Architecture and Construction Career Cluster Introduction to Construction Course Number 46.54600

Course Description:

This course is preceded by the Occupational Safety and Fundamentals course. This course offers an opportunity for students to build on their knowledge and skills developed in Industry Fundamentals and Occupational Safety. It introduces them to four construction craft areas and is also the second step towards gaining a Level One Industry Certification in one of the craft areas. The goal of this course is to introduce students to the history and traditions of the carpentry, masonry, plumbing, and electrical craft trades. Students will explore how the various crafts have influenced and been influenced by history. The student will also learn and apply knowledge of the care and safe use of hand and power tools as related to each trade. In addition, students will be introduced to and develop skills to differentiate between blueprints related to each individual craft area.

Course Standard 1

AC-IC-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

| Person-to-Person | Telephone and | Cell Phone and | Communicating At | Listening |
|------------------|-------------------|--------------------|----------------------|--------------------------|
| Etiquette | Email Etiquette | Internet Etiquette | Work | O |
| Interacting with | Telephone | Using Blogs | Improving | Reasons, Benefits, and |
| Your Boss | Conversations | | Communication Skills | Barriers |
| Interacting with | Barriers to Phone | Using Social Media | Effective Oral | Listening Strategies |
| Subordinates | conversations | | Communication | |
| Interacting with | Making and | | Effective Written | Ways We Filter What |
| Co-workers | Returning Calls | | Communication | We Hear |
| Interacting with | Making Cold Calls | | Effective Nonverbal | Developing a |
| Suppliers | _ | | Skills | Listening Attitude |
| | Handling | | Effective Word Use | Show You Are |
| | Conference Calls | | | Listening |
| | Handling | | Giving and Receiving | Asking Questions |
| | Unsolicited Calls | | Feedback | |
| | | | | Obtaining Feedback |
| | | | | Getting Others to Listen |

| Nonverbal | Written | Speaking | Applications and Effective |
|------------------------------|----------------------|-----------------------------|------------------------------|
| Communication | Communication | | Résumés |
| Communicating Nonverbally | Writing Documents | Using Language Carefully | Completing a Job Application |
| Reading Body Language | Constructive | One-on-One | Writing a Cover Letter |
| and mixed Messages | Criticism in Writing | Conversations | |

| Matching Verbal and | Small Group | Things to Include in a Résumé |
|-------------------------|------------------------|-------------------------------|
| Nonverbal communication | Communication | |
| Improving Nonverbal | Large Group | Selling Yourself in a Résumé |
| Indicators | Communication | |
| Nonverbal Feedback | Making Speeches | Terms to Use in a Résumé |
| Showing Confidence | Involving the | Describing Your Job Strengths |
| Nonverbally | Audience | |
| Showing Assertiveness | Answering Questions | Organizing Your Résumé |
| | Visual and Media Aids | Writing an Electronic Résumé |
| | Errors in Presentation | Dressing Up Your Résumé |

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

| Teamwork and Problem Solving | Meeting Etiquette |
|------------------------------|---|
| Thinking Creatively | Preparation and Participation in Meetings |
| Taking Risks | Conducting Two-Person or Large Group Meetings |
| Building Team Communication | Inviting and Introducing Speakers |
| | Facilitating Discussions and Closing |
| | Preparing Visual Aids |
| | Virtual Meetings |

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

| Problem Solving | Customer Service | The Application Process | Interviewing Skills | Finding the Right Job |
|--------------------|----------------------|---------------------------|------------------------|--------------------------|
| Transferable | Gaining Trust and | Providing Information, | Preparing for an | Locating Jobs and |
| Job Skills | Interacting with | Accuracy and Double | Interview | Networking |
| | Customers | Checking | | |
| Becoming a | Learning and Giving | Online Application | Questions to Ask in | Job Shopping |
| Problem Solver | Customers What | Process | an Interview | Online |
| | They Want | | | |
| Identifying a | Keeping Customers | Following Up After | Things to Include in a | Job Search |
| Problem | Coming Back | Submitting an Application | Career Portfolio | Websites |
| Becoming a | Seeing the | Effective Résumés: | Traits Employers are | Participation in |
| Critical Thinker | Customer's Point | | Seeking | Job Fairs |
| Managing | Selling Yourself and | Matching Your Talents to | Considerations | Searching the |
| | the Company | a Job | Before Taking a Job | Classified Ads |
| | Handling Customer | When a Résumé Should be | | Using |
| | Complaints | Used | | Employment |
| | | | | Agencies |
| | Strategies for | | | Landing an |
| | Customer Service | | | Internship |
| | | | | Staying Motivated |
| | | | | to Search |

