

SYLLABUS CARP 111-213 (Clustered)

12 Credits

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COURSE DESCRIPTION, LEARNING OBJECTIVES, AND CONTENT

Carp 111, Introduction to Residential Carpentry. 12 credits. *Prerequisites: Placement in Math 60 and English 60; and instructor permission.* Five lecture hours; 14 lab hours. Vocational program course. May be used as a general elective in the AA degree. A lecture-lab course to provide an introduction to safe work practices, work ethics, basic tool use, and carpentry concepts. Students will participate in the construction of a home on a working jobsite. *Summer quarter hours vary.*

Course Objectives:

To meet the course standards and demonstrate the ability to meet the outcomes expectation of this course, students will:

Category: A–Competency in the Discipline, B–Literacy, C–Critical Thinking, D–Social and Personal Responsibility, and E–Information Use

Scale: 1–Minimal exposure, 2–Moderate exposure, 3–Frequent exposure, 4–Strongly supports

Demonstrate social & personal responsibility necessary for success in the workplace.	(D4)
Demonstrate the ability to comply with organizational rules and policies.	(D4, B1, E1)
Demonstrate safe work habits and safety awareness.	(A4, C1, D2)
Access technical information from physical and online sources.	(A3, B2, E1)
Safely troubleshoot/fix tools that require minor repair or adjustment.	(A2, C2)
Identify tools and demonstrate their safe set-up and use.	(A4, B1, E1)
Perform basic mathematic calculations in relation to assignments.	(A4, C2)
Create project drawings with material lists/estimates, cut lists, and notes.	(A3, B1, C2, E1)
Measure accurately with a tape and scale.	(A4, B1)
Follow directions to achieve safe, accurate, and efficient project construction.	(A4, B2, C2, E2)

Course Content:

Introduction, orientation and general safety.
Trade practices, labor organizations, employment opportunities
Basic tool use/safety
Basic carpentry concepts
Hands–on construction
Basic estimation
Basic sketching
Basic Blueprints

Introduction to building code (IRC) topics

Carp 112, Residential and Commercial Carpentry I. 12 credits. *Prerequisites: Placement in Math 60 and English 60; and instructor permission.* Five lecture hours; 14 lab hours. Vocational program course. May be used as a general elective in the AA degree. A lecture-lab course to build upon the skills learned in Carp 111. Training increases skills and expands tasks learned in Carp 111. Students will participate in the construction of a home on a working jobsite. *Summer quarter hours vary.*

Course Objectives:

To meet the course standards and demonstrate the ability to meet the outcomes expectation of this course, students will:

Category: A–Competency in the Discipline, B–Literacy, C–Critical Thinking,
D–Social and Personal Responsibility, and E–Information Use

Scale: 1–Minimal exposure, 2–Moderate exposure, 3–Frequent exposure, 4–Strongly supports

Demonstrate social & personal responsibility necessary for success in the workplace.	(D4)
Demonstrate the ability to comply with organizational rules and policies.	(D4, B1, E1)
Demonstrate safe work habits and safety awareness.	(A4, C1, D2)
Access technical information from physical and online sources.	(A3, B2, E1)
Safely troubleshoot/fix tools that require minor repair or adjustment.	(A2, C2)
Identify tools and demonstrate their safe set-up and use.	(A4, B1, E1)
Perform basic mathematic calculations in relation to assignments.	(A4, C2)
Create project drawings with material lists/estimates, cut lists, and notes.	(A3, B1, C2, E1)
Measure accurately with a tape and scale.	(A4, B1)
Follow directions to achieve safe, accurate, and efficient project construction.	(A4, B2, C2, E2)

Course Content:

Introduction, orientation and general safety.
Trade practices, labor organizations, employment opportunities
Intermediate tool use/safety
Continued carpentry concepts
Hands–on construction
Continued estimation
Basic Blueprints
Continued building code (IRC) topics

Carp 113, Residential and Commercial Carpentry II. 12 credits. *Prerequisites: Placement in Math 60 and English 60; and instructor permission.* Five lecture hours; 14 lab hours. Vocational program course. May be used as a general elective in the AA degree. A lecture-lab course to build upon the skills learned in Carp 112. Training increases skills and expands tasks learned in Carp 112. Students will participate in the construction of a home on a working jobsite. Tasks are completed to industry standards. *Summer quarter hours vary.*

Course Objectives:

To meet the course standards and demonstrate the ability to meet the outcomes expectation of this course, students will:

Category: A–Competency in the Discipline, B–Literacy, C–Critical Thinking, D-Social and Personal Responsibility, and E-Information Use

Scale: 1-Minimal exposure, 2-Moderate exposure, 3-Frequent exposure, 4-Strongly supports

- Demonstrate social & personal responsibility necessary for success in the workplace. (D4)
- Demonstrate the ability to comply with organizational rules and policies. (D4, B1, E1)
- Demonstrate safe work habits and safety awareness. (A4, C1, D2)
- Access technical information from physical and online sources. (A3, B2, E1)
- Safely troubleshoot/fix tools that require minor repair or adjustment. (A2, C2)
- Identify tools and demonstrate their safe set-up and use. (A4, B1, E1)
- Perform basic mathematic calculations in relation to assignments. (A4, C2)
- Create project drawings with material lists/estimates, cut lists, and notes. (A3, B1, C2, E1)
- Measure accurately with a tape and scale. (A4, B1)
- Follow directions to achieve safe, accurate, and efficient project construction. (A4, B2, C2, E2)

Course Content:

