide variety of areas and would be more than happy to hire upon completion of the program.

Through our program our students are introduced to many different businesses as per normal operating procedures. These experiences are expected to serve as introductions and contacts for future employment, all our students are free to contact these businesses in the future for the purpose of furthering their construction careers.

As one of our students you may request that we supply your experience record, school grades, comments from your instructor(s), and the comments of the organizations you spend time with out side of the school to whomever you desire simply by signing a written authorization request.

Cancellation and Refund Policy for Private Career Schools

1. You may cancel enrollment prior to entering classes by giving written notice to the school.
2. If cancellation occurs within five business days, you will receive a 100% refund.
3. If cancellation occurs after five business days, a \$150 registration fee will be charged.
4. If you terminate enrollment after entering classes the following applies:
 - a) If a student withdraws prior to completion of 50% of the instructional program contract, the student shall be entitled to a prorated refund of the total tuition charged for such instructional program.
 - b) Upon completion of 50% of instruction, no refund is given.

Note: When a cancellation, termination, or completion occurs, a calculation of all allowable charges shall be made, using the last recorded date of attendance if any, as a baseline.

Prerequisite Course Outline

Our prerequisite course is offered four times/year. It starts approximately seven weeks before the start of our terms as well as the first Monday in August.

Duration of class:	6-weeks
Breakdown of hours:	
150 hrs	In class/direct supervised
90 hrs	Homework/field experience
240 hrs	TOTAL

Cost of Course:	
\$75.00	Registration fee
\$700.00	Tuition
\$200.00	Personal tools & supplies (approx.)
\$975.00	TOTAL

Instructor: Rotates among in-house staff

Required tools:

- 1 – Nail apron- 4 pockets minimum, hammerloop, combination square (canvas is okay)
- 1 – 16 oz ripping hammer- straight claw with steel or fiberglass handle (no waffle heads)
- 1 – Stanley knife with three sharp blades
- 1 – Combination square- commercial type w/belt holder (not a speed square)
- 2 – Pencils (#2, not carpenter's)
- 1 – Chalk line- Sears type, no split case without ring
- 1 – Pair work boots with non-marking soles
- 1 – Pair tennis shoes (flat bottom)
- 1 – Solid steel wood roughing chisel
- 2 – Nail sets- 2/32 and 3/32 (one of each)
- 2 – Screwdrivers- 1 flat, 1 Phillips (or combo)
- 2 – Tape measures- 20' minimum
- 1 – Tool box, may be of wood from the shop
- 2 – Pairs of gloves- 1 pr brown cotton, 1 pr leather
- 1 – Crescent wrench 10" or 12"
- 1 – Cats paw
- 1 – Flat bar- 18"
- 2 – Pairs of pliers- standard or channel locks
- 1 – Pair of side cutters
- 1 – Finish chisel- 3/4" or 1"
- 1 – Roll of black plastic tape
- 1 – Set of rain gear (commercial grade)
- 1 – Pair of rubber boots
- 1 – Pair of suspenders (for nail belt)
- 1 – Set of drill bits
- 1 – Set of screwdriver bits
- 1 – Plumb bob

Class topics:

Please note that all classes will include information on related safety issues.

Temporary utilities

Provides an understanding of what to expect when using temporary utilities, how to use them, and how to safely turn them off.

Tool rentals

Introduces tool rentals including what and how to rent, how to get the most for company money, expectations of tool treatment, and what to expect from rented tools.

Scaffolding I

Teaches the advantages, basic set up procedures, and safety rules for many types of scaffolding.

Trash/Clean-up

Teaches efficient ways to clean-up jobsites, the most important times to make sure a jobsite is clean, safety issues involved, and different levels of clean-up. Trains how to sort, arrange, transfer, and determine what is and is not trash. This class will cover many different disposal methods and the costs involved with each.

Dismantle and Removal I

Covers the tools and techniques used for dismantle and removal, safety procedures, and recycling methods. Will include a discussion on approach methods.

Hand and Shop Tools

Overviews tool usage including: how to obtain, what type to buy, basic use, familiarity, and maintenance of many tools. This class also covers construction shop tools and safety procedures.

Material/Appliance Moving

Covers the characteristics of moving different appliances, when not to volunteer, how many people are needed to safely move different types of appliances, and what tools to use.

