

CARPENTRY

MASTER PLAN OF INSTRUCTION 2020 - 2021

Ron Schmitt, Instructor



MISSION

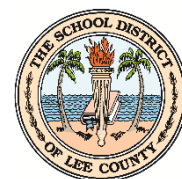
The mission of Fort Myers Technical College is to provide high quality career and technical training, in order to prepare students for current and emerging industries, delivered by a professional and caring staff in a positive learning environment.

The School District of Lee County does not discriminate on the basis of race, color, national origin, gender, age, disability, marital status, pregnancy, or genetic information in its educational programs, services or activities, or in its hiring or employment practices. The district also provides equal access to its facilities to the Boy Scouts and other patriotic youth groups, as required by the Boys Scout of America Equal Access Act. Questions, complaints, or requests for additional information regarding discrimination or harassment may be sent to: Equity Coordinator, Fort Myers Technical College, 3800 Michigan Ave., Fort Myers, FL 33916, (239) 334-4544.

Lack of English language skills will not be a barrier to admission and participation. The district may assess each student's ability to benefit from specific programs through placement tests and counseling, and, if necessary, will provide services or referrals to better prepare students for successful participation.



Fort Myers Technical College
3800 Michigan Avenue
Fort Myers, FL 33916
(239) 334-4544



Carpentry

INTRODUCTION

Carpenters make up the largest building trades occupation in the construction industry. Because of increasing demands for housing, job opportunities for carpenters are expected to be excellent over the next decade.

Our program will teach you entry-level residential carpentry skills and help you find a job.

PROGRAM MISSION

The mission of the Carpentry program is to prepare our students for entry-level jobs in the construction industry. This will be done by providing a positive learning environment.

PROGRAM PHILOSOPHY

The philosophy of the Carpentry program is that all students have individual worth and right to reach their fullest potential in a technical program, by developing the programs specific skills, positive attitudes, and effective work habits. Student success will be accomplished through their accepting responsibility for their own learning while receiving relevant, challenging and interesting instruction.

PROGRAM CONTENT

- Shop safety and job site cleanliness
- Use and care of hand and power tools
- Construction materials and fasteners
- Blueprint reading
- Carpentry estimating
- Rough framing (floors, walls, roofs)
- Exterior trim
- Interior trim
- Stair construction
- Cabinet installation
- Door and window installation
- Employability skills
- Entrepreneurship

ESSENTIAL TRAINING TASKS

Physical Requirements

- Must be in good physical condition
- Lift 50 pounds or more and carry it
- Must be able to stoop, kneel, crouch and bend
- Use voice, hearing and sight effectively to perform carpentry work
- Work in an atmosphere of loud noises
- Work in an atmosphere of temperature changes
- Perform repetitive task
- Work without close, direct supervision
- Work on multiple tasks and priorities

Cognitive Requirements

Must have the ability to:

- Interpret a variety of written and oral instructions
- Interpret blueprints
- Collaborate with others
- Perform mathematical computations
- Make fast decisions under pressure
- Work in close or crowded areas

ACCOMMODATIONS

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or post-secondary student's accommodations plan to meet individual needs to ensure equal access. Post-secondary students with disabilities must self-identify, present documentation, required accommodations if needed, and develop a plan with their post-secondary service provider. Accommodations received in post-secondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology, and special communication systems. Documentation of the accommodations requested and services provided are maintained in a confidential file.

TUITION

Tuition is charged for adult students at a reasonable rate that may vary slightly from year to year and is due prior to the first day of each semester. Current fee information is available from Student Services. Tuition is waived for eligible high school dual-enrolled students. Failure to pay all fees due at the time class begins will result in the student not being able to attend class and/or clinical.

CLASS SCHEDULE

Daytime certificated classes meet Monday through Friday from 8:00 A.M. until 2:30 P.M. This amounts to 30 hours of classroom instruction per week. Lunch breaks are 30 minutes in length. Bringing a lunch is recommended.

ATTENDANCE POLICY

In an effort to develop appropriate employability skills, FMTC students are expected to attend all class sessions. As is expected in the workplace, when it is necessary to be absent due to illness or emergency situations, all students are to notify the instructor on or before the date of absences. The student attendance policy for each post-secondary program is consistent with industry standards.

Campus attendance is kept via a computerized system. It is the responsibility of the student to **log in and out** in order to receive credit for class time. This allows the school to keep accurate attendance records for the actual number of hours and minutes attended.

All adult students are expected to be in attendance at least 90% of their scheduled hours during each semester. Adult students failing to maintain the 90% attendance standard will not be permitted to continue in their program and may be required to sit out one full semester, unless administration approves to waive the 90% standard based on special circumstances.