- Introduction, orientation and general safety.
- Trade practices, labor organizations, employment opportunities
- Continued tool use/safety
- Continued carpentry concepts
- Hands–on construction
- Continued estimation
- Basic Blueprints
- Continued building code (IRC) topics

Carp 211, Residential and Commercial Carpentry III. 12 credits. *Prerequisites: Placement in Math 60 and English 60; and instructor permission.* Five lecture hours; 14 lab hours. Vocational program course. May be used as a general elective in the AA degree. A lecture-lab course to build upon the skills learned in Carp 111-113. Training increases skills and expands tasks learned in Carp 111-113. Students will participate in the construction of a home on a working jobsite. Tasks are completed to industry standards and increase in complexity. *Summer quarter hours vary.*

Course Objectives:

To meet the course standards and demonstrate the ability to meet the outcomes expectation of this course, students will:

Category: A–Competency in the Discipline, B–Literacy, C–Critical Thinking,
D–Social and Personal Responsibility, and E–Information Use

Scale: 1-Minimal exposure, 2-Moderate exposure, 3-Frequent exposure, 4-Strongly supports

Demonstrate social & personal responsibility necessary for success in the workplace.	(D4)
Demonstrate the ability to comply with organizational rules and policies.	(D4, B1, E1)
Demonstrate safe work habits and safety awareness.	(A4, C1, D2)
Access technical information from physical and online sources.	(A3, B2, E1)
Safely troubleshoot/fix tools that require minor repair or adjustment.	(A2, C2)
Identify tools and demonstrate their safe set-up and use.	(A4, B1, E1)
Perform basic mathematic calculations in relation to assignments.	(A4, C2)
Create project drawings with material lists/estimates, cut lists, and notes.	(A3, B1, C2, E1)
Measure accurately with a tape and scale.	(A4, B1)
Follow directions to achieve safe, accurate, and efficient project construction.	(A4, B2, C2, E2)

Course Content:

Introduction, orientation and general safety.
Trade practices, labor organizations, employment opportunities
Continued tool use/safety
Continued carpentry concepts
Hands–on construction
Continued estimation
Continued Blueprints
Continued building code (IRC) topics

Carp 212, Residential and Commercial Carpentry IV. 12 credits. *Prerequisites: Placement in Math 60 and English 60; and instructor permission.* Five lecture hours; 14 lab hours. Vocational program course. May be used as a general elective in the AA degree. A lecture-lab course to build upon the skills learned in Carp 111-211. Training increases skills and expands tasks learned in Carp 111-211. Students will participate in the construction of a home on a working jobsite. Tasks are completed to industry standards and increase in complexity. Problem solving is emphasized. Leadership opportunities are presented. *Summer quarter hours vary.*

Course Objectives:

To meet the course standards and demonstrate the ability to meet the outcomes expectation of this course, students will:

Category: A–Competency in the Discipline, B–Literacy, C–Critical Thinking,
D–Social and Personal Responsibility, and E–Information Use

Scale: 1–Minimal exposure, 2–Moderate exposure, 3–Frequent exposure, 4–Strongly supports

Demonstrate social & personal responsibility necessary for success in the workplace.	(D4)
Demonstrate the ability to comply with organizational rules and policies.	(D4, B1, E1)
Demonstrate safe work habits and safety awareness.	(A4, C1, D2)
Access technical information from physical and online sources.	(A3, B2, E1)
Safely troubleshoot/fix tools that require minor repair or adjustment.	(A2, C2)
Identify tools and demonstrate their safe set-up and use.	(A4, B1, E1)
Perform basic mathematic calculations in relation to assignments.	(A4, C2)
Create project drawings with material lists/estimates, cut lists, and notes.	(A3, B1, C2, E1)
Measure accurately with a tape and scale.	(A4, B1)
Follow directions to achieve safe, accurate, and efficient project construction.	(A4, B2, C2, E2)

Course Content:

Introduction, orientation and general safety.
Trade practices, labor organizations, employment opportunities
Continued tool use/safety
Continued carpentry concepts
Hands–on construction
Continued estimation
Continued Blueprints
Continued building code (IRC) topics

Carp 213, Residential and Commercial Carpentry V. 12 credits. *Prerequisites: Placement in Math 60 and English 60; and instructor permission.* Five lecture hours; 14 lab hours. Vocational program course. May be used as a general elective in the AA degree. A lecture-lab course to build upon the carpentry skills learned in Carp 111-212. Training increases skills and expands tasks learned in Carp 111-212. Students will participate in the construction of a home on a working jobsite. Tasks are completed to industry standards and increase in complexity. Problem solving is emphasized. Leadership opportunities are presented. Course includes a capstone exam to ensure retention of competency in previous Carpentry Technology program topics. *Summer quarter hours vary.*

Course Objectives:

To meet the course standards and demonstrate the ability to meet the outcomes expectation of this course, students will:

Category: A–Competency in the Discipline, B–Literacy, C–Critical Thinking, D–Social and Personal Responsibility, and E–Information Use

Scale: 1–Minimal exposure, 2–Moderate exposure, 3–Frequent exposure, 4–Strongly supports

- Demonstrate social & personal responsibility necessary for success in the workplace. (D4)
- Demonstrate the ability to comply with organizational rules and policies. (D4, B1, E1)
- Demonstrate safe work habits and safety awareness. (A4, C1, D2)
- Access technical information from physical and online sources. (A3, B2, E1)
- Safely troubleshoot/fix tools that require minor repair or adjustment. (A2, C2)
- Identify tools and demonstrate their safe set-up and use. (A4, B1, E1)
- Perform basic mathematic calculations in relation to assignments. (A4, C2)
- Create project drawings with material lists/estimates, cut lists, and notes. (A3, B1, C2, E1)
- Measure accurately with a tape and scale. (A4, B1)
- Follow directions to achieve safe, accurate, and efficient project construction. (A4, B2, C2, E2)

Course Content:

- Introduction, orientation and general safety.
- Trade practices, labor organizations, employment opportunities
- Continued tool use/safety
- Continued carpentry concepts
- Hands–on construction
- Advanced estimation and bid preparation
- Continued Blueprints
- Continued building code (IRC) topics

TEXTBOOKS AND OTHER INSTRUCTIONAL MATERIALS:

See GHC bookstore for required texts.
See tool list for other required instructional materials.