Vehicle Safety/Maintenance

Covers general vehicle maintenance, quick repairs, general safety, effective mirror usage, chains, dealing with flat tires, and working with different construction vehicles.

Trailers

Strengthens hauling skills. Covers loading, hauling, backing-up, parking, tying down loads, and basic wiring fixes. Hands on practice will be given in this area until you are proficient.

Construction Site Ethics

Teaches consideration for the customers' yard and belongings as well as use and care for lawn maintenance equipment.

Construction Technician – Basic Course Outline

This is a comprehensive, hands-on construction program for today's working world. It includes a revolving curriculum dealing with a variety of construction areas.

This program is designed to prepare you to find employment in one of the many skill areas you will cover. This level of training is not designed to teach you how to supervise others or to run your own business. At the end of this two-year program, you will be able to function independently in all of the areas covered either by yourself or with a helper. You will be able to do most of the tasks associated with a construction project.

Duration of course:	2 Years (Year 1 and 2 of program)
Breakdown of hours:	
1200 hours	In class
500 hours	Homework/independent time
<u>1300 hours</u>	<u>Field experience (supervised)</u>
3000 hours	TOTAL
Cost (per term):	
\$150.00	Registration fee
\$1600.00	Tuition
Variable	Transportation to and from field locations (some are several miles from the school)
<u>\$210.00</u>	<u>Personal tools, books, supplies</u>
\$1960.00+	TOTAL (approx. per term)

Additional tools/materials required:

- 1) One cordless drill
- 2) One set of mechanics wrenches – 3/8" to 3/4"
- 3) Complete set of finish chisels
- 4) Building Construction Illustrated by Francis D.K. Ching

Instructor: Rotates among in-house staff

Class Topics:

These classes will be in "round robin" order so that students will be able to come into them during any term. Classes will be held three terms per year and run fall through spring term.

Scaffolding II (1% - 30 hrs)

An in-depth course for learning advanced scaffolding techniques. Will discuss which types to use when, material lists, and lots of field set-up practice.

Dismantle and Removal II (2% - 60 hrs)

Focuses on layout, equipment, and personnel planning. Also includes dismantle and removal of large structures and sections of structures as well as the use of larger power equipment.

Tools – Advanced (5% - 150 hrs)

Provides students with current principles and practical techniques for using a variety of tools including considerable hands-on use of the floor station power tools, use and identification of lesser known hand and hand-held power tools, and diversely powered tools (cordless, 110V, 220V).

Excavation (5% - 150 hrs)

Overviews general excavation techniques. Explores a study of equipment used including when to use what types, as well as depth and shoveling criteria. Will include hands-on time with a variety of different equipment and a field study with excavation contractors- operating their heavy equipment is not included in this curriculum.

Concrete Forms (5% - 150 hrs)

Details step-by-step methods of doing short and tall forms, walls (both single and double-sided), steps, elevated landings, and walks. Discusses prefabricated concrete forms, special footings, reinforcing steel layout and installation, use of

transient level for form layout, as well as sizing of footings and connectors.

Concrete Pour and Finish (5% - 150 hrs)

Builds or expands skills in concrete pouring and finishing. Topics include technical background of different mixes of concrete, pouring, and additives. Lots of hands-on finishing to practice flat slabs, walls, steps, and a variety of finishes including broom, colored patterned, aggregate, and specialty. Class will cover use of different types of concrete pumps, power trowels, and wheelbarrows/buckets.

Framing (10% - 300 hrs)

Teaches the types of framing, layout, tools used, fasteners, types of connectors and use. Covers different roof systems and stairs. Will include hands-on cutting and layouts with significant field time spent cutting and layout as well as putting pieces together. Prepares students to calculate loads and attachments and work with steel light gauge. Introduces structural steel use and attachments and working with large lumber.

Interior and Exterior Trim (10% - 300 hrs)

Students learn types, shapes, and parts of trim, use table-mounted equipment to manufacture special pieces, and use finish tools and techniques. Covers types and grades of lumber used, layout and set up of large trimming operations, and hands-on installation and trim-out of door, windows, moldings, and hardware. Studies different types of hardware and their uses. Discusses types of fasteners for form, effect, and show.

Siding (5% - 150 hrs)

Teaches different types of siding and their uses including wood, vinyl, aluminum, steel, and composite. Prepares students to install a variety of types of siding including how to personally manufacture old patterns that are out of common stock. Hands-on field installation of several types is included in the class.

