

PROGRAM REVIEW

Department: Carpentry



Date of Program Review: 2022

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Appendices

Full-Time Faculty Qualifications

List of courses included in the program

- **Advising degree sheet (Course catalog)**
- **Degree Audit courses (Registrar)**
- **List of college owned equipment over \$2000**
- **Courses offered in the last 3 years (Instruction office)**
- **Curriculum Mapping**

Recommended Timeline

- Program Review document will be completed and submitted to the Instruction Office by December 31st.
- Vice President of Academic Affairs and Director of Institutional Effectiveness will complete the summary report and send it to faculty by April 15th.
- The faculty responsible will review the report, provide any follow up information and make comments within seven days of receiving the report.
- A meeting will be scheduled with VP of Academic Affairs and Director of Institutional Effectiveness to develop an action plan within three weeks of the review.
- Programs under review will present a summary of their program findings and an Action Plan to the Cabinet Committee in August/September of the following year.

ACADEMIC PROGRAM/DISCIPLINE REVIEW
Fort Scott Community College
Introduction to Program

I. Scope

A. Program Relation to College Mission, Core Values, and Strategic Plan:

1. How do the goals and measurable objectives for the program/discipline help the college meet its mission, core values, and strategic plan?

The purpose of the program is to teach the basic work, life, and employability skills necessary to have a meaningful career in the field of Carpentry. Our measurable objectives are to have students complete the FSCC Construction Trades Certificate and or the AAS in Construction Trades, and obtain the Construction OSHA 10 safety certification as well as the NCCER Carpentry Level 1 and or Level 2 Certificates.

Construction Trades is a quality technical program that supports the needs in the local workforce and has grown over the past three years in enrollment as well as locations which are key elements in the FSCC Mission and Vision statements.

**2. What specific goals of the strategic plan are affected by this?
Please explain.**

Goal 2 - Carpentry includes 2 locations (CTEC and Miami County Campus). This review seeks to continue to improve the quality of the program and the education of students as well as improve the efficacy of instruction.

B. Program/Discipline Demand/Need:

If applicable, provide any advisory board meeting minutes.

1. Describe the need for the program/classes based on regional demands.

2. Is program revision needed? If yes, provide a detailed rationale supporting the program change.

Our program uses the National Center for Construction Education and Research curriculum. In 2019 we started using the NCCER online testing system which has helped our instructors use their classroom instruction more effectively.

One of the challenges in working with dual credit students is scheduling if the course were to be a hybrid course much of the lecture could be moved online allowing the time spent in class to be more focused on lab work.

3. Describe how the revised program differs from the current one?

We have moved to online testing. This has helped our instructors and students by providing a more efficient delivery method for testing which in turn allows more instruction time both in the classroom and the shop.

It is recommended to change all of the Construction Trades courses to a hybrid format to improve consistency in instruction as well as allow more flexibility in the schedule for work in the lab portion of the class.

C. Program/Discipline Analysis:

1. What procedures are used to ensure that course content is up-to-date?

Our courses are kept up to date by our close partnerships with businesses in our communities, instructors working in the field as well as Advisory Board meetings each semester. Our cooperation with local construction and masonry companies ensures that we are teaching the techniques and skills in demand locally as well as using equipment that is up to the standard of the industry. Using NCCER as the curriculum also enhances the consistency across the different locations and instructors and assures that the course content is current as a new curriculum is required every 5 to 7 years.

SkillsUSA membership also provides excellent opportunities to remain relevant and current with competitions as well as an extensive industry network.

2. What is the process for textbook review? Please list the book(s) and ISBN for each course.

Currently, FSCC Construction Technology is an NCCER-accredited educational institution and uses the required NCCER textbooks and curriculum in partnership with the Association of General Contractors of Kansas (AGC KS). AGC KS will conduct audits of the program every 3 years.

3. What methods of instruction are used to meet the goals and objectives of courses in the program/discipline? Please describe two different sample lessons used within different courses in the program.

Lecture, demonstration, workbooks, flipbooks and hands-on activities in the lab as well as building projects in the lab.