INSTRUCTIONAL TECHNIQUE:

All courses are taught for 4 hours and 20 minutes per day, with a 15 minute break included. The methods of instruction are lecture, discussion, classroom exercises, written homework, demonstrations and lab work. Lab work is emphasized with one-on-one instruction when possible. *Summer sessions have different hours – see instructor.*

PROJECTS:

Personal projects that are not part of the curriculum will not be done.

DISABILITIES:

If you have a documented disability that may interfere with your ability to fully participate in this class, you may be eligible for accommodations. Contact the instructor or Disability Support Services located on campus in the Student Services office (HUB), room 119. Information regarding a disability will be kept confidential.

SAFETY POLICY:

No student will be allowed to use any machinery or power tool without first receiving instruction on the safe and proper use of the tool they desire to use. Violations of this policy will result in lost points. Any student who consistently fails to follow the safety procedures for any power tool may be limited to the use of hand tools for the remainder of the quarter.

WORK HABITS:

Attendance, punctuality and other appropriate work habits are critically important for success on the job. Industry is demanding and so are the standards of this carpentry program. You are expected to be here every day, on time, clean, fed, awake, thinking about carpentry, and with neatly and correctly completed homework ready for turn in. Each day you will need to bring a pen/pencil, a calculator (as specified on the tool list), a 3-ring binder to contain notes and homework, required personal protective equipment, and your tools. You are to keep safety first, treat the equipment well, and be conscientious of others.

Effective use of time is vital. The assignments are designed to require effective time management for successful completion. Just like on the job, you will have to plan out your tasks and periodically multi-task to avoid unnecessary delays waiting for glue to cure or for shared equipment.

This course is part of a full time training program. The main goal is to build technical skills and

improve employability. The quantity and skill level requirements of the carpentry assignments and homework, combined with enforcement of work habits standards, grading criteria, and organizational rules/policies are designed to increase your likelihood of success in the industry. Focus, a positive attitude, and prioritization of your education are expected and necessary in order to be successful.

CLASS ENVIRONMENT:

It is the goal of this course to create a safe learning environment for all students. Toward this goal, I expect that all students will respect one another, allow for differences in opinion, learning styles, knowledge levels, and view all members of the class as contributing to the total learning experience. Tolerance for diversity is emphasized.

INSTRUCTOR EXPECTATIONS:

It is my expectation that students will engage in behavior that contributes to the learning experience and is not disruptive. My definition of disruptive is anything that prevents your classmates or me from effectively meeting the learning objectives of the course. This may include such things as sleeping, arriving late, rudeness, talking in class, poor personal hygiene and excessive questioning or commenting. Note: The instructor decides what is disruptive and may take action to remove a student who disrupts a class.

HOMEWORK:

In order to receive credit, written assignments will be word processed, size 12 Times New Roman font, double spaced, 1 1/4" margins, and in the case of narrative assignments be at least 14 lines in length. All assignments must include the student name, course name and number, and due date.

For Math assignments, problems and answers must be word-processed. Work must be done in pen/pencil - neatly - with each problem answer circled. This sheet must be stapled behind the word processed list of problems and answers. All assignments must be completed entirely to receive credit. Math assignments completed, but scoring less than 90% correct will result in the loss of 1 daily point. You are highly encouraged to complete the assignments before leaving the campus/worksite, and also to compare answers with the other students the day before assignments are due.

In case of absence, it is your responsibility to find out what homework assignments were given. All homework that is/was required of the rest of the class will also be due from you on the day you return. Each homework assignment not turned in on time will result in the loss of 3 daily points. Now (after class) is the best time to exchange phone numbers with other students in the class.

TESTS:

Wandering eyes, answer sharing, group work, cheating, or casual talking will cause all students involved to score a zero on that test. This applies even if you submit your test, but remain in the room or within earshot. No re-test will be allowed.

Students in 101/111: <90% correct = -1 daily point, <80% = -2, <70% = -3

All other students: <100% = -1, <90% = -2, <80% = -3, <70% = -4, <60% = -5

LETTERS OF RECOMMENDATION/ACADEMIC PROGRESS:

Letters of recommendation will only be provided to "A Team" members upon request. If this does not apply, please do not ask.

Please be aware that the degree and all certificates in Carpentry require at least a 2.0 grade point average in core course and overall.

A TEAM:

Carpenters earning three consecutive "A" grades in the Residential Carpentry courses will be inducted into the "A Team".

ATTENDANCE POLICY:

Attendance is graded. There are no excused absences. If you provide *advanced notice*, some temporary flexibility in work hour scheduling may be provided through instructor discretion for jury duty, or in the event of a death or a grievous accident involving an immediate family member. Flexibility may also be offered if you are *sent home* due to illness. Please tell a friend or family member to call in and communicate any tragedy immediately in case you can not.

If you will miss class for some other reason, please call in and leave a message on the office answering machine prior to 7:00am. An absence without prior notice by 7:00am will score zero points for the day. Arriving late or leaving early *with* prior notice by 7:00am will result in the loss of 2 daily points. Arriving late or leaving early *without* prior notice by 7:00am will result in the loss of 3 daily points.

