

Title 7: Education K-12

Part 143: Carpentry



2015 Carpentry

Mississippi Department of Education

Program CIP: 46.0201 Carpentry

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The Research and Curriculum Unit (RCU), located in Starkville, MS, as part of Mississippi State University, was established to foster educational enhancements and innovations. In keeping with the land grant mission of Mississippi State University, the RCU is dedicated to improving the quality of life for Mississippians. The RCU enhances intellectual and professional development of Mississippi students and educators while applying knowledge and educational research to the lives of the people of the state. The RCU works within the contexts of curriculum development and revision, research, assessment, professional development, and industrial training.

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Preface

Secondary career and technical education programs in Mississippi face many challenges resulting from sweeping educational reforms at the national and state levels. Schools and teachers are increasingly being held accountable for providing true learning activities to every student in the classroom. This accountability is measured through increased requirements for mastery and attainment of competency as documented through both formative and summative assessments.

The courses in this document reflect the statutory requirements as found in Section 37-3-49, *Mississippi Code of 1972*, as amended (Section 37-3-46). In addition, this curriculum reflects guidelines imposed by federal and state mandates (Laws, 1988, Ch. 487, §14; Laws, 1991, Ch. 423, §1; Laws, 1992, Ch. 519, §4 eff. from and after July 1, 1992; Carl D. Perkins Vocational Education Act IV, 2007; and No Child Left Behind Act of 2001).

Executive Summary

Pathway Description

The Construction pathway is designed as a secondary program for preparation to enter the field of Carpentry. The Carpentry program includes an introduction to the basic carpentry processes. The purpose of the course is to prepare students to continue study in a postsecondary construction program (Residential Carpentry) or to begin work at the entry level in a carpentry occupation. The carpentry units are written to the National Center for Construction Education and Research (NCCER) certification standards.

Industry Certification

NCCER Learning Series – Carpentry Standards Level 1

Assessment

The latest assessment blueprint for the curriculum can be found at <http://www.rcu.msstate.edu/Curriculum/CurriculumDownload.aspx>

Student Prerequisites

In order for students to be able to experience success in the program, the following student prerequisites are suggested:

1. C or higher in English (the previous year)
2. C or higher in Math (last course taken or the instructor can specify the math)
3. Instructor Approval and TABE Reading Score (eighth grade or higher)

or

1. TABE Reading Score (eighth grade or higher)
2. Instructor Approval

or

1. Instructor Approval

Teacher Licensure

The latest teacher licensure information can be found at <http://www.mde.k12.ms.us/educator-licensure>

Professional Learning

If you have specific questions about the content of any of training sessions provided, please contact the Research and Curriculum Unit at 662.325.2510

Course Outlines

Option 1—Two One-Carnegie-Unit Courses

This curriculum consists of two one-credit courses, which should be completed in the following sequence:

1. **Theory and Application of Carpentry I – Course Code: 993111**
2. **Theory and Application of Carpentry II – Course Code: 993112**

Course Description: Theory and Application of Carpentry I Course Code: 993111

Theory and Application of Carpentry I includes an in-depth study of basic safety, construction math, materials, and construction drawings used in the carpentry field. This one-Carnegie-unit course should only be taken after students successfully pass Construction Core.

Course Description: Theory and Application of Carpentry II Course Code: 993112

Theory and Application of Carpentry II includes an in-depth study of floor framing systems, wall, ceiling, and roof framing, windows and doors, and construction essentials. This course also reinforces safety related to the construction industry. This one-Carnegie-unit course should only be taken after students successfully pass Theory and Application of Carpentry.

Theory and Application of Carpentry I — Course Code: 993111

Unit	Unit Name	Hours
1	Orientation	5
2	Basic Safety	20
3	Construction Math	22.5
4	Introduction to Materials Used in Construction	22.5
5	Introduction to Construction Drawings, Specifications, and Layout	20
6	Floor Framing Systems	50
Total		140

Theory and Application of Carpentry II — Course Code: 993112

Unit	Unit Name	Hours
7	Wall, Ceiling, and Roof Framing	60
8	Windows and Doors (Building Envelope Systems)	40
9	Construction Essentials	40
Total		140

Option 2—One Two-Carnegie-Unit Course

This curriculum consists of one two-credit course, which should be completed in the following sequence:

1. Carpentry Course Code: 993110

Course Description: Carpentry (Course Code: 993110)

The Carpentry course consists of an in-depth study of basic safety, construction math, materials, wall, ceiling, and roof framing; windows and doors; and construction essentials. This one-Carnegie-unit course should only be taken after students successfully pass Construction Core. Upon the completion of this course, students will have the knowledge to complete the NCCER Level I Certification.

Carpentry — Course Code: 993110

Unit	Unit Name	Hours
1	Orientation	5
2	Basic Safety	20
3	Construction Math	22.5
4	Introduction to Materials Used in Construction	22.5
5	Introduction to Construction Drawings, Specifications, and Layout	20
6	Floor Framing Systems	50
7	Wall, Ceiling, and Roof Framing	60
8	Windows and Doors (Building Envelope Systems)	40
9	Construction Essentials	40
Total		280