

**CT S120 Basic Construction Techniques
Construction Technology
Spring 2015-Syllabus**

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Office Hours: by appointment only

Classroom: Technical Education Center, Room 139

Dates of Class: 1/13-2/18
Tuesdays, Wednesdays & Thursdays: 1:30 PM – 5:30 PM

Course Description: Overview of construction hand and power tool usage, building procedures and codes, job and site planning, layout, foundation, floor wall, and roof framing methods, utilizing current construction practices.

Required Text: Carpentry 5th Edition 2010, Floyd Vogt
(Copies of the text may be on reserve at the UAS Library)

Course Objectives, Schedule, and Competencies:

Course Objectives:

CT S120 will introduce the student to the appropriate use of hand and power tools, material identification and selection, architectural plans, building code, and rough carpentry. Instruction will be through classroom presentations, hands-on projects, student research and field visits. Competencies and Objectives are aligned with that of the National Association of Home Builders, Residential Construction Academy Series, a partnership of Delmar Learning and the Home Builders Institute. Construction techniques will follow the US Department of Energy Building America best practices for marine climates.

Instructional time will be split between lecture and lab work. Throughout the course, students will be constructing floor, wall, and roof panels that will become part of an affordable home built here in Juneau. Construction will take place in the UAS Tech Center and on a job site. For this reason, it will be necessary for students to meet in multiple locations and be appropriately prepared for the weather. Certain construction techniques will be demonstrated via "mock-ups" built in the CT lab.

UAS Student Competencies:

UAS faculty have defined six competencies (communication, quantitative skills, information literacy, computer usage, professional behavior, critical thinking) in which students will be assessed periodically during their studies at UAS. Aspects of these competencies will also be integrated in the teaching approach, class structure, and curriculum of this course.

Course competencies will be judged (using either academic testing **(at)** results or lab skills **(ls)** testing or both for the following:

Schedule:

We will be covering a wide array of information in a very short timeframe. Classes are long and will be broken up into classroom and lab segments. Below is a rough outline of topics and when they will be covered. The schedule may change depending upon student progression with lab projects.

Week 1—Hand Tools, Power Tools, Tool Safety Tests, Wood and Lumber

Week 2— Wood and Lumber, Fasteners, Architectural Plans, Layout

Week 3— Floor Framing

Week 4— Wall Framing

Week 5—Roof Framing

Week 6—Stair Framing and Final Exam

Please note: The above schedule and procedures in this syllabus are subject to change.

Student Responsibilities:

Students are responsible for their own safety.

It is mandatory to ask for instructor assistance if safe tool or machine operational procedures are not fully understood.

Safety glasses must be worn during any machine operation and at all other times eye injury is possible. They may be purchased at the campus bookstore or off campus. If you wear eyeglasses, you are required to wear safety glasses that are made to go over the top of them.

Students are responsible for damages to tools or equipment resulting from a careless action or failure to follow proper shop practices/procedures.

A clean and orderly lab is vital for safe and successful shop operations. Students are responsible for returning tools and materials to their proper places and for cleaning-up in all areas that have been worked in.
Normal clean-up time begins 10 minutes before end of class.

Students are expected to participate in classroom discussion and in assigned individual or group learning activities. Students are expected to demonstrate competence in correct tool and machine operation, and in shop practices and procedures.
Students are expected to pass safety exams with a 100% grade.
Students are expected to complete exercises and exams.

Grading:

This course is offered through the School of Career Education and will be graded on the standard academic scale based on the following:

Practical Lab (ls):

Maximum 17 sessions - 10 points per lab – 170 possible points
Lab points are earned through active participation during class period

Academic (at):

Quizzes/Assignments: Max 20 points per quiz – 100 possible points
Weekly take-home quizzes or assignments will be given out each Thursday. Exams are due the following Tuesday class. Late exams are deducted 50%.

Final Exam: 30 possible points

Total Points: 300

There will be an instructor evaluation during the last two weeks of class.

Drop/Withdraw

The last day to drop and withdraw from this class will be posted at the start of the semester

Please stay in touch and let me know if you cannot make it to class. If I haven't seen or heard from you in three consecutive class meetings, I will check to see if you have dropped. If you haven't, I will initiate a withdrawal.

Students with Disabilities

UAS is committed to providing accommodations for students who have disabilities in order to equalize their ability to achieve success in academic classes and to ensure physical access to student activities or university-sponsored events. The Disability Support Services (DSS) provides academic accommodation for students in both classroom and testing situations and coordinates registration for students with disabilities. If you experience a disability and would like information about support services, contact Disability Support Services, located in Mourant Building, First Floor at 796-6000 or by e-mail at margie.thomson@uas.alaska.edu. A staff member from Disability Resource Center will specify in a letter the accommodations that will be required for this class.