Arriving after 9:00am or leaving prior to 10:30am (1:00pm in Summer), even with prior notice, is an absence. In any event, notify Adam or Phil immediately when you arrive late or leave early!

If a student is absent for the first day of the class without prior approval from the instructor then that student will be dropped from the class.

Lost points cannot be made up. However, scheduling time to make up assignments and participating in study groups will demonstrate your level of commitment to success in the trade and allow you to keep up with the assignments. If a situation arises that causes you to miss enough class to perform poorly in the course, you may request an official withdrawal through admissions.

STUDENT RIGHTS AND RESPONSIBILITIES:

Consult the **Student Handbook** for a complete listing of campus policies, resources, **Code of Conduct**, fee schedules and other valuable information: www.ghc.edu

METHOD OF EVALUATION:

To earn any letter grade, you must accomplish both of the minimum requirements corresponding to that letter grade as listed herein. For example a “B” requires at least 90% for Work Habits and at least 80% for Assignments. When different, Work Habits scores and Assignments scores are NOT averaged. *The lower of the two scores earned constitutes the overall letter grade earned.*

Pluses and minuses are not used. The minimum requirements listed are for whole letter grades. Any calculated decimal places are dropped from point scores. Scores are never rounded up. The final grade computed will be dropped by one full letter grade if absent on the last day of class (clean up day). The final grade computed will also be dropped by one full letter grade if the student accepts a local scholarship and fails to attend the donor recognition ceremony in the spring. In addition, the final grade computed will be dropped by one full letter grade if a graduating student does not attend commencement.

MINIMUM REQUIREMENT FOR A GRADE OF:

	A	B	C	D
Work Habits Points	94	90	85	80
Assignment Points	90	80	70	60

Quarter: Year: Course: Name:

WORK HABITS POINT SHEET

Circle Present Week: 1 2 3 4 5 6 7 8 9 10 11 12

5 points are possible per day. Deduct points per syllabus guidelines. Points cannot be made up.

	Points earned	Explanation if less than 5 points
M		
T		
W		
Th		
F		

Total points warned as of last week: _____
(Fill in on Monday)

Points earned this week: + _____
(Fill in on last day of the week)

Total points earned to date: = _____ Total points possible: _____
(Fill in on last day of the week) (Fill in on Monday)

Total points earned divided by the total points possible = _____ %
(Fill in on last day of week. Drop decimal places, do not round up.)

Current Work Habits letter grade: _____
(Fill in on last day of week)

	A	B	C	D
Work Habits Points	94	90	85	80
Assignment Points	90	80	70	60

(The *lower* of the two grades is the highest possible grade for the quarter. Additional requirements apply - see syllabus.)

Work Habits Point Sheet Guide

Students earn five points when they arrive to class on time, turn in correctly and neatly completed homework on time, stay on task for the entire class, and follow the program rules!

Students **lose points** under the following circumstances:

Absent	-5
Sent home per safety or rule violation	-5
Arrive Late	-3
Leave Early	-3
Late Homework	-3
Arrive Late or Leave Early - prior notification	-2
Math homework less than 90%	-1
Rule violations: see syllabus	varies

Tests/Quizzes:

Students in 101/111: <90% correct = -1 daily point, <80% = -2, <70% = -3

All other students: <100% = -1, <90% = -2, <80% = -3, <70% = -4, <60% = -5

Project / Assignment Grading Guide

	0 points	1	2	3	4
Project / Assignment adheres to given specifications and guidelines. (Correct materials, joinery, fasteners, adhesive, dimensions, shapes, codes, etc.)	None	Few 1-32%	Some 33-65%	Most 66-99%	All
Project / Assignment follows oral and written directions and procedures. (Correct tool use, order of processes, format for drawings, etc.)	None	Few 1-32%	Some 33-65%	Most 66-99%	All
Project / Assignment demonstrates Competency of related carpentry skills. *	None	Few 1-32%	Some 33-65%	Most 66-99%	All
Project / Assignment adheres to other requirements (Name, date, project labeling, on time, word processed, spell checked...)	None	Few 1-32%	Some 33-65%	Most 66-99%	All

* Competency: Projects / Assignments reflect the learning curve while remaining pleasing to the eye and the hand. Layout is within 1/16", framing is within 1/8", fasteners are on spec, square joints are square, dimensions are correct, code specs have been met, etc. See assignment specifications.

Carpentry Department Organizational Rules

1. Safety glasses or protective eyewear is/are required at all times in the shop/lab. (-1)
2. Students are responsible for providing their own safety glasses or protective eyewear.
3. Shop safety policies are part of the organizational rules.
4. No alcohol or drugs on you or in you - you will be sent home. (-5)
5. No horseplay - you will be sent home. (-5)
6. Report all injuries immediately. Contain your blood to the extent practical in order to prevent contamination of the work area.
7. Don't leave the shop/lab or work area without notifying the instructor.
8. Report broken equipment and machinery that is out of adjustment immediately.
9. Student provided hard hats are required in designated work areas. (-1)
10. No spitting in the classroom, lab, or inside jobsite projects. (-1)
11. No tobacco use in the classroom, lab, or inside jobsite projects. (-1)
12. Smoking is only allowed at break time 25' from building entrances and air intakes. (-1)
13. Dispose of tobacco products and waste properly. (-1)
14. Class starts promptly at the time listed in the course catalog. If you are not inside the classroom at that time, you will be marked as late. When class starts you are to have yourself ready for work. That means you already have your work boots on and laced, already have used the restroom, already have any jewelry removed, already have your hair tied up, already have your personal protective items and tools retrieved and with you or placed where you will be working, etc.
15. Shop/lab time is not to be spent in the classroom. The only time you should be in the classroom during shop/lab time is if you have been assigned by the instructor to do so. Drawings, cut lists, material lists and notes should be done as *homework*. (-1)
16. Breaks start and end when called by instructor. Anything other than working is considered to be a break – e.g. smoking, standing around, talking, *cell phone use*, etc. Non-authorized breaks will be treated as a “late arrival” in your daily attendance. (-3)
17. No radios, I-pods, or other music devices in the classroom, lab or at the jobsite. (-1)
18. No ringing cel phones, or talking, texting, etc on cel phones in the shop, at the jobsite or classroom, or during class hours. (-1)
19. Be prepared to start class on time with the proper tools. (-1)

