

**Building Trades Course Syllabus 2015-2016**

**Lake Career & Technical Center**

***Developing Skills for a Lifetime***

**Instructor Name & Contact Information:**  Ryan Bearden, 573-346-9260 Ext. 368, rbearden@camdentonschools.org

**Prerequisites:** It’s not mandatory, but Cabinetmaking would be a great “pre course” for students that are looking to sharpen their pencil in the construction field.

**High School Credits:** 3 credits **Grade Levels:** 11 & 12

**Integrated Academic Credit Available:** Students are eligible to receive 1 credit in math over a two year period, if they score 80% or higher on the Math Power Standards.

**College Credit (dual credit and/or articulated):** State Fair Community College has partnered with the LCTC Building Trades program to offer Dual Credit for this course.

**Work-based Learning Opportunities:** Eligible students will have opportunities to job shadow.

**Industry Recognized Credential:** Students will have the opportunity to receive an IRC through National Center for Construction Education and Research (NCCER).

**Program Accreditation:** Pursuing NCCER

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**Course Rationale:** This course prepares students for a career or post-secondary education toward a career within the building trades industry.

**Course Description:** This course will provide experience and skills training for students planning a career in the building trades industry. Students will participate in a variety of construction activities and will become familiar with the materials and processes commonly used in the building industry today. Areas of instruction will include frame construction, masonry, plumbing, heating and ventilation along with basic electrical installation and wiring, as well as principles of setting foundations and decorative techniques (painting, tiling etc.).

**Power Standards/Course Objectives:**

**Power Standard**  **SISK12 Code**

Safety BT1A & BT1B

Tools BT2A & BT2B

Blueprints BT3A & BT3B

Plumbing BT4A & BT4B

Concrete BT5A & BT5B

Flooring BT6A & BT6B

Walls BT7A & BT7B

Roofing BT8A & BT8B

Electrical BT9A & BT9B

HVAC BT10A & BT10B

Exterior BT11

Sheetrock BT12A & BT12B

Cabinets & Trim BT13A & BT13B

Paint BT14A & BT14B

Job Application PE1a

Work Ethics WE1a

Technical Math TM1A, TM1B, TM1C, & TM1D

**Outcomes/Goals of Course:** Throughout this course, students will be introduced to the skills and knowledge directly related to careers within the Architecture and Construction Career Clusters as well as the construction and pre construction pathways. Students will also become aware of core safety skills related to the industry as well as gain experience in a multitude of distinct trades - Carpentry, Electrical, Plumbing, HVAC, etc.

**Careers & Earnings:**

1. Carpentry Apprentice $21,286 - $46,301
2. Construction Manager $46,577 - $112,611
3. Heavy Equipment Operator $28,659 - $99,729
4. Laborer Apprentice $20,654 - $57,014
5. Pre-Engineer $48,101 - $106,733
6. Estimator $34,613 - $81,171

**Resources:** NCCER Core Training and NCCER Carpentry Level I Textbooks

**Materials & Supplies Needed:**  Students will need the following for class: Tool bag, Speed Square, Hammer, Tape Measure, Utility Knife, chalk line, and a Pencil. Students will receive a complete tool list detailing what they will need to purchase or borrow from a friend or family member.

**Evaluation:** Your grade will be calculated using your total accumulated points at the end of the grading term as a percentage of the possible points. It will be a letter grade based on the following: Participation by way of projects, written work, exams, and work values. Students are able to view their grades and attendance via the Student Portal. A link has been provided on the LCTC webpage -- <http://camdentonschools.schoolwires.net/lctc>

**Grading Scale:** Total points accumulated from all assignments will be used to establish the semester grade.

A 95% - 100% C 73% - 76%

A- 90% - 94% C- 70% - 72%

B+ 87% - 89% D+ 67% - 69%

B 83% - 86% D 63% - 66%

B- 80% - 82% D- 60% - 62%

C+ 77% - 79% F 59% and below

**CTSO:** Students are strongly encouraged to be members of SkillsUSA where students will develop leadership skills and be able to compete within their program area of study. Competitions can occur at the district, state, and national levels. Student dues are $15 and can be paid to the instructor. All “finalized” CTSO membership is due before February 15.

**Classroom & Student Expectations:**

**Safety** - Within the confines of any Industrial/Construction environment SAFETY is the first and foremost consideration. For this reason the following expectations are made of all students:

 1. Safety Glasses will be worn at ALL Times.

 2. Inappropriate clothing is not permitted in work areas (this includes but is not limited to, baggy pants, hooded sweatshirts, untied shoes, open faced shoes, hats, scarves, bandanas, chained piercings, loose fitting shirts and sweaters, chains of any sort, or any other clothing that may pose a threat to student safety by becoming entangled in machinery).

3. Students who do not comply with safety mandates will be excluded from participating in shop activities (this may severely impact student performance and thus the ability to pass the class).

4. Horseplay and unnecessary physical contact will be grounds for disciplinary action. This again, is a necessity to maintain a safe and injury free environment.

 5. Students will not operate machinery for which they have not been certified. (Certification is done through passing of safety tests, and by instructor verification of student knowledge of safe operation).

 6. Additional safety devices will be worn as needed based upon the equipment and material being used. Examples are: Ear Protection around loud equipment, leather aprons and gloves around welding and hot materials and safety visors around welding instruments. Additional safety material may be deemed necessary by the individual instructor at the appropriate time.

7. Failure to follow the directions of the teacher may result in disciplinary action being taken.

**Late Work Policy** In order to successfully progress, specific deadlines for all assignments are clearly stated either in the course syllabus, or on the assignment criteria sheet given by the instructor. Should a student be unable to meet a deadline, it is expected the student will make arrangements in advance with the instructor to turn work in late. A penalty may or may not be assigned, at the discretion of the faculty member.