Fences (2% - 60 hrs)

General installation procedures for fences, study of the advantages/disadvantages of different types, and the use of a variety of equipment are all included. Includes hands-on installation with a minimum of three types of fencing.

Dryrot (5% - 150 hrs)

Enables a better understanding of what causes dryrot, what the code requirements are to prevent

it, special tools and techniques to work on it, and practical ways to prevent dryrot in the future. Will include hands-on field experience fixing dryrot problems in a variety of locations.

Floor Prep and Underlayment (2% - 60 hrs)

General study of how to prepare floors and subfloor for application of various types of flooring, leveling compounds, prep of concrete floors, and “beefing up” existing wood floor systems.

Sheetrock/Plaster (5% - 150 hrs)

Introduces general sheetrock and plaster application procedures, advantages, and patching. Repair procedures, code requirements, and uses will all be covered as well as fire rated assemblies. Includes significant hands-on and field work associated with this area.

Insulation (2% - 60 hrs)

Focuses on uses, advantages, and application procedures for a variety of types. Will also include code requirements.

Flashings (2% - 60 hrs)

Explores types, placement, materials used and why they are used, how and where to order, and installation procedures.

Wood/Gas Stoves (2% - 60 hrs)

Studies code requirements, installation procedures, advantages/disadvantages of different types, construction associated with, as well as surrounds and bases for wood/gas stoves.

Windows/Skylights (2% - 60 hrs)

Information and techniques for working with windows and skylights including code requirements, types, uses, and placement within structures. Covers commercial and residential differences, installation instruction, and extensive hands-on field work.

Painting/Stains/Wall Paper (2% - 60 hrs)

Overviews residential and commercial application procedures, prep work, special safety procedures, and specialty matching and mixing. Includes hand and machine field work.

Floorings (2% - 60 hrs)

In-depth studies of floor covering (i.e. wood, vinyl, plastic laminate, etc.), installation procedures, and advantages of each type. Will also include a class on covering vinyl floors.

Ceramic Tile (5% - 150 hrs)

Explores types, uses, advantages, and application procedures for counters, showers, patios, and walls. Commercial application procedures with an emphasis on commercial shower construction will be included. Significant hands-on time is part of the class.

Plastic Laminate (2% - 60 hrs)

Overviews uses, advantages, ordering parameters, and installation of plastic laminate. Installation classes include countertop, splash backs, walks, doors/frames, and overlays/inlays.

Roofing (5% - 150 hrs)

Studies types, uses, and advantages of wood, metal, composition, single membrane, and tile roofs. Covers backings and pitches required for different types, framing for special loads, and covering for traffic roofs. Safety harnesses, barricades, ladders, and field roofing application will be discussed.

Drain Piping/Septic Fields (5% - 150 hrs)

Covers installation procedures and equipment used for different types of drains. Discusses septic fields and special sewage disposal (this is restricted to residential and light commercial applications) as well as roof rain and hard surface run-off water (non-potable). Includes hands-on work with field inspection.

Bad Weather/Daylight Hours (1% - 30 hrs)

Discusses construction procedures including temporary coverings and drainage, scheduling considerations, special tool maintenance, work area set up, and factors to consider when deciding whether or not to work.

Welding (3% - 90 hrs)

Teaches welding skills (taught mainly through our local community college) with considerable hands-on and basic construction use with general application to the construction trade.

Overview Classes (5% - 150 hrs)

Reviews general information that a contractor needs to be aware of in order to integrate work correctly with subcontractors. These areas include: large construction equipment, masonry work, suspended ceiling assemblies, electrical work, plumbing work, boiler work, and HVAC work. Students will have some field exposure to these specialties as part of the class.

Please note: there will be considerable time spent on safety issues throughout this whole program and students will be expected to adhere to the safety protocol taught in each of the classes.

We reserve the right to add subjects and modify the percentages if this would better serve your ability to gain employment.

We are currently in the process of developing an advanced course for people who desire to train for jobsite leadership and/or want to become self-employed in the construction industry.

**Anticipated Residential/Commercial Construction Supervisor
Advanced Course Outline (STILL IN DEVELOPMENT)**

Our additional two-year supervisory certificate is designed to prepare you to supervise and run many types of residential and commercial construction projects. It provides in-depth studies in many areas including codes, customer relations, labor laws, jobsite organization, etc. All of these areas are necessary for supervisors to be successful. In today’s construction world, few supervisors have the advantage of both technical knowledge and “hands on” training in supervision; our program provides you with both.