20. No student will be allowed to use any woodworking machinery or power tool without first receiving instruction on the safe and proper use of the tool they desire to use. (-1)
21. The instructor's tools are not for loan, and it is poor form to ask others to use theirs – help support the industries you will be working in, buy your own good quality, free-world manufactured tools.
22. Long hair must be secured out of harm's way.
23. Cotton denim or duck long pants, and shirts that cover the shoulders must be worn when working. Leather work boots at least 6" high are required – lace up. (-2)
24. Clothing must be secured out of harm's way (e.g. Sleeves, shirt tails, and loose items).
25. All materials not included in student fee structure must be documented prior to use.
26. Materials must be purchased before they leave the shop.
27. Negligent damage to equipment will be charged.
28. Good personal hygiene is essential to career success. Please exercise common courtesy by doing the following every morning: bathing with soap and scrub pad, washing hair with shampoo, brushing teeth, and wearing washed clothing. Repairs, stains, and some holes on clean clothing are normally acceptable for working tradesmen, but clothing must never be frayed or tattered to the point of creating a safety hazard.
29. For everyone's sake, please wash your hands after using the restroom. They should also be washed before putting anything in your mouth at break time.
30. Drive and park with respect for others. Your actions represent the program and effect future opportunities for other students. (-1)
- 31. If you don't know, or are at all unsure, ASK!**

(Deduction for violation in parenthesis.)

Clean Up Procedure

Shut down all machinery.

Place all machinery in “safe” positions (no exposed blades, all guards replaced).

Return all tools, equipment, and supplies to proper locations.

Return projects to proper storage areas. Label your stuff.

Sweep off tables and tools with fox tail brushes.

Sweep floors.

Dispose of sawdust.

Return foxtails, brooms and dust pans to proper locations.

Place useable and burnable scraps in proper places.

Dispose of waste in dumpster.

Dispose of any finishing rags or solvent contaminated materials properly.

Place recycling in proper container.

Continue cleaning until instructor signals that it is time to stop.

Participate in the class “rap-up” and fill out your paperwork prior to dismissal.

Grays Harbor College Carpentry Safety

Table Saw Safety

1. Always wear eye protection.
2. Never wear loose fitting clothing or dangling jewelry. Hair must be secured.
3. Maintain focus. Don't become distracted.
4. Keep the blade guard on at all times unless it interferes with safe operation.
5. Check to see that guard is adjusted properly before starting a cut.
6. Make sure material is free of any foreign objects - nails, screws, rocks, etc.
7. Never cut bowed, cupped, crooked, or warped wood on the table saw.
8. Never cut with a dull or damaged blade.
9. Always keep your fingers and hands away from the blade when using a table saw.
10. Make sure the rip fence is in the locked position before starting a cut.
11. Set the blade height about 1/8" above the top face of the material being cut.
12. Make sure that the correct table insert is installed for angled or dado cuts.
13. Make sure material being cut has a straight edge against the rip fence and a flat face down on the table. Failure to do so may result in a kick-back.
14. Make sure the material being ripped can and does ride against the rip fence.
15. Always maintain solid control of material.
16. Use your hand to guide material wider than 4", and try to keep your fingers in contact with the rip fence.
17. Always use a push stick when ripping a piece that is less than 4" wide.
18. Do not stand directly behind the piece being cut, (stand off to one side).
19. Do not force the wood through the table saw blade (guide it).
20. If material is binding, shut the saw off and investigate the problem. Fix it. Then finish your cut. (Maintain control!)
21. Do not pull material from the out feed side of the saw.
22. *Never* make a free-hand cut.
- 23. Always push the material clear of the blade before releasing.**
24. Use a "zero clearance" throat plate when cutting small pieces which might fall into the gap beside the blade in the table insert.
25. Never use the rip fence as a stop when using a miter gauge to cross cut material.
26. Ask some one to help you catch or support any long or large material.
27. Do not leave the table saw until the blade has come to a complete stop.
28. Never reach over the blade when it's turning.
29. Do not drag your arm or hand back across the blade after completing a cut.
30. Turn off the circuit breaker before changing the blade.
31. When replacing a blade always check to make sure the blade is installed in the correct direction and the arbor nut/washer is snug before starting the saw.
32. Keep the saw table free of any tools or scraps of wood.
33. Pick up your stuff before leaving the saw (wood, tools, etc.).