Absences

A student who is absent for 6 consecutive class sessions, without prior approval and without contact with the instructor, will be withdrawn from enrollment in his/her program. A student withdrawn for absenteeism must petition administration to return. Students exhibiting a pattern of consecutive absences of 4 days will be subject to dismissal as determined by a School Intervention Team. School Intervention Team meetings will be held as necessary to attempt to alleviate issues resulting in excessive absences and to counsel the student of possible alternatives and consequences.

Students, who are late for class, including returning late from lunch, must clock in. Students who leave school early must notify their instructor and clock out. This time out of class is recorded as time absent and is counted against the required 90% attendance. Excessive tardies or early departures will be reported to the Student Affairs Specialist and will result in a meeting with the School Attendance Intervention Team.

Adult students who know they will be out of school for an extended period of time (4 days or longer) may apply for a Leave of Absence from their program. A Leave of Absence will be granted only once during a twelve-month period. **STUDENTS WHO EXERCISE A LEAVE OF ABSENCE MAY HAVE TO EXTEND THEIR TIME IN THEIR PROGRAM AND PAY ADDITIONAL FEES.**

Leaving Campus During School Hours

Students must notify their instructor when leaving campus early. This is for the safety of students, to accurately track time, and to allow the instructor to best utilize instruction resources.

PLAN OF INSTRUCTIONAL PRACTICES

Teaching Methods

Lecture, demonstration, discussion, group interaction, verbal and written quizzes, skill practice, individualized instruction, computerized tutorials, interactive learning, web-based learning, and online courses are among the teaching methods utilized.

Textbooks, workbooks, projects, journals, reports, simulations, hands-on computer experience, collaborative learning, guest speakers, board examples, field trips, customer service projects, program job shadowing, cooperative on-the-job training, computerized tutorials, computerized assessment, interactive learning, and web-based learning are used for instruction.

Among the provisions made to allow for individual differences are pre-testing to determine entry level, workbooks and study guides for progress at individual rate, progress grading, individualized instruction, individual project assignments, and referral for basic skills remediation. Curriculum may be adapted to meet the individual needs and individual goals of students.

Safety

Safety is extremely important in the construction industry. Shop, tools, and on-site safety is covered and emphasized on a continuous basis throughout the Carpentry program.

Evaluation

Class performance, quizzes, tests, attendance, portfolio assessments, completion of project assignments, decision-making, work habits, achievement of entry-level competencies, and other methods are used for evaluation.

Work-Based Activities

Work-based learning activities play an integral part of the curriculum of FMTC's career-technical training programs. These activities are planned with two objectives in mind. First, the activity provides students with opportunity to develop and apply 'real world' experience using the knowledge and skills attained in the program. Second, the activity provides the instructor with objective input from potential employers or customers of program graduates. Each work-based activity has a written instructional plan outlining objectives, experiences, competencies, and evaluation required during the activity.

Work based activities are program specific and may include:

- Unpaid in-school shop activities to provide customer service opportunities under the direct supervision of the program instructor.
- Unpaid job shadowing experiences that may include in-school or off-campus employer-based experiences under the supervision of a qualified employer representative who is working closely with the program instructor.
- Paid or unpaid cooperative training experiences conducted at the employer's work location under the supervision of a qualified employer representative and under the direction of the program instructor.

Cooperative Education

Cooperative training is available for students and coordinated by the instructor and career specialist. Cooperative training is for students who have shown competence in program training that indicates readiness for placement in an on-the-job program. High school students participating in the cooperative job placement program must be in the 12th grade. To be eligible for a cooperative education experience, students must have completed one-half of the required program hours and requirements.

Students may be returned to the program for additional training if they do not function satisfactorily on the job or when the cooperative agreement is terminated at the request of the student, parent, employer, or program instructor. Veterans will be accepted in the program in accordance with the Department of Veterans Affairs approved program.

Additional information regarding cooperative training opportunities may be obtained from the program instructor or career specialist.

Job Shadowing

Job shadowing experiences, or volunteer experiences, are available to students as part of their program training. These experiences are designed to give the student actual hands-on experiences doing a variety of related tasks. Length and type of experiences will vary. The program instructor determines appropriateness of the experience. Additional information regarding job-shadowing experiences may be obtained from the program instructor or career specialist.

GRADING PROCEDURE

Carpentry grading procedure:

Lab and Live Work	50%
Employability Skills	30%
Tests and Quizzes	20%

All student work will be taken into consideration when determining student grades. Oral and written test, group discussions, written work, checklists, homework, and student projects are all representative means which may be used to determine student grades.

The grading scale for the county is:

A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

Fort Myers Technical College is a post-secondary institute designed to provide trained individuals to industry. The approved post-secondary program grading requirements must be met if the student is to receive a certificate.

Program Progress

Students are required to complete the program of training within the hours allotted by the state of Florida for completion. Progress must be at a rate that will allow completion of the program with the number of membership hours stated in the Curriculum Frameworks.

