

URBANDALE COMMUNITY SCHOOL DISTRICT
CURRICULUM FRAMEWORK

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| SUBJECT: | Vocational Education | |
| COURSE TITLE: | Building Construction | 1 Semester |
| PREREQUISITES: | Woodworking Technology with minimum grade of C and instructor approval | |

COURSE DESCRIPTION:

Building Construction will explore all areas of construction including residential, commercial, and civil construction. The processes of design, estimating, planning and the contractor's role in scheduling will be covered.

CONTENT STANDARDS AND BENCHMARKS:

In order that our students may achieve the maximum benefit from their talents and abilities, the students in Urbandale Community School District's Building Construction course should be able to...

Content Standard I. Demonstrate comprehension, computation, and applied technology skills.

- Benchmarks:
- Interpret construction drawings independently.
 - Demonstrate and apply an understanding of construction planning.
 - Demonstrate industrial math literacy.
 - Demonstrate understanding of materials required for construction.
 - Demonstrate the safe and proper use of hand tools, portable tools, and industrial machines.
 - Apply appropriate construction techniques and terminologies.

Content Standard II. Develop communication, employability and life management skills.

- Benchmarks:
- Demonstrate an awareness/practice site safety management.
 - Display responsibility, self-esteem, sociability, self-management, integrity, and honesty.
 - Demonstrate leadership and fellowship qualities.



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**CONTENT STANDARDS AND COURSE BENCHMARKS WITH INDICATORS
FOR BUILDING CONTRUCTION:**

Standard I. Demonstrate comprehension, computation, and applied technology skills. Students in Building Construction should be able to...

Benchmark: Interpret construction drawings independently.

Indicators: Identify and follow the steps of the building process.
Develop plan of procedure to achieve finished project.
Interpret blueprint symbols.
Use construction terminologies appropriately.

Benchmark: Demonstrate and apply an understanding of construction planning.

Indicators: Demonstrate the ability to perform site layout.
Demonstrate the processes needed in order to complete a construction project.
Identify the role and function of building codes and inspectors.
Identify basic materials for particular trade or process.

Benchmark: Demonstrate industrial math literacy.

Indicators: Read a rule/tape measure within 1/16th of an inch.
Calculate linear feet, cubic yards, material costs, and angular dimensions (stairs, roof pitch).
Complete activities on estimating, bidding and labor relations.

Benchmark: Demonstrate understanding of materials required for construction.

Indicators: Understand the types of equipment needed for a construction company.
Interpret a materials list.
Identify, select, and use materials needed for a construction project.



Benchmark: Demonstrate the safe and proper use of hand tools, portable tools, and industrial machines.

Indicators: Demonstrate proper uses of equipment needed for a construction company.
Maintain and service machines and equipment.

Benchmark: Apply appropriate construction techniques and terminologies.

Indicators: Explain the scheduling process used in the construction industry.
Lay out structural materials on center.
Identify and assemble various construction systems.
Select and use jigs and fixtures for machine operations.
Interpret working drawings.

**Standard II. Develop communication, employability and life management skills.
Students in Building Construction should be able to...**

Benchmark: Demonstrate an awareness/practice site safety management.

Indicators: Demonstrate proper lifting techniques.
Identify appropriate first aid procedures.
Identify climbing equipment and demonstrate the proper setup of ladders, planks, and scaffolds.

Benchmark: Display responsibility, self-esteem, sociability, self-management, integrity, and honesty.

Indicators: Exert a high level of effort and perseverance toward goal attainment
Demonstrate belief in own self-worth and maintain a positive view of self
Demonstrate understanding/friendliness/empathy in group settings
Take responsibility for mistakes and/or good work

Benchmark: Demonstrate leadership and fellowship qualities.

Indicators: Utilize time effectively.
Plan together and participate as a member of a team, contributing to the group effort.
Organize activities as a team.

No student enrolled in the Urbandale Community School District shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination in the District's programs on the basis of race, color, creed, sex, religion, marital status, ethnic background, national origin, disability, sexual orientation, gender identity, or socio-economic background. The policy of the District shall be to provide educational programs and opportunities for students as needed on the basis of individual interests, values, abilities and potential.