Grays Harbor College Carpentry Safety

Band Saw Safety

1. Always wear eye protection.
2. Never wear loose fitting clothing or dangling jewelry. Hair must be secured.
3. Always use a sharp blade.
4. Before using the band saw adjust the upper blade guide as close as possible to the top of your material.
5. Check to make sure there is proper tension on the blade and the blade is tracking properly before turning on the machine.
6. If constant, evenly spaced clicks are heard, turn off the machine, disconnect the power supply and check the blade for defects.
7. Make sure material is free of any foreign objects - nails, screws, rocks, etc.
8. Maintain focus. Don't become distracted.
9. Do not feed material with your hands or fingers directly in line with the blade. Always keep them off to one side.
10. Before you start a radius cut check the width of the blade.
11. Plan wisely and make "release" cuts before cutting radii or curves.
12. Make short cuts first so there will be a minimum of backing out.
13. Use a rip fence for long straight cuts.
14. Never clear the small cut off pieces from around the blade with your fingers, use a scrap of wood or a bench brush.
15. Do not leave the saw until it has come to a complete stop.
16. Drop the upper blade guide down to the table when the saw has stopped.
17. Do not change the blade adjustments.
18. Disconnect the power source before changing blades.
19. If the blade breaks when in use, shut off the power and wait for the wheels to come to a complete stop before opening the wheel guards.

Sliding Compound Miter Saw Safety

1. Always wear eye protection.
2. Use hearing protection when appropriate.
3. Never wear loose fitting clothing or dangling jewelry. Hair must be secured.
4. Make sure material is free of any foreign objects - nails, screws, rocks, etc.
5. Never cut with a dull or damaged blade.
6. Never operate this machine unless it is secured in place.
7. Make sure that the angle adjustment knobs are locked before starting a cut.
8. Blade guards must remain in place during machine use.
9. Make sure material is in contact with the table and the fence near the blade.
10. If you must cut a piece of wood which is bowed, cupped or crooked, plan your cut so you don't cause the blade to pinch.
11. When cutting small material use a fence extension, or auxiliary fence.

Grays Harbor College Carpentry Safety

12. When using this saw to cut thick material, make more than one pass, start with a push and finish with a pull cut.
13. Material between a stop block and the blade must be controlled.
14. Keep your hands and fingers clear of the cut line at all times.
15. Maintain focus. Don't become distracted.
16. Always ease the blade into the cut, never use a chopping motion.
17. Keep your arm rigid when starting a pull cut.
18. Hold the material tightly; keep your hand in contact with the saw table so that the wood cannot move during the cut. **Become one with the machine.**
19. Allow the blade to come to a complete stop before lifting it from the cut.
20. Remove scraps from cutting table when blade stops, not before.
21. Disconnect power source when changing the blade.
22. When changing a blade make sure the teeth are pointing the correct direction and the arbor nut is tight before operating the saw.
23. Return the saw to the rear of the table after *every* cut.
24. Set angles to zero before leaving saw.

Powered Nailer Safety

1. Always wear eye protection when in the vicinity of a powered nailer.
2. Disconnect power source when loading or changing nails.
3. Check for proper nail length before connecting to power source.
4. Do not hold the material being nailed near the point of fastening. (The nail could be deflected into your hand or finger).
5. Check that the air pressure is set correctly.
6. Maintain focus. Don't become distracted.
7. Concentrate on driving the nail straight (where you want it to go) not askew.
8. Be careful climbing down a ladder or scaffolding with the tool.
9. When finished nailing remove your finger from the trigger.
10. NEVER point the tool at another living being. It is a nail *gun*!

Belt Sander Safety - Spindle Sander Safety

1. Always wear eye protection.
2. Never wear loose fitting clothing or dangling jewelry. Hair must be secured.
3. Make sure material is free of any foreign objects - nails, screws, rocks, etc.
4. Maintain focus. Don't become distracted.
5. Keep material in solid contact with the table.
6. Do not allow anything to become caught between the abrasive and the table.
7. Maintain control of the material.
8. When using the spindle sander on a "hole" make sure the machine comes to a complete stop before lifting material.
9. Do not allow material to "burn" the abrasive.
10. Clean the abrasive as directed.

Grays Harbor College Carpentry Safety

Router/Router Table Safety

1. Always wear eye protection.
2. Never wear loose fitting clothing or dangling jewelry. Hair must be secured.
3. Use hearing protection when appropriate.
4. Maintain focus on machining operations. Don't be distracted!
5. Always unplug the machine before making bit or depth of cut changes.
6. Insert bit and properly tighten collet before turning on machine.
7. Always feed material left to right relative to the bit. The router moves from left to right if hand held, material feeds left to right on the router table.)
8. Set the depth of cut appropriately. (Don't bite off more than you can chew.)
9. Maintain control of the machine until the bit comes to a complete stop.
10. Maintain control of material until the bit comes to a complete stop.
11. Do not use damaged bits, dispose of them. (Give to instructor.)
12. Use a set up piece for trial runs. Use a set up piece for trial runs!
13. Keep hands and fingers away from "live" bits.

Lathe Safety - Seek specialized instruction and permission.

General Safety

1. Always wear eye protection.
2. Never wear loose fitting clothing or dangling jewelry. Hair must be secured.
3. Use hearing protection when appropriate.
4. Use respiratory protection when appropriate.
5. Be alert for the safety of others in the shop. Assist others when appropriate.
6. Sharp tools are safe. Dull tools are dangerous.
7. Make sure material is free of any foreign objects - nails, screws, rocks, etc.
8. Maintain focus on machining operations. Don't be distracted!
9. The presence of persons with altered states is ***Strictly Forbidden!***
10. Keep floor clear of hoses, cords, sawdust and debris.
11. Read and follow directions for machines, tools, finishing products, etc.
12. Disconnect the power source before attempting any machine or tool maintenance, blade change, belt change, bit change, adjustment, etc.
13. **When in doubt – ask.**

Name: _____

Date: _____

Residential Carpentry Scaffold Test (sections 111, 112, 113, 211, 212, 213)

This test is worth 50 points.

