



**Florida Department of Education Student Performance
STANDARDS ALIGNMENT & SUGGESTED PACING GUIDE**

Building Trades & Construction Design Technology 1



**iCEV Architecture, Construction, Transportation &
Manufacturing Site**

Scope & Sequence	Lesson Title	CTE Standards and Benchmarks	Days of Teaching
1	Personal & Occupational Health & Safety	01.01; 01.02; 01.03; 01.04; 01.05; 01.06; 01.08; 01.09; 01.10	11
2	Large Wood Power Tools - I: Safety, Operation & ID	01.07; 03.01	3
3	Large Wood Power Tools - II: Safety, Operation & ID	01.07; 03.01	2
4	Portable Wood Power Tools - I: Safety, Operation & ID	01.07; 03.01	2
5	Portable Wood Power Tools - II: Safety, Operation & ID	01.07; 03.01	2
6	Large Metal Power Tools: Safety & Operation	01.07; 03.01	6
7	Hand Tool ID & Terminology I	02.01	6
8	Hand Tool ID & Terminology II	02.01	6
9	Hand Tool ID & Terminology III	02.01	6
10	The Construction Industry	04.01; 04.02; 04.03; 05.01; 05.02; 05.03; 05.04; 06.03; 06.07; 06.08;	7
11	Project Management Skills	04.04	13
12	Employability Skills	06.01; 06.06; 06.07; 06.13	5
13	Exploring Careers: Architecture & Construction	06.02; 06.05; 06.09	10
14	Formulas for Career Success: Portfolio Development	06.04	5
15	Formulas for Career Success: Job Search	06.10	2
16	Decision Making	06.11	4
17	Confidentiality in the Workplace	06.12	4

Florida Department of Education Student Performance Standards
Building Trades and Construction Design Technology 1

Course Number 8722010

Course Credit 1

Course Description

The purpose of this course is to provide students with competencies in safety practices; the use of hand and power tools; construction components, materials and hardware; construction industry occupations and employability skills.

CTE Standards and Benchmarks		Lesson Title	Location
01.0 Demonstrate safety practices and follow disaster plans--The student will be able to:			
01.01	Observe and comply with all applicable company and organizational safety policies and Occupational Safety and Health Administration (OSHA) rules and regulations.	Personal & Occupational Health & Safety	Slides 5 - 18; Project - OSHA
01.02	Be able to demonstrate the purpose of Safety Data Sheets (formerly known as Material Safety Data Sheets (MSDS)) and follow the procedures as necessary.	Personal & Occupational Health & Safety	Slides 19 - 22; Activity - MSDS vs. SDS; Activity - Safety Data Sheet Information
01.03	Discuss, analyze and explain the "Right-to-Know" Law as recorded in (29 CFR-1910.1200).	Personal & Occupational Health & Safety	Student Handout - "Right-to-Know"
01.04	Identify and demonstrate the use of safety equipment such as fall arrest systems, fire extinguishers, scaffolds and ladders.	Personal & Occupational Health & Safety	Slides 88, 35 - 36, 63 - 64, 67 - 68, 103; Student Handout - Safety Equipment
01.05	Identify, interpret and follow disaster plans.	Personal & Occupational Health & Safety	Slides 98 - 113; Project - Public Service Announcement
01.06	Describe and demonstrate appropriate safety attitudes and behaviors in the shop and on the job in the construction industry.	Personal & Occupational Health & Safety	Entire lesson
01.07	Describe and demonstrate the appropriate safe use and maintenance of portable and stationary power equipment in the shop and on the job in construction industry.	Large Wood Power Tools - I: Safety, Operation & ID	Entire lesson; Activity - Band Saw Puzzle; Project - Large Wood Power Tool Use
		Large Wood Power Tools - II: Safety, Operation & ID	Entire lesson; Project - Using the Tools
		Portable Wood Power Tools - I: Safety, Operation & ID	Entire lesson; Activity - Tool Set-Up
		Portable Wood Power Tools - II: Safety, Operation & ID	Entire lesson; Activity - Drill Bits; Project - Design and Build
		Large Metal Power Tools: Safety & Operation	Entire lesson; Activity - Using The Tools
01.08	Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments.	Personal & Occupational Health & Safety	Slides 33 - 78; Activity - Hazard Solutions; Activity - Hazard Solutions Teacher Instruction Sheet

CTE Standards and Benchmarks		Lesson Title	Location
01.09	Explain and demonstrate emergency procedures to follow in response to workplace accidents.	Personal & Occupational Health & Safety	Slides 98 - 113; Project - Public Service Announcement
01.10	Create a disaster and/or emergency response plan for a specific instance.	Personal & Occupational Health & Safety	Slides 98 - 113; Project - Public Service Announcement

