Department of Teaching & Learning
Parent/Student Course Information

Masonry
(VO8513)
Three Credits, One Year
Grades 10 - 12

Counselors are available to assist parents and students with course selections and career planning. Parents may arrange to meet with the counselor by calling the school's guidance department.

COURSE DESCRIPTION
In this program students work with brick and block on full-sized projects in the shop, on campus and construction sites. Students learn to use, care for, and safely handle the tools, machinery, equipment and materials commonly found in the masonry trade. Activities involve building walls, columns and planning and building a variety of structures.

CERTIFICATION
Skills Connect Assessment: Masonry

STUDENT ORGANIZATION
SkillsUSA is a co-curricular organization for all students enrolled in trade and industrial education programs. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps students excel by providing educational programs, events and competitions that support career and technical education (CTE) in the nation’s classrooms. Students are highly encouraged to participate.

PREREQUISITE
Construction Technology

OPTIONS FOR NEXT COURSE
None

REQUIRED STUDENT TEXTBOOK
None
Demonstrating Workplace Readiness Skills: Personal Qualities and People Skills
1. Demonstrate positive work ethic.
2. Demonstrate integrity.
3. Demonstrate teamwork skills.
4. Demonstrate self-representation skills.
5. Demonstrate diversity awareness.
6. Demonstrate conflict-resolution skills.
7. Demonstrate creativity and resourcefulness.

Demonstrating Workplace Readiness Skills: Professional Knowledge and Skills
8. Demonstrate effective speaking and listening skills.
9. Demonstrate effective reading and writing skills.
10. Demonstrate critical-thinking and problem-solving skills.
11. Demonstrate healthy behaviors and safety skills.
12. Demonstrate an understanding of workplace organizations, systems, and climates.
13. Demonstrate lifelong-learning skills.
14. Demonstrate job-acquisition and advancement skills.
15. Demonstrate time-, task-, and resource-management skills.
16. Demonstrate job-specific mathematics skills.
17. Demonstrate customer-service skills.

Demonstrating Workplace Readiness Skills: Technology Knowledge and Skills
18. Demonstrate proficiency with technologies common to a specific occupation.
19. Demonstrate information technology skills.
20. Demonstrate an understanding of Internet use and security issues.
21. Demonstrate telecommunications skills.

Examining All Aspects of an Industry
22. Examine aspects of planning within an industry/organization.
23. Examine aspects of management within an industry/organization.
24. Examine aspects of financial responsibility within an industry/organization.
25. Examine technical and production skills required of workers within an industry/organization.
26. Examine principles of technology that underlie an industry/organization.
27. Examine labor issues related to an industry/organization.
28. Examine community issues related to an industry/organization.
29. Examine health, safety, and environmental issues related to an industry/organization.

Addressing Elements of Student Life
30. Identify the purposes and goals of the student organization.
31. Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.
32. Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.
33. Identify Internet safety issues and procedures for complying with acceptable use standards.

Applying Basic Construction Safety Standards (Core Safety)
34. Comply with federal, state, and local safety legal requirements, including OSHA, VOSHA, and EPA.
35. Identify PPE (personal protective equipment) requirements.
36. Inspect and maintain a safe working environment.
37 Explain safe working practices around electrical hazards.
38 Identify emergency first-aid procedures.
39 Identify the types of fires and the methods used to extinguish them.
40 Inspect course-specific hand and power tools to visually identify defects.
41 Demonstrate safe operation of course-specific hand and power tools.
42 Demonstrate lifting and carrying techniques.
43 Demonstrate safe laddering techniques.
44 Demonstrate safe tubular steel scaffolding techniques.
45 Report injuries.
46 Report personal, environmental, and equipment safety violations to the appropriate authority.
47 Earn the OSHA 10 card.
48 Pass safety exam.

**Laying Brick Positions and Bonds**
49 Lay an American/common bond pattern.
50 Lay a stack bond pattern.
51 Lay an English bond pattern.
52 Lay a Flemish bond pattern.

**Laying Concrete Masonry Units**
53 Build a block jamb.
54 Build a block corner.
55 Identify types and sizes of block.

**Identifying and Mixing Masonry Mortars**
56 Differentiate among types of masonry mortars.
57 Select masonry mortar appropriate for a job.

**Performing Residential Masonry**
58 Lay out a masonry foundation.
59 Construct block piers.
60 Install veneer ties.
61 Build a window sill.
62 Clean brick walls.

**Constructing Commercial Masonry**
63 Identify wall systems.
64 Install wire reinforcements.
65 Build a composite/cavity wall system.
66 Set lintels.
67 Identify the procedures for forming and building a bonded beam.
68 Lay split-face block.
69 Lay fluted block.
70 Identify control and expansion joints.

**Preparing the Building Site**
71 Estimate amounts of materials needed for a job.
72 Locate and square corners.
73 Read blueprints and plans.
Notice of Non-Discrimination Policy
Virginia Beach City Public Schools does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation/gender identity, pregnancy, childbirth or related medical condition, disability, marital status, age, genetic information or veteran status in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. School Board policies and regulations (including, but not limited to, Policies 2-33, 4-4, 5-7, 5-19, 5-20, 5-44, 6-7, 6-33, 7-48, 7-49, 7-57 and Regulations 2-33.1, 4-4.1, 4-4.2, 4-4.3, 4-6.1, 5-44.1, 7-11.1, 7-17.1 and 7-57.1) provide equal access to courses, programs, counseling services, physical education and athletic, vocational education, instructional materials and extracurricular activities.

To seek resolution of grievances resulting from alleged discrimination or to report violations of these policies, please contact the Title VI/Title IX Coordinator/Director of Student Leadership at (757) 263-2020, 1413 Laskin Road, Virginia Beach, Virginia, 23451 (for student complaints) or the Section 504/ADA Coordinator/Chief Human Resources Officer at (757) 263-1133, 2512 George Mason Drive, Municipal Center, Building 6, Virginia Beach, Virginia, 23456 (for employees or other citizens). Concerns about the application of Section 504 of the Rehabilitation Act should be addressed to the Section 504 Coordinator/Executive Director of Student Support Services at (757) 263-1980, 2512 George Mason Drive, Virginia Beach, Virginia, 23456 or the Section 504 Coordinator at the student’s school. For students who are eligible or suspected of being eligible for special education or related services under IDEA, please contact the Office of Programs for Exceptional Children at (757) 263-2400, Laskin Road Annex, 1413 Laskin Road, Virginia Beach, Virginia, 23451.

Alternative formats of this publication which may include taped, Braille, or large print materials are available upon request for individuals with disabilities. Call or write The Department of Teaching and Learning, Virginia Beach City Public Schools, 2512 George Mason Drive, P.O. Box 6038, Virginia Beach, VA 23456-0038. Telephone 263-1070 (voice); fax 263-1424; 263-1240 (TDD) or email at Brandon.Martin@vbschools.com.