SkillsUSA Competition

OSHA 10 Online

Carpentry Basics Module 27104 Lesson

How to Layout a Square Foundation

- **Lecture:** 3-4-5 triangle – Students learn through lecture and demonstration that a right triangle that has leg lengths of 3 feet, 4 feet, and a hypotenuse of 5 feet always creates a right angle. Additionally, they learn that these dimensions can be reduced or increased by a common factor as well as across dimensions.

For example, 3-inch and 4-inch legs with a hypotenuse of 5 inches is also a right angle, and a triangle with 6-foot and 8-foot legs with a hypotenuse of 10 feet will also create a right angle.

- **Lab:** Students then move to the lab and lay out a basic, condensed floor plan using tape measures, calculators, and a chalk line to demonstrate how to correctly design a square foundation.

Windows, Doors, and Stairs Module 27110 Lesson

Basic Stair Layout

- **Lecture:** International Residential Codes (IRC) is used as the standard for safe maximum rise and minimum run calculations. Students are given a total height and then use a calculator to calculate the rise and run that would fit with the IRC and the given project.
- **Lab:** Students take the calculations from the lecture and apply it using a tape measure and framing square to layout the stair stringers. Performance is evaluated on stringer layout, making sure they allow for tread thickness and if it is an open or closed stringer.

4. How do you ensure appropriate academic rigor and consistency of course content in all modalities?

As the Construction Trades program has expanded and this is an essential part of the review process. Moving forward with the NCCER curriculum, testing online and instruction through workbooks and flipbooks as well as hybrid courses will help improve this area as we can take the classroom instruction to the shop as our students learn “while doing” and have the resources to take more ownership of their work and time. The course could be consistently used by all instructors in Blackboard and would be identical. It would also help in meeting the required number of minutes for the classes.

D. Program Assessment:

1. What are the program outcomes?

- After completion of the OSHA 10 online course, NCCER Core and instruction students will demonstrate appropriate safety in the lab and apply their knowledge of a safe environment to daily construction situations.
- Students will be able to construct various elements of a building to create a complete quality structure, including interior and exterior elements of the building.
- Students will be able to apply their knowledge of tools, fasteners and building materials to real-world applications.
- Students will be able to assess existing structures and develop a strategy to repair or remodel the structure.

2. What is the process for program and course level assessment?

- Program assessment is based on students successfully completing the OSHA 10 course and demonstrating workplace safety. Students are also assessed on their ability to complete the NCCER Core, NCCER Carpentry Level 1 and NCCER Carpentry Level 2 Certificates.
- Course level assessments include online tests and quizzes for OSHA 10, NCCER written exams and NCCER performance profiles, both of which are required to successfully complete the NCCER Curriculum. Demonstration and participation in the lab environment are used for assessment.

3. What are the findings of outcomes assessment reports from the department since the last program review? (Program Compilation Summaries/Course Assessment Reports)

For CTE programs only: Information from Adam Borth

Program majors/Current concentrators

Unduplicated prior 3 year graduates

4. Please list any third party accreditation.

OSHA 10

National Center for Construction Education & Research (NCCER)

List any additional needs for the program (facilities, personnel, technology, student support, etc.).

We have a large group of students and anticipate large classes in Carpentry for future years. We have one full time instructor and believe an part time or another full time instructor would better serve our students and the integrity of the program.

II. Institutional Support

A. Support:

1. How does this program support other academic areas of the college and/or how is it supported by other academic areas?

This program supports and is supported by various other academic areas of the college by providing a practical application to the things they are learning in these courses.

- Math is directly applied in our classes in multiple ways through drafting, blueprints, detailed drawings, cost sheets, layout, material calculations, timetables, and geometric calculations that are integral in building a structure.
- English is also supported as students are encouraged to complete job applications, as well as resumes and instructors, have developed English lesson plans for students that are relevant to their field.

2. What learning resources are utilized for instruction and supporting the institutional outcomes?

The NCCER Curriculum and testing are great. We are working on creating some workbooks that will allow our students to take the classroom instruction out to the shop and utilize the NCCER skills to build structures and various things. We also want to create a “flipbook” that identifies all the performance skills they will need to learn throughout the classes so they can have access to that information and start to track how often they perform them and get the instructor’s evaluation of that skill. When the students masters the skill, the instructor will initial that item in the flipbook. The idea is to get the students to take more ownership of their skills and level.

Lab tools and materials are used extensively throughout the