Failure to progress at this rate will require the student to meet with the program instructor, career specialist, and an administrator in order to identify an appropriate completion point or to assist the student in selecting a more appropriate training program.

Work Habits

Effective work habits are the cornerstone to successful employment. Students are expected to demonstrate productive work habits during all phases of enrollment. Instructors will work with students who need assistance in this area to improve the overall possibility for successful employment.

Attendance: Attends class, arrives/leaves on time; begins and ends work as expected.

Character: Displays loyalty, honesty, trustworthiness, dependability, reliability, initiative, self-discipline, and self-responsibility; displays a high level of effort and commitment to performing and completing work.

Teamwork: Respects the right of others; respects confidentiality; is cooperative; is assertive; displays a customer service attitude; seeks opportunities for continuous learning; demonstrates mannerly behavior; encourages and facilitates cooperation, pride, trust, and group identity; fosters commitment and team spirit.

Appearance: Displays appropriate dress, grooming, hygiene, and etiquette; wears full regulation uniform.

Attitude: Displays a willingness to cooperate and accept constructive criticism; sets realistic expectations; approaches assignments with interest.

Productivity: Is prepared for class by reading assignments and completing homework; contributes to class discussions; and involvement in lab activities (in other words, no sleeping or daydreaming). Follows safety practices; conserves and maintains equipment and supplies; keeps work area neat and clean; follows directions and procedures; makes up assignments and tests punctually; notifies proper authorities of situations presenting potential safety hazards; does not use or knowingly permits others to use tools and equipment improperly; stays on task and utilizes time constructively.

Organization: Manifests skill in prioritizing and management of time and stress; demonstrates flexibility in adapting to changes.

Communication: Communicates accurate information to others in a professional and courteous manner; displays appropriate nonverbal (eye contact, body language) and oral (listening, telephone etiquette, grammar) skills; asks pertinent questions; listens attentively to others, notifies instructor in advance of absences or tardies.

SATISFACTORY ACADEMIC PROGRESS

In order to receive and continue to receive financial assistance of any type, a student must maintain satisfactory academic progress. The Financial Aid Advisor will require a progress report to be completed by the student's instructor and submitted to the Financial Aid Office prior to each disbursement.

Students are considered to be making Satisfactory Academic Progress (SAP) if they successfully complete their scheduled clock hours, achieve a specific cumulative grade evaluation or grade point average (GPA), and do not exceed the maximum time limits to complete their course of study. Each Student Academic Progress will be checked at 450 clock hours and prior to subsequent disbursements for students enrolled in programs one academic year or greater. Progress will be checked at the half-way point for programs less than one academic year. No SAP is required prior to the first disbursement.

REQUIREMENTS FOR A CERTIFICATE

All competencies specified in the Florida Department of Education Curriculum Frameworks for the program must be successfully completed. Successful completion is at least a 75% average in the areas of skills, knowledge, and work habits.

Proficiency in the competency standards listed in the Master Plan of Instruction must be demonstrated.

Students must meet minimum T.A.B.E. skill requirements (or qualify for an exemption) prior to graduation.

In addition to the requirements above, the recommendation of the instructor for certification includes: consideration of personal appearance, willingness to learn and to work, punctuality, cooperative attitude, and appropriate work habits.

CARPENTRY STUDENT DRESS CODE

Students who attend FMTC shall dress in a manner appropriate for the job in which they are receiving training, including any special protective gear and professional uniforms. All clothing must be neither distracting nor offensive and be clean, neat, modest, in good repair, and appropriately sized.

Administration has the final authority for determining whether or not a student's apparel conforms to the dress code. When it is determined that it does not, students will be required to change into appropriate clothing.

Dress Code/Uniforms Required: Collared khaki button-down shirts (tucked into pants at waist), work pants/jeans, belt, and work shoes.

JOB DESCRIPTIONS

The purpose of this program is to prepare students for entry-level jobs. Time and experience on the job will make you a "Carpenter."

OCP A Introduction to Carpentry (150 Hours)

Students will learn shop safety, care and use of hand and power tools. Building materials, fastening techniques are studied. Blueprints and blueprint reading are covered in this OCP.

OCP B Rough Framing Carpentry (450 Hours)

Power tools, hand tools, nail guns and fasteners are all covered in this unit. Stair layout, interior trim, door installation are covered and practiced in this unit. This OCP prepares the student for trim carpentry.

OCP C Finish Trim Carpentry (450 Hours)

Foundations, drywall, exterior trim, basic rigging, house framing and walls, roofing and floor framing are all covered and practiced in this unit.

OCP D Foundation and Form Carpentry (150 Hours)

This unit covers structural timber, plans, specifications and identifying forms and form carpentry.

TEXTBOOKS

For the most recent book list for the Carpentry program, visit FMTC's online bookstore – www.fmtcshop.com.