Directions: Write the response that best completes the statement/answers the question in the blank space provided within the text or directly under the corresponding question. The standards for this test are those set forth by OSHA and the Scaffolding, Forming and Shoring Institute.

The acronym OSHA stands for _____.

Three reliable sources for information regarding scaffolding/ladders are _____ and _____, and _____.

OSHA requires that ladders accessing roof decks or scaffolding must extend above the final exit point by _____.

Ladders and scaffolding must stand on _____.

List a method for *positively* securing ladders to avoid ladder collapse: _____.

The ratio of vertical plumb height to level horizontal run at the foot of leaning ladders should be _____: _____.

Scaffolding must be erected _____ and _____. (P & L)

Scaffolding must also be _____. (R)

Name the scaffolding element that is required to prevent tools and materials from falling from the scaffold deck: _____.

OSHA requires that scaffolding have a _____ at 38-45" and a _____ at 18 - 23" to discourage falls from the scaffold deck.

Safe erection of a steel tube-scaffolding unit should include 2 _____,
2 _____ - _____ and a full _____.

In the state of Washington, if the height of a scaffold is more than 3.5 times the narrowest
width of its base then the scaffold must be _____.

Scaffolds should be inspected _____.

If any part of a scaffold is damaged it should be _____.

Riding a moving scaffold is _____.

Casters (wheels) should ***not*** be used on _____. (type of footing)

If electrical hazards are in question/present you should contact _____.

Boxes, ladders, makeshift devices and/or other means of increasing the scaffold height
are _____.

OSHA regulation 29 CFR Part 1926.451 section g.1 (8/30/1996) states that an employee on a
scaffold more than _____ feet above a lower level shall be protected from falling from that
level.

It is possible to find the load capacity for scaffolding by consulting the _____.

The load capacity of the scaffolding should ***never*** be _____.

The personal protective equipment device that is required where
scaffolding is present is a _____.

Scaffold should be erected so that integrated ladders are adjacent to the _____.

If possible scaffold should be erected within _____ inches of the side of a building.

If there is reason to believe that a person lacks the skill or understanding needed for safe
work/use involving scaffolding that person must be _____.

Scaffold should only be erected/used by a person considered to be _____.

Grays Harbor College

Residential Carpentry 213 Capstone Exam - part 1

Name:

Date: Due: June 16, 2008

This portion of the exam is designed to assess your cumulative carpentry knowledge and your ability to create and utilize plan view drawings, material and labor estimations, Information Use, and Literacy related to carpentry.

Outcome: Create a Bid Document based on the construction of a small house.

Include: material type, size, quantity, cost per piece, total price per type, total price of all materials, estimated labor hours for construction for two carpenters for this stage of work, cost per hour of labor, total labor cost, total job cost per this stage of work.

Draw in proportion: the floor system top view and cross section (footing and stem wall, post locations, girder locations, I-joist locations, Simpson mud sill anchor locations, and the orientation of the floor sheathing), the four exterior wall's top framing member layout view (corners, wall intersections, O.C. layout), side elevation view (all framing members, windows, doors, O.C. layout). Include the dimensions required for this project to be constructed by a third party apprentice carpenter.

Notes: Calculate materials only for the footing and stem wall - omit form materials and labor. Omit the interior walls of the house for this project. Utilize the IRC or carpentry book span tables. Utilize OVE. Footing cross section is 6" x 12", stem wall cross section is 6" x 24", pier pads are 8" x 18" x 18".

Include complete estimates for:

Footing, stem wall, & pier pad concrete	9 1/2" Versa rim
Minimum rebar required w overlap	9 1/2" I-joists
Post brackets	3/4" T&G OSB sub flooring
Post material	2x6 plate material
Girder material	2x6 pre-cut studs @ 92 5/8"
Girder gusset material (16"x16")	7/16" OSB wall sheathing
Simpson mud sill hardware	Rough fastener estimate –
Mud sill material	(e.g. 99 boxes 8d gal. nails)

The house floor plan and elevation views are available at:

www.cusatocottages.com. The plan for this exam is KC 612.

Grays Harbor College Residential Carpentry 213 Capstone Exam - part 1

Scoring:

Late exams will not be accepted, and will be scored 0 points.

This exam will be scored on percentage of correct items compared to total items.

Tolerance is zero for under estimation, up to 10% for over estimation.

Example: 99 boxes 8d hdg. nails.

This is over the 10% margin of error for this item on this project.

Drawings will be scored by the instructor on a scale of 1-50; 50 being the highest. This will be an aggregate of the clarity and usability of all the drawings.

This exam must be typewritten, organized and word processed (spell checked) to earn an "A". The final score of exams not meeting this standard will be lowered by 10%.

You will receive one rough draft consultation session with the instructor. Schedule your time and date with the instructor.

A more complete scoring guide will be available at the rough draft consultation session.

Grays Harbor College
Residential Carpentry 213 Capstone Exam - part 1

Complete Scoring Guide

Materials: 50 points

3 point items scored as follows:

- 0 = Item omitted
- 1 = Item properly listed
- 2 = Item quantity within margin of error
- 3 = Item price accurate and tabulated

Concrete
Fdn. vents
rebar
tie wire
Simpson mud sill anchors
16d sinkers
8d galvanized nails
2" x 6" P.T. mudsill
9 ½" I-Joists with span rating
9 ½" Versa Rim
¾" T&G OSB
2" x 6" plate material
2" x 6" pre-cut studs @ 92 5/8"
Header material (4" x 6")
7/16" OSB wall sheathing

Labor hours reasonable and properly tabulated = 0, 5 pts

If the total material estimate is omitted, then a 3 point score for each item is not possible, therefore the result will be a 15 point deduction from the score.

