

COURSE SYLLABUS

LAST REVIEW	Fall 2022
COURSE TITLE	Drywall Level 1-2
COURSE NUMBER	CONS 0112
DIVISION	Career and Technical Education
DEPARTMENT	CONS
CIP CODE	46.0201
CREDIT HOURS	3
CONTACT HOURS/WEEK	Class: 1 Lab: 4 Clinical:
PREREQUISITES	KBOR approved Core Curriculum. OSHA 10, Math Level 3 Recommended

COURSE DESCRIPTION

This is the course in Drywall. It is in alignment with NCCER (selected modules) and the Kansas Board of Regents. The course topics include: Environmental sustainability, Orientation to the Trade, Construction Materials and Methods, Thermal and Moisture Protection, Drywall Installation, and Drywall Finishing.

PROGRAM LEARNING OUTCOMES

1. Demonstrate appropriate safety practices and procedures.
2. Demonstrate proper methods for completion of interior finishes.
3. Demonstrate proper methods for mechanical installation

TEXTBOOKS

<http://kckccbookstore.com/>

METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE

- I. Introduction to the Trade
 - A. Drywall trade.
 - B. Aptitudes, behaviors, and skills.
 - C. Training opportunities.
 - D. Career and entrepreneurial opportunities.
 - E. Responsibilities.
 - F. Personal characteristics.
 - G. Safety.

II. Construction Materials and Methods

- A. Common types of residential building materials.
- B. Structural components.
- C. Commercial building materials.
- D. Residential and commercial construction.
- E. Construction of a frame residence.
- F. Common terms.
- G. Suspended ceilings.
- H. Types of gypsum board.
- I. Fire stopping systems.
- J. Code requirements.

III. Thermal and Moisture Protection

- A. Insulation.
- B. Types of insulation material.
- C. Insulation for a structure.
- D. Selected insulation materials.
- E. Moisture control.
- F. Vapor barriers.
- G. Waterproofing.
- H. Air infiltration.
- I. Building wraps.

IV. Drywall Installation

- A. Types of drywall.
- B. Specific installations.
- C. Fasteners for drywall.
- D. Fastener schedules.
- E. Single-layer and multi-layer drywall installations including:
 - 1. Nails
 - 2. Drywall screws
- F. Gypsum drywall on steel studs.
- G. Soundproofing.
- H. Estimate materials.

V. Drywall Finishing

- A. Six levels of finish.
- B. Hand tools.
- C. Automatic tools.
- D. Identify the materials used in drywall including:
- E. Compounds
- F. Joint reinforcing tapes
- G. Trim material
- H. Textures and coatings
- I. Hand tools.
- J. Types of problems.
- K. Patching damaged drywall.

VI. Environmental Sustainability

- A. Environmentally safe waste disposal.
- B. Life cycle analysis.
- C. Recycled material.

- D. Low VOC emissions.
- E. New “green” materials.
- F. New “green” methods and practices.
- G. “Low impact” designs.

COURSE LEARNING OUTCOMES AND COMPETENCIES

Upon successful completion of this course, the student will:

- A. Identify and describe the trade, characteristics, safety, training and careers.
 - 1. Describe the history of the drywall trade.
 - 2. Identify the aptitudes, behaviors, and skills needed to be a successful drywall specialist.
 - 3. Identify the training opportunities within the drywall trade.
 - 4. Identify the career and entrepreneurial opportunities within the drywall trade.
 - 5. Identify the responsibilities of a person working in the construction industry.
 - 6. State the personal characteristics of a professional.

- B. Identify and describe construction materials and methods, terms, and safety.
 - 7. Describe the composition and uses of the common types of residential building materials.
 - 8. Identify the major structural components of a residential building.
 - 9. Describe the composition and uses of the common types of commercial building materials.
 - 10. Describe common methods of residential and commercial construction.
 - 11. State the major steps in the construction of a frame residence.
 - 12. Explain common terms used in construction.
 - 13. Identify various types of suspended ceilings.
 - 14. Identify the various types of gypsum board and their applications.
 - 15. Describe types of firestopping systems.
 - 16. Describe the construction of walls to meet code requirements for fire and sound ratings.

- C. Identify and describe thermal and moisture protection, types of insulation, and waterproofing.
 - 17. Describe the requirements for insulation.
 - 18. Describe the characteristics of various types of insulation material.
 - 19. Calculate the required amounts of insulation for a structure.
 - 20. Install selected insulation materials.
 - 21. Describe the requirements for moisture control and ventilation.
 - 22. Install selected vapor barriers.
 - 23. Describe various methods of waterproofing.
 - 24. Describe air infiltration control requirements.
 - 25. Install selected building wraps.

- D. Identify and describe the types of drywall, installation, and fasteners.
 - 26. Identify the different types of drywall and their uses.
 - 27. Select the type and thickness of drywall required for specific installations.
 - 28. Select fasteners for drywall installation.
 - 29. Explain the fastener schedules for different types of drywall installations.
 - 30. Perform single-layer and multi-layer drywall installations using different types of fastening systems, including:
 - Nails

Drywall screws

31. Install gypsum drywall on steel studs.
 32. Explain how soundproofing is achieved in drywall installations.
 33. Estimate material quantities for a drywall installation.
- E. Identify and describe drywall finishing methods, tools, joints and types of damage.
34. State the differences between the six levels of finish established by industry standards and distinguish a finish level by observation.
 35. Identify the hand tools used in drywall finishing and demonstrate the ability to use these tools.
 36. Identify the automatic tools used in drywall finishing.
 37. Identify the materials used in drywall finishing and state the purpose and use of each type of material, including:
 - Compounds
 - Joint reinforcing tapes
 - Trim material
 - Textures and coatings
 38. Recognize various types of problems that occur in drywall finishes; identify the causes and correct methods for solving each type of problem.
 39. Patch damaged drywall.
- F. Identify and describe sound environmental practices for drywall, including waste disposal, life cycle analysis, green practices and low impact
40. Describe waste disposal methods for this industry according to EPA and industry guidelines.
 41. Describe the process of life cycle analysis in this industry based on industry guidelines.
 42. Identify recycled materials by label and industry practice.
 43. Define "low emission" and give two examples.
 44. Identify new "green" materials now being introduced or currently used in this industry.
 45. Describe new "green" practices and methods being instituted or currently employed within this industry. identify and explain the term "low Impact" as it relates to the environment.

ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

College Catalog

<https://www.kckcc.edu/academics/catalog/index.html>

College Policies and Statements

<https://www.kckcc.edu/about/policies-statements/index.html>

Accessibility and Accommodations

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.