

**Merrillville High School
Ivy Tech Community College-Northwest
Dual Credit Course Syllabus**

Course Information:

High School Course Title & DOE #: Construction Trades 1A, 1B, 1C - 5580

HS Credits 3.0

Ivy Tech Course Title: Introduction to Carpentry, Part I – BCTI101

Ivy Tech Credits: 3.0

Length of Course: 3 trimesters

High School Prerequisites: None

Ivy Tech Prerequisites: Students seeking Ivy Tech dual credit must create an Ivy Tech account by registering online at: <http://ivytech.edu/dualcreditapplication>. You only need to register one time to obtain a “C” number.

Successful completion of BCTI 100 – Introduction to Construction.

Your grade for this high school course will be the same grade you receive for your dual credit course and will appear on your college transcript with Ivy Tech. Make sure you perform at a “B” or better because this sets your grade expectations for college.

High School Faculty Information:

Name: Terrell Taylor

Office Location: Merrillville High School

Contact Information: Phone: 219-650-5307 ext 7579 Email: ttaylor@mvsc.k12.in.us

Catalog Description:

This course covers the NCCER Carpentry Level 1 and is a prerequisite to most other construction courses. Its modules cover topics such as basic safety, communication skills, and introduction to construction drawings; all basic skills needed to continue education in the construction program. The NCCER Carpentry Level 1 certificate and wallet card will also be awarded upon successful completion of this course.

Course Objectives:

Students will create and read blueprints, drawings and plot plans to construct physical objects and/or repair/remodel buildings. Students will explore and research career opportunities in Construction.

Students will be introduced to Indiana Residential code for residential dwellings and continue to consistently practice safety in the workplace, including OSHA Standards.

Course Content:

Common, 3 dimensional and geometric construction projects based on basic blueprints and other technical drawings, Construction drawing, math and applications, freehand technical sketching and pictorial/perspective drawings incorporating views and details, scale transposition, tolerances, electrical symbols, materials lists. Introduction to residential design and sitework. Indiana Residential code, OSHA standards, Career opportunities

Required High School Textbook/Resources:

Carpentry Level 1, 5th Edition	Pearson - NCCER
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Grading and Evaluation:

Grades are electronically entered into RDS. Final exams constitute 20% of overall trimester grade.

Methods of Evaluation:

Skill work, drawings, quizzes, research, presentations, demonstrations, in-house projects, final exam

Grading Scale:

92-5-100 = A
89.5-92.49 = A-
86.5-89.49 = B+
82.5-86.49 = B
79.5 - 82.49 = B-
76.5 - 79.49 = C+
72.5 - 76.49 = C
69.5 - 72.49 = C-
66.5 - 69.49 = D+
62.5 - 66.49 = D
59.5 - 62.49 = D-
59.49 and below = F

Assignments and Tentative Course Schedule:**1st 12 weeks**

<u>Class Meeting</u>	<u>Topic</u>	<u>Assigned Work</u>	<u>Work Due and Exams</u>
Week 1	Module 1 - Orientation to the Trade	Identify the career and entrepreneurial opportunities within the carpentry trade	Quiz on terminology
Week 2	Module 2 - Building Materials, Fasteners, and Adhesives	Identify various types of building materials and describe their uses	
Week 3	Module 3 - Hand and Power Tools	Explore different types of Hand & Power Tools and the "SAFE usage	
Week 4	Module 4 - Introduction to Construction Drawings, Specifications and Layout	Describe the types of drawings usually included in a set of plans and describe the information found on each type.	
Week 5	Module 5 - Floor Systems	Read and interpret specifications and drawings to determine floor system requirements	Activity
Week 6	Module 5 - Floor Systems Module 6 - Wall Systems	Identify the components of a wall system.	Activity
Week 7	Module 6- Wall Systems Module 7 - Ceiling Joist & Roof Framing	Identify the components of ceiling framing.	Activity
Week 8	Module 7 - Ceiling Joist & Roof Framing Module 8 - Introduction to Building Envelope	Identify the components of the building envelope.	Activity
Week 9	Module 8 - Introduction to Building Envelope	State the requirements for a proper window installation.	Activity
Week 10	Module 9 - Basic Stair Layout	Identify the types of stairways.	Activity
Week 11	Module 9 - Basic Stair Layout	Identify the various components associated with stairs.	Activity
Week 12	Review	Review	FINAL EXAM

2nd 12 weeks

<u>Class Meeting</u>	<u>Topic</u>	<u>Assigned Work</u>	<u>Work Due and Exams</u>
Week 1	Module 1 - Orientation to the Trade	Identify the career and entrepreneurial opportunities within the carpentry trade	Quiz on terminology
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Week 8			
Week 9			
Week 10			
Week 11	Review	Review	Activity
Week 12	Review	Review	FINAL EXAM