Grays Harbor College Residential Carpentry 213 Capstone Exam - part 1

Complete Scoring Guide

Scoring of Drawings: 50 points

2 point items scored as follows:

- 0 = outcome not met
- 1 = outcome partially met
- 2 = outcome completely met

3 point items scored as follows:

- 0 = outcome not met
- 1 = outcome partially met
- 2 = outcome mostly met
- 3 = outcome completely met

Top view and cross section of floor system

meets prescription of span tables	0,2
mudsill accurate	0,1,2
mudsill anchors accurate	0,1,2
I-joist layout accurate, versa rim accurate	0,1,2
sheathing orientation correct	0,2

Top view wall 1

Dimensions accurate	0,1,2
Framing members accurate	0,1,2,3

Side view wall 1

Dimensions accurate	0,1,2
Framing members accurate	0,1,2,3

Top view wall 2

Dimensions accurate	0,1,2
Framing members accurate	0,1,2,3

Side view wall 2

Dimensions accurate	0,1,2
Framing members accurate	0,1,2,3

Top view wall 3

Dimensions accurate	0,1,2
Framing members accurate	0,1,2,3

Last Updated 2008

Side view wall 3		
Dimensions accurate	0,1,2	
Framing members accurate		0,1,2,3
Top view wall 4		
Dimensions accurate	0,1,2	
Framing members accurate		0,1,2,3
Side view wall 4		
Dimensions accurate	0,1,2	
Framing members accurate		0,1,2,3

Example:

Top view wall X		
Dimensions accurate, O.C. layout incorrect	1/2	
Framing member's accurate but		
Wall intersection omitted		2/3
Side view wall X		
Dimensions accurate	2	
Framing members not accurate:		
No header, no rough sill, no trimmers		1/3

Sample Lineout/Performance Assessment

Residential Carpentry – 1735 Taft St.

Weekly Plan: 2/19/08

Monday: President's Day. No Class.
Tuesday: Install outlookers, soffit blocking, roof sheathing.
Wednesday: Same
Thursday: Same

Next Week: Install Fascia, Soffit, written midterm review and exam.

Group	Group Assignments
Dudley Tim John W. Matt	Responsible for straight lining truss tails and installing outlookers and ledgers for soffit nailing on all non-gable soffit <i>except</i> North and West walls. *Classroom trailer/bathroom cleaning and organizing
Chris Dwayne Mark H. Jerry	Responsible for checking and correcting gable trusses for plumb and straight, installing all gable outriggers (outlookers), solid blocking on gable truss top chord and sheathing gable trusses * Material storage and organization.
Mike Gary Jack	Responsible for straight lining truss tails parallel with North side exterior wall, create outlookers and ledger for soffit on North side exterior wall. * Tool and equipment storage, tool trailer organization.

Paul
Don
Doug

Responsible for double-checking/correcting fixes on trusses according to engineering specifications, permanent bracing per truss engineering, bird and solid blocking for trusses, install hurricane fasteners (Simpson H1z/H2.5) per manufacturers instructions.

* Jobsite clean-up – debris, garbage, recycling.

Richard
Jim H.
Steve

Responsible for straight lining truss tails parallel with West side exterior wall, create outlookers and ledger for soffit on West side exterior wall.

* Jobsite safety and security

This week you will receive a performance assessment. It is worth 50 points.

You will be observed this week and rated in the following categories:

- Remaining "on-task" - focused on assigned work.
- *Completing* responsibilities according to the IRC/manufacturer's specifications/instructor's directions. (You must check other's work!)
- Problem solving - critical thinking.
- Information Use.
- Teamwork/cooperation, participation in your group.

See rubric for scoring. Counted in the assignment/project/competency portion of the grade.

Grays Harbor College Carpentry Syllabus

Performance Assessment Rubric

Category	0 points	4 points	6 points	8 points	10 points
On Task	Story time.	Distractions.	Minor distractions.	n/a	All the time.
Completed assigned tasks.	< 70% completed ATS.	<80% ATS	<90% ATS	<100% ATS	100% ATS.
Problem Solving Process - critical thinking	Asks questions rather than applying PSP.	Tries PSP & fails to complete task.	Applies PSP & completes task - needs rework.	Applies PSP & completes task <i>not</i> ATS.	Applies PSP & completes task ATS.
Information Use	Asks questions rather than attempting to use resources.	Not aware of resources and how to use them. Honest attempt.	Uses resources as appropriate yet applies findings incorrectly.	Uses resources as appropriate and applies findings. Not ATS.	Uses resources as appropriate and applies findings correctly. ATS.
Teamwork	Lets others carry the workload.	Negative attitude or distracter.	Hesitant.	Helper.	Team Player!

ATS = *According To Specs.* (i.e. instructor's directions, IRC, manufacturer's specs, etc.)

PSP= identify problem/goal, analyze possible solutions, apply chosen solution, analyze result ATS, refine process for future use or problem/goal corrections.

Assignments= You will be expected to perform at the production & quality level of an apprentice carpenter on the jobsite.

Safety = Hard hats, safety glasses, ladders, scaffolding, fall arrest systems, all apply.

This is a workplace-simulated program. This is real house built with real money. The "boss" has hired you to do a thorough job. The boss cannot check each nail pattern or measurement. Those who do quality work efficiently receive the best pay. Those who consistently fail on either account are a financial liability and are usually "*down-sized*".