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

| Workplace Ethics | Personal | Employer | Business Etiquette | Communicating at |
|--------------------|-----------------|------------------|---------------------------|---------------------|
| | Characteristics | Expectations | | Work |
| Demonstrating Good | Demonstrating a | Behaviors | Language and | Handling Anger |
| Work Ethic | Good Attitude | Employers Expect | Behavior | |
| Behaving | Gaining and | Objectionable | Keeping Information | Dealing with |
| Appropriately | Showing Respect | Behaviors | Confidential | Difficult Coworkers |

| Maintaining Honesty | Demonstrating | Establishing | Avoiding Gossip | Dealing with a |
|-------------------------|--------------------|--------------------|----------------------|-----------------------|
| | Responsibility | Credibility | | Difficult Boss |
| Playing Fair | Showing | Demonstrating Your | Appropriate Work | Dealing with |
| | Dependability | Skills | Email | Difficult Customers |
| Using Ethical | Being Courteous | Building Work | Cell Phone Etiquette | Dealing with Conflict |
| Language | | Relationships | | |
| Showing | Gaining | | Appropriate Work | |
| Responsibility | Coworkers' Trust | | Texting | |
| Reducing Harassment | Persevering | | Understanding | |
| | | | Copyright | |
| Respecting Diversity | Handling Criticism | | Social Networking | |
| Making Truthfulness | Showing | | | |
| a Habit | Professionalism | | | |
| Leaving a Job Ethically | | | | |

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

| Expected Work Traits | Teamwork | Time Management |
|-----------------------------------|-----------------------------------|-------------------------------------|
| Demonstrating Responsibility | Teamwork Skills | Managing Time |
| Dealing with Information Overload | Reasons Companies Use Teams | Putting First Things First |
| Transferable Job Skills | Decisions Teams Make | Juggling Many Priorities |
| Managing Change | Team Responsibilities | Overcoming Procrastination |
| Adopting a New Technology | Problems That Affect Teams | Organizing Workspace and Tasks |
| | Expressing Yourself on a Team | Staying Organized |
| | Giving and Receiving Constructive | Finding More Time |
| | Criticism | |
| | | Managing Projects |
| | | Prioritizing Personal and Work Life |

1.6 Present a professional image through appearance, behavior and language.

| On-the-Job Etiquette | Person-to-Person Etiquette | Communication Etiquette | Presenting Yourself |
|--------------------------------|------------------------------|--------------------------------|--------------------------|
| Using Professional | Meeting Business | Creating a Good Impression | Looking Professional |
| Manners | Acquaintances | | |
| Introducing People | Meeting People for the First | Keeping Phone Calls | Dressing for Success |
| | Time | Professional | · |
| Appropriate Dress | Showing Politeness | Proper Use of Work Email | Showing a Professional |
| | | | Attitude |
| Business Meal Functions | | Proper Use of Cell Phone | Using Good Posture |
| Behavior at Work | | Proper Use in Texting | Presenting Yourself to |
| Parties | | | Associates |
| Behavior at Conventions | | | Accepting Criticism |
| International Etiquette | | | Demonstrating Leadership |
| Cross-Cultural Etiquette | | | |
| Working in a Cubicle | | | |

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

Course Standard 2

AC-IC-2

Demonstrate and explain knowledge of the history and traditions of the building trades.

- 2.1 Describe and explain the history of carpentry, masonry, plumbing, electrical and HVAC.
- 2.2 Describe and explain the association of the history of the trades with other events in history.
- 2.3 Demonstrate a basic understanding of the history of the tools related to each craft.

Course Standard 3

AC-IC-3

Demonstrate knowledge and application of general construction and specific OSHA and EPA safety concepts and practices.

- 3.1 Demonstrate an understanding of the applications of Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) regulations concerning Personal Protective Equipment (PPE).
- 3.2 Demonstrate an understanding of the applications of OSHA and EPA regulations concerning environmental issues on the construction site.
- 3.3 Describe and explain the importance of building codes.
- 3.4 Evaluate sustainable building practices.

Course Standard 4

AC-IC-4

Demonstrate the professional and safe use of basic tools used in the building trades.

- 4.1 Demonstrate safe use of basic tools of the trade areas.
- 4.2 Demonstrate proper care and maintenance of the basic tools.
- 4.3 Demonstrate the use of proper tools for specific building procedures.
- 4.4 Demonstrate knowledge of specific regulations related to specific tools.

Course Standard 5

AC-IC-5

Differentiate between the different building trades' plans and specifications.

- 5.1 Demonstrate evaluating specific types of plans and drawings.
- 5.2 Compare differences in symbols between the building trades.
- 5.3 Accurately explain terms and abbreviations for each building trade area.
- 5.4 Accurately estimate materials needed based on the provided blueprints.

Course Standard 6

AC-IC-6

Examine how SkillsUSA is a co-curricular part of career and technical education through leadership development, school and community service projects, and competitive events.

- 6.1 Explain the purpose, mission, objectives, motto, colors, official dress and other distinguishing characteristics of SkillsUSA.
- 6.2 Explain how participation in SkillsUSA can promote lifelong responsibility for community service, professional growth and development.
- 6.3 Explore the impact and opportunities that SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs.
- 6.4 Explore the local, state, and national opportunities available to students through participation in SkillsUSA, including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities.