

Applied Home Maintenance (Business)

Elective – Semester – 11/12

Prerequisites: consent of instructor

Course Description

The Luther High School Technical Education class is designed to develop God-given talents and equip the young Christian student with basic life skills in and around the home. The skills will include basic home upkeep and repairs.

Course Goals

The Christian teacher will:

1. Encourage Christian stewardship principles.
2. Show and demonstrate the use of basic tools and the understanding needed for various upkeep and repair projects in the home.
3. Develop the student's abilities in home improvements.
4. Select appropriate projects for the students to work on in a "hands on" environment.
5. **Stress of the importance of safety first in the classroom and work area.**

Course Objectives

The student will:

1. Understand that basic home upkeep and repairs afford an opportunity to maintain and improve blessings in grateful service to God.
2. Know the proper names of tools used and demonstrate the proper way to use them in the home.
3. Demonstrate the ability to do simple home projects in plumbing, electrical, dry walling as well as taping, prime and finish paint, carpentry, basic masonry, pouring concrete, outdoor landscaping, small engine, automobile maintenance, and home flooring.
4. Will demonstrate the ability to find out square feet (yardage) of materials needed for various projects.
5. Understand the electrical and plumbing codes of Minnesota and Wisconsin.
6. Know when to call in a certified licensed technical repair man verses "do it yourself."

Course Outline

1. Basic tool usage and names of tools and brands.
2. Basic plumbing
 - a. Replace toilets with subfloor
 - i. Check leaks
 - ii. Unstop toilets
 - b. Faucets-change o-rings
 - c. Cleaning under sink traps
 - d. Unclogging sinks and showers
3. Electrical
 - a. Replace switches
 - b. Replace outlets
 - c. Replace light fixtures/types
 - d. Understand circuit breakers, fuses and wattage.
4. Flooring (how to install as well as amount needed)
 - a. Carpet
 - b. Ceramic tile (lay a 4 x 4 section on plywood with subflooring)
 - c. Tile
 - d. Hardwood floor
5. Small engines (lawn mowers-atvs-snow blower)
 - a. The change or clean spark plugs
 - b. Oil changes in vehicles (how often)
 - c. Check the transmission fluid as well as air cleaners
 - d. Oil changes in small engines
 - e. Rotate tires-check air pressure
6. Landscaping
 - a. Trim trees

- b. Design an attractive plan for landscaping around a home or at school.
 - c. Stone verses wood
 - d. Types of walkways
 - e. Types of decks (designing)
 - f. Retaining walls
7. Masonry
- a. Pouring concrete
 - i. Sand verses black ground
 - ii. Yards needed by size and thickness of concrete
8. Carpentry
- a. Help with the set for the school play
 - b. Make a small project (stool or table) for the home
 - c. Study rafters, side walls and floors
 - d. The insulation factor in walls and windows
 - e. Dry wall project with taping and painting
 - f. Stain and finish door and window trim and install
 - g. Vinyl siding verses steel siding verses wood siding
 - h. Cabinets

Instructional Strategies

Technical education students will be taught the basics of home repairs and upkeep of the home and property. A number of field trips to Home Depot and Menards will be taken during class time. Field trips to or representatives from Roosevelt's (plumbing and lighting), Sherwin Williams (paint and stain), Decker (flooring) will benefit the class.

Grading

Tests will be given on knowledge of the basics in technical education. Students will also be graded on their work ethic, creativity, and quality of the "hands on" projects due. Completing work in a timely fashion will also affect their grade.

Grading Scale

A+	99-100
A	95-98
A-	93-94
B+	91-92
B	87-90
B-	85-86
C+	83-84
C	79-82
C-	77-78
D+	75-76
D	72-74
D-	70-71
F	0 -69

Student Materials

A text book is provided. Students may bring in tools from home however many common tools are available for student use. Students will purchase materials for their projects. La Crosse Area Builders Association has a grant that can be applied for to help with materials and tools. Various stains-finishes-sand paper will be provided.

Classroom Procedures

Students not in the room at the beginning of the period will be considered tardy.

Safety will be a key issue for this course. Any behavior which compromises safety will have severe consequences. If it continues the student will be terminated from the class.