

AREA CAREER CENTER OF HAMMOND
AREA DISTRICT OF CAREER AND TECHNICAL EDUCATION #2
COURSE SYLLABUS
CONSTRUCTION TECHNOLOGY
SCHOOL YEAR 2008-2009

Course Title: Construction Technology

Meeting Dates: Monday - Friday
AM Session: 7:45-10:15
PM Session: 11:45-2:15

Instructor: Mr. Scott Ciupak, Construction Technology Teacher
Location: ACC Room 141
Office Phone: (219) 933-2428 x2041
Main Office Fax: (219) 933-1680
E-Mail: saciupak@hammond.k12.in.us

Office Hours: 10:15-11:45 Monday - Friday, or by appointment

Prerequisites:

Students should be familiar with basic math and science principles.

Course Description:

Construction Technology is a comprehensive construction program that covers the most common aspects and techniques used in the construction trades. Students participate in a wide variety of hands-on projects in both the classroom, shop, and in the community. Construction Technology offers a second year in the program for students who successfully complete the first year.

Course Intent:

The goal of the course is to educate and expose the students to different aspects of construction technology and to help students make wise and informed career choices.

Assigned Curriculum:

Koel, Leonard (2002). *Carpentry*. (Fourth Edition). American Technical Publishers, Inc.: Homewood, IL
Koel, Leonard (2002). *Basic Plumbing*. (Fourth Edition). American Technical Publishers, Inc.: Homewood, IL
Koel, Leonard (2002). *Electrical*. (Fourth Edition). American Technical Publishers, Inc.: Homewood, IL

Indiana Professional Standards Covered:

- 1.1 Safety is taught as an integral part of the instructional program. (511 IAC 8-2-4(b))
- 1.2 Safety issues are addressed during all phases of program planning and implementation including selection and maintenance of facilities and equipment as well as management of classroom activities.
- 1.3 The Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) standards guide the implementation and maintenance of environmental health and safety features.
- 1.4 Facilities are accessible to all populations and are appropriate for the instructional program being offered.
- 2.1 Advisory committees (general and program area) are organized and meeting as required each school year. (511 IAC 8-2-8)
- 2.2 Advisory committees meet a minimum of twice per year and maintain accurate minutes of each meeting.

- 2.3 Membership includes a balanced representation from business/industry, labor, education, males and females, and advocates for racial and ethnic minorities, and the disabled.
- 2.4 Program advisory committees annually review course standards, curriculum, assessment practices, and resources (including equipment) for appropriateness and effectiveness.
- 3.1 All career and technical education teachers possess a valid teaching license for their teaching assignments under rules adopted by the Indiana Professional Standards Board.
- 3.2 Teachers participate in workshops, conferences, and professional organization activities to remain current in their program area and to meet license renewal requirements.
- 3.3 Teachers demonstrate knowledge of learners in the instructional process.
- 3.4 Teachers demonstrate knowledge of content and instructional resources pertaining to basic skills, the world of work, and the skills and processes of industry.
- 3.5 Teachers create an environment that develops democratic values, risk taking, and a desire for lifelong learning.
- 3.6 Teachers select from a variety of instructional strategies in performance-based learning of subject matter, critical thinking, and problem-solving.
- 3.7 Teachers understand and use a variety of assessment and evaluation strategies to assist learners in their intellectual, social, and physical development.
- 3.8 Teachers reflect on personal practices to improve the effectiveness and quality of learner education.
- 3.9 Teachers foster collaborative relationships with business, industry, and government in order to extend and enrich opportunities for learners.
- 3.10 Teachers work with colleagues and the professional community to improve schools and to advance knowledge in the occupational area.
- 3.11 Teachers foster relationships with families and the local community to achieve common goals for all learners.
- 3.12 Teachers involve the learners in a variety of activities to help them understand the changing workplace as they prepare to enter the workforce.
- 3.13 Teachers prepare learners to meet the competing demands and responsibilities of the workplace.
- 3.14 Teachers assist learners in developing self-awareness and confidence as well as sound personal and social values.
- 4.1 State content standards are used as the foundation for local curriculum development and input from the community is considered during the development process.
- 4.2 Curriculum activities help students apply appropriate English/language arts, mathematics, science, and social studies standards in work-related situations.
- 4.3 Local curriculum emphasizes the technical, academic, and employability skills needed for success.
- 4.4 Curriculum is consistent with available state and national industry certification standards.
- 4.5 Curriculum is aligned with existing postsecondary programs.
- 4.6 Curriculum is connected to available apprenticeship training programs.
- 4.7 A variety of assessment strategies is used to document student achievement.
- 4.8 Each course or program has the resources necessary to implement state standards and local curriculum and to adapt to needs of students.
- 4.9 Career and Technical Student Organization (CTSO) activities enhance the instructional program.
- 4.10 Career pathways are used to identify a sequence of courses that includes a rigorous technical core and academic preparation.
- 4.11 Guidance activities are used to help students affirm or adjust career goals.
- 4.12 Sequenced career and technical courses meet the directed elective requirements of the Core 40 curriculum.
- 4.13 Student data is collected to meet state and federal accountability requirements.

