



Building Trades Syllabus

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Course Description:

In Building Trades, students participate in a two-year program during which they construct a new home from start to finish. Students are exposed to all phases of construction, from planning to layout, estimating, and building. This is a real world/life experience for students to safely practice and learn work ethic and a new skill set.

We review all building materials and their use in detail. We practice technical skills and methods, both new and old. Students also have the chance to work with subcontractors who are hired to work at the house throughout the building process.

Safety is our goal 100% of the time. Students must earn 100% on safety tests to participate. Every precaution is taken to secure the safety of all students and staff at HACTC.

Field trips, job shadowing and Cooperative Education are also parts of our curriculum.

Classroom work includes, but is not limited to, math, vocabulary and a Digital Assessment Tool (DAT). Students access their Chromebook for office work and safety assessments upon arrival to class.

Students also have the opportunity to participate in Future Business Leaders of America (FBLA) as their Career Technical Student Organization (CTSO).

Units of Study:

- Blueprint reading
- Safety modules
- National Center for Construction Education and Research (NCCER) modules
- Concrete layout and installation
- Energy Star construction
- House framing, layout and installation
- Stair layout and construction
- Roofing
- Door and window installation
- Siding choices
- Deck construction
- Rough and finish plumbing, hands-on with a licensed contractor
- Rough and finish electrical, hands-on with a licensed contractor
- Heat work, hands-on with a licensed contractor
- Insulation work
- Sheetrock work
- Painting
- Interior finish work
- Kitchen and bath cabinet and counter installation
- Landscaping
- House plan design

Classroom Expectations and Goals:

- Students are expected to arrive to class on time and be prepared to learn.
- Safety is a requirement. Absolutely no horseplay will be tolerated. Students will be expected to wear all safety equipment at all times or they cannot participate at the site.
- Absolutely no cell phone and/or ear bud use is allowed during class or at the site without instructor's permission. Students are assigned lockers with locks so cell phones can be locked up during class.
- All students are expected to participate in all activities unless other arrangements have been made.
- Students will be asked to work on their Digital Assessment Tool weekly. DATs will be graded separately from the Grading Categories.

Embedded Credit: Math

Concurrent Enrollments Offered:

- Construction Management I, Vermont Technical College, 2 credits (pending)
- Construction Management II, Vermont Technical College, 3 credits (pending)

Articulation Agreements:

- Vermont Technical College
- Lincoln Technical College
- Keene State College

Industry Recognized Credentials:

- National Center for Construction Education and Research (NCCER) Modules
- OSHA 10
- AED/CPR and First Aid
- WorkKeys National Career Readiness Certification (NCRC)

Grading Categories and Weights:

Communication	20%
Leadership & Teamwork	20%
Problem Solving/Critical Thinking	35%
Technical Skills	<u>25%</u>
Total	100%

Grading includes attendance, participation, live jobs, shop projects, safety practices, bellringers, homework, tests and quizzes.

Assignment Policy:

- Self-Evaluation Rubric
- Class Participation Rubric
- Lab Progress Rubric
- Projects, assignments, quizzes, tests, homework
- DAT (Digital Assessment Tool)
- Co-op Placements

Common Standards Assessed in Every Program:

Communication: ESS02.01 Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.

Leadership and Teamwork: ESS07.03 Employ teamwork skills to achieve collective goals and use team members' talents effectively.

Technical Skill: ESS10.01 Employ information management techniques and strategies in the workplace to assist in decision-making.

Problem Solving/Critical Thinking: ESS03.01 Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate).

Standards Unique to Building Trades:

ACC01.01.05 Use appropriate formulas to determine measurements of dimensions, spaces and structures.

ESS06.01.01 Assess workplace conditions with regard to safety and health.