Please be aware that our third and fourth year curriculum is specifically designed for people who wish to train for jobsite leadership and/or want to become self-employed in the construction industry. During this stage, considerable time will be spent in learning to estimate and run jobs ranging from a few dollars to possibly several hundred thousand dollars. This training is distinctly different from the first two years in the following ways:

- 1) For significant parts of this time, you will be able to receive tuition credit.
- 2) You will probably be spending time at significant distances from our home base.
- 3) You will be tested on your ability to pass on what you have learned to other less experienced people.
- 4) You will be expected to study building codes, personnel management, estimating, and customer relations, among other topics, while actually guiding work at jobsites.
- 5) You will be evaluating less experienced students and helping to make appropriate decisions about these students with your evaluations.

Duration of course: 2 Years (Year 3 and 4 of program)	
Breakdown of hours:	
1000 hours	In class
800 hours	Homework/independent time
1200 hours	Field experience (supervised and supervising)
3000 hours	TOTAL

Proposed Cost (per term):	
\$3600.00	Tuition***
\$Variable	Transportation to and from field locations (some are several miles from the school)
\$210.00	Personal tools, books, supplies
\$3810.00+	TOTAL (approx.per term) ***
*** Years 3 and 4 have a significant tuition credit possible.	

Class Topics:
These classes will be in “round robin” order so that students will be able to come into them during any term. Classes will be held three terms per year and run fall through spring term.

Plans and Drawings (10% - 300 hrs)
 Designed to teach students how to read, sketch, and detail simple to medium-complexity plans.

Project Scheduling (10% - 300 hrs)
 How to build and implement actual working schedules for projects.

Code Class (10% - 300 hrs)
 All third and fourth year students will be required to take and pass a nine credit building code class (the same one that all beginning building inspectors take).

Building Permits (5% - 150 hrs)

Teaches how to apply for and fulfill the requirements at the jobsite. Students will be given projects that require significant interaction with local building departments as part of this class.

Advertising (2% - 60 hrs)

Overviews types of advertising including a discussion of their effectiveness.

Customer Relations/Contracts (5% - 150 hrs)

A short course including on-the-job training and evaluation of the different ways to communicate with actual customers. Covers ways to keep customers happy while turning out a profit on their jobs.

Estimating (15% - 450 hrs)

Prepares students to use a variety of estimating methods and guides them in setting a fair company labor rate.

Cost Change Orders (5% - 150 hrs)

Discover step-by-step what they are, how they can be used, how to construct a legal and profitable one, and how to present the different types to customers.

Crew Coordination (25% - 750 hrs)

Designed to further build leadership skills by starting with one helper and increasing this to as many as ten people for certain job segments.

Subcontractor Relations (5% - 150 hrs)

Prepares students to wisely choose, operate successfully with, and not be taken advantage by subcontractors. Discusses what to expect from subcontractors in return.

Intro to Business Organization (3% - 90 hrs)

Covers the basic types of business entities and what impact different ones can have on an organization.

Labor Laws and Responsibilities (2% - 50 hrs)

Provides information on the laws that govern employees and employers including the impact on the students.

Hiring and Firing (2% - 50 hrs)

Allows students to obtain a better understanding on what to do and what to avoid.

Safety Programs (2% - 50 hrs)

Explores both the legal requirements and the practical parts of safety programs.

PLEASE BE AWARE THAT THIS ADVANCED PART OF OUR PROGRAM IS STILL IN THE DEVELOPMENT STAGE AND THAT THE FOLLOWING MAY APPLY:

- 1) This part of our program may not be licensed by the State of Oregon Department of Education. Their support for these types of programs is limited to educating people to making a “living wage.” Our two-year program adequately achieves this goal; we would like to add this part of the program to take you beyond this level.
- 2) While the tuition for this part of the program will be significantly higher than the first two years, we anticipate you having the ability to earn significant tuition credits while enrolled in this segment. The finer points of what and how these credits will apply are still being developed and will be available within the next year.
- 3) This part of our program is anticipated to have limited enrollment and will be filled by a committee selection board that will evaluate the students who wish to apply based on their all around performance during the first two years of our program.
- 4) Again we reserve the right to modify this curriculum if we feel it is in the best interest of our students to do so.