Learning Objectives:

1. To learn safe and practical use of hand, portable and stationary tools.
2. To identify proper materials for each construction trade.
3. To determine proper tool and material selection by analyzing blueprints and drawings.
4. To design, plan and build a complete construction project from start to finish.
5. To work and complete projects as a team.
6. To experience and evaluate many of the careers available in construction technology.

Instruction Strategies/Methods:

1. Discussion/Questioning
2. Problem Solving
3. Discovery Learning
4. Role Playing/Simulation
5. Case Study
6. Lecture
7. Group Projects

8. Job Shadows/Internships
9. Journaling
10. Peer Evaluation
11. Mentoring
12. Theory and Practical Assessments

Diversity:

It is the policy of the Area Career Center not to discriminate on the basis of race, color, religion, sex, national origin, age or handicap in its programs as required by the Indiana Civil Rights Act (I.C. 22-9.1), Title VI and VII (Civil Rights Act of 1964, Title IX (Educational Amendments), and Section 504 (Rehabilitation Act of 1973).

Title IX Officer and Section 504 Officer

Connie Manous, Director of Special Education
 (219) 933-2400 x1081
CBManous@hammond.k12.in.us

Special Needs Learners:

If adaptations or accommodations are needed in the classroom, for transportation, or for emergency procedures because of a disability or medical condition, please inform Mr. Ciupak as soon as possible.

Assignments:

Daily Grade: Points will be awarded based on student's performance for each day. Performance levels are determined by the student's effort, attitude, attendance and punctuality, safety practices, and the ability to follow direction.

Written Assignments: Periodically students will be required to complete written assignments to further their knowledge of construction technology.

Projects: Student projects will be evaluated by how accurately they complete assignments to specification.

Work Study: Second year students may participate in an internship provided they meet all criteria as specified by Mr. Ciupak.

Grading and Credits:

All students will have grades reported every six weeks. Two credits are awarded to Hammond students at the end of each trimester (12 weeks). All other students receive three credits at the end of each semester (18 weeks). Even though credits are awarded at the end of a trimester or semester, one credit is associated with each six week grading period for all students. Credits are only awarded to students who pass class objectives with a 60% or better and are in compliance with the ACC attendance and discipline policies. Points are calculated by using raw scores.

The unadjusted grade scale is as follows:

A+	100% or higher	B-	82%-80%	D	66%-63%
A	99%-93%	C+	79%-77%	D-	62%-60%
A-	92%-90%	C	76%-73%	F	59% and below
B+	89%-87%	C-	72%-70%		
B	86%-83%	D+	69%-67%		

Accreditation and College Credit:

The ACC has contracts with many local colleges that will allow honors-level students to gain college credit while they are at the ACC. We have agreements of different scope with both Ivy Tech and Joliet Junior College.

Club Memberships and Competitions:

All students will have the option to be enrolled in the SkillsUSA/VICA organization for \$12. Select students will have the opportunity to compete in the regional and state SkillsUSA competitions.

Student Expectations:

1. Attend all class meetings. Be prepared to start class on time.
2. Complete assignments on the specified due date.
3. Prepare for and participate in all class discussions and activities.
4. Maintain a positive attitude at all times.
5. Demonstrate professionalism in all aspects of construction technology.
6. Respect the school, equipment, teachers, other students and yourself.

Class Schedule:

The pace and content of the class will be determined by student progress and the availability and timing of class projects.

Signatures and Acknowledgment:

I, _____, certify that I understand what is expected of me as
(Print Full Student Name)
a student and will try my best to realize my full potential for the entire 2008-09 school year.

(Student Signature)

(Date)

(Parent Signature)

(Date)