REQUIRED MATERIALS INCLUDED IN TUITION AND FEES

Hammer – framing	Nail apron – cloth /leather
Tape measure – 25'	Utility knife
100' Chalk box	Speed square
Safety glasses	Cat's Paw

PROGRAM OBJECTIVES

See the attached Florida Department of Education Curriculum Frameworks for program objectives and competencies.

**Florida Department of Education
Curriculum Framework**

Program Title: Carpentry
Program Type: Career Preparatory
Career Cluster: Architecture & Construction

PSAV	
Program Number	C510300
CIP Number	0646020117
Grade Level	30, 31
Standard Length	1200 Hours
Teacher Certification	Refer to the <u>Program Structure</u> section.
CTSO	SkillsUSA
SOC Codes (all applicable)	47-3012 – Helpers--Carpenters 47-2031- Carpenters
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stm
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

The purpose of this program is to prepare students for employment in the carpentry industry with an emphasis on fundamental carpentry skills.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Architecture and Construction career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Architecture and Construction career cluster. The content includes but is not limited to developing rough and finish carpentry skills. **Additional Information** relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Program Structure

This program is a planned sequence of instruction consisting of four occupational completion points. This program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the postsecondary program structure:

OCP	Course Number	Course Title	Length	SOC Code
A	BCV0112	Introduction to Carpentry	150 Hours	47-3012
B	BCV0122	Rough Framing Carpentry (formerly 'Carpenter, Rough')	450 Hours	47-2031
C	BCV0125	Finish Trim Carpentry	450 Hours	47-2031
D	BCV0123	Foundation and Form Carpentry	150 Hours	47-2031

Common Career Technical Core – Career Ready Practices

Career Ready Practices describe the career-ready skills that educators should seek to develop in their students. These practices are not exclusive to a Career Pathway, program of study, discipline or level of education. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

1. Act as a responsible and contributing citizen and employee.
2. Apply appropriate academic and technical skills.
3. Attend to personal health and financial well-being.
4. Communicate clearly, effectively and with reason.
5. Consider the environmental, social and economic impacts of decisions.
6. Demonstrate creativity and innovation.
7. Employ valid and reliable research strategies.
8. Utilize critical thinking to make sense of problems and persevere in solving them.
9. Model integrity, ethical leadership and effective management.
10. Plan education and career path aligned to personal goals.
11. Use technology to enhance productivity.
12. Work productively in teams while using cultural/global competence.

Standards

After successfully completing this program, the student will be able to perform the following:

- 01.0 Apply shop safety skills.
- 02.0 Select and use hand and power tools relevant to the carpentry profession.
- 03.0 Demonstrate mathematics knowledge and skills relevant to the carpentry field.
- 04.0 Create basic construction drawings and/or sketches.
- 05.0 Recommend appropriate building materials for specific scenarios.
- 06.0 Select appropriate fasteners and hardware for specific scenarios.
- 07.0 Set up and install basic rigging and scaffolding.
- 08.0 Investigate sustainability issues related to the carpentry profession (Optional).
- 09.0 Explain the importance of employability and entrepreneurship skills.
- 10.0 Perform site-preparation and layout activities.
- 11.0 Layout and construct a building foundation.
- 12.0 Identify and discuss engineered structural lumber.
- 13.0 Cut and install framing members for a floor system (wood and/or metal).
- 14.0 Cut and install a wall framing system (wood and/or metal).
- 15.0 Comply with hurricane codes.
- 16.0 Frame a roof.
- 17.0 Frame walls using cold-formed steel.

- 18.0 Lay out and construct an exterior stair system.
- 19.0 Apply roofing applications.
- 20.0 Apply thermal and moisture protection.
- 21.0 Install windows and exterior doors.
- 22.0 Install drywall.
- 23.0 Fasten stock and joints.
- 24.0 Read and understand construction documents.
- 25.0 Install cabinets and components.
- 26.0 Identify and describe types of interior and exterior doors (wood and/or metal).
- 27.0 Interpret interior door and door hardware requirements based on plans and specifications.
- 28.0 Install trim and finish carpentry using plans and specifications.
- 29.0 Install interior wall and ceiling materials.
- 30.0 Lay out and construct an interior-stair system.
- 31.0 Apply interior trim.
- 32.0 Apply exterior finishes.
- 33.0 Demonstrate an understanding of trenching and excavation.
- 34.0 Erect, plumb and brace a simple concrete form with reinforcement.
- 35.0 Explain or identify various foundation forms.
- 36.0 Use plans and specifications for form carpentry.
- 37.0 Construct vertical formwork.
- 38.0 Construct horizontal formwork.
- 39.0 Explain and demonstrate how to place reinforcing bars in walls, columns, beams, girders, joists and slabs.
- 40.0 Explain the transport and placement of concrete.