CTE Standards and Benchmarks		Lesson Title	Location
02.0 Identify and use basic hand tools--The student will be able to:			
02.01	Select and utilize appropriate hand tools typically used in the construction industry for specific tasks in accordance with safety guidelines and standard practice.	Hand Tool ID & Terminology I	Segment 2. Screwdrivers, Hammers, Pliers, Punches & Chisels; Project - Tool Presentation
		Hand Tool ID & Terminology II	Segment 2. Wrenches, Sockets Ratchets; Project - Tool Presentation
		Hand Tool ID & Terminology III	Segment 2. Scapers, Stud Removers, Hacksaw, etc.; Project - Tool Presentation
03.0 Identify power tools and describe their proper operation--The student will be able to:			
03.01	Select and utilize appropriate power tools and equipment for specific tasks in accordance with safety guidelines.	Large Wood Power Tools - I: Safety, Operation & ID	Entire lesson; Activity - Band Saw Puzzle; Project - Large Wood Power Tool Use
		Large Wood Power Tools - II: Safety, Operation & ID	Entire lesson; Project - Using the Tools
		Portable Wood Power Tools - I: Safety, Operation & ID	Entire lesson; Activity - Tool Set-Up
		Portable Wood Power Tools - II: Safety, Operation & ID	Entire lesson; Activity - Drill Bits; Project - Design and Build
		Large Metal Power Tools: Safety & Operation	Entire lesson; Activity - Using The Tools
04.0 Research, identify, classify and present construction components, materials, hardware and characteristics--The student will be able to:			
04.01	Research, identify and present the various components, materials and hardware used in residential construction applications.	The Construction Industry	Activity - Differences
04.02	Research, identify and present the various components, materials and hardware used in commercial construction applications.	The Construction Industry	Activity - Differences
04.03	Research, identify and present the various components, materials and hardware used in industrial construction applications.	The Construction Industry	Activity - Differences
04.04	Research and present preplanning and procedural steps to accomplish various projects large and small both in the lab and on the job site with attention to building codes, standard practice and acceptable techniques.	Project Management Skills	Entire lesson; Activity - Project Quality Management; Activity - Project Quality Management Answer Key
05.0 Demonstrate an understanding of the construction industry and related occupations--The student will be able to:			
05.01	Identify and distinguish construction trade occupations and the roles and responsibilities of each craft.	The Construction Industry	Slides 23-28, 41-46; Project: My Construction Career
05.02	Identify and distinguish construction project management occupations and the roles and responsibilities of each.	The Construction Industry	Slides 29, 41-46; Project: My Construction Career
05.03	Identify and differentiate design and engineering occupations and the roles and responsibilities of each.	The Construction Industry	Slides 20, 41-46; Project: My Construction Career
05.04	Assess the relationship between the Department of Labor and the construction industry, economy and employment.	The Construction Industry	Slides 7 - 9

CTE Standards and Benchmarks		Lesson Title	Location
06.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:			
06.01	Identify and demonstrate positive work behaviors needed to be employable.	Employability Skills	Entire lesson; Activity - Work Habits: Good vs. Bad; Activity - Work Habits: Good vs. Bad Answer Key; Activity - Skills Flashcards
06.02	Develop personal career plan that includes goals, objectives and strategies.	Exploring Careers: Architecture & Construction	Entire lesson; Project - Career Exploration Journal Career Plan
06.03	Examine and explain licensing, certification and industry credentialing requirements.	The Construction Industry	Slides 25, 28, 36, 58-61
06.04	Maintain a career portfolio to document knowledge, skills and experience.	Formulas for Career Success: Portfolio Development	Entire lesson; Activity - Choosing Artifacts; Activity - Creating Artifacts; Project - Digital Portfolio; Project - Portfolio Development
06.05	Evaluate and compare employment opportunities that match career goals.	Exploring Careers: Architecture & Construction	Entire lesson; Project - Career Exploration Journal Career Plan
06.06	Identify and exhibit traits for retaining employment.	Employability Skills	Slides 66 - 70; Project - Climbing The Ladder
06.07	Identify opportunities and research requirements for career advancement.	Employability Skills	Slides 66 - 70; Project - Climbing The Ladder
		The Construction Industry	Project - My Construction Career
06.08	Research the benefits and necessity of ongoing professional development.	The Construction Industry	Project - My Construction Career
06.09	Examine and describe entrepreneurship and leadership opportunities as a career planning option.	Exploring Careers: Architecture & Construction	Entire lesson; Project - Career Exploration Journal Career Plan
06.10	Conduct a job search and analyze the requirements of the job.	Formulas for Career Success: Job Search	Entire lesson; Activity - Job Hunt
06.11	Understand the consequences of poor decision making.	Decision Making	Entire lesson; Activity - Decision Making
06.12	Assess the importance of confidentiality in the workplace.	Confidentiality in the Workplace	Entire lesson; Activity - Is this the Right Way?; Project - Confidentiality Policies
06.13	Determine healthy living habits in relation to work.	Employability Skills	Slides 55 - 61; Activity - The Physical Health Connection; Activity - The Physical Health Connection Answer Key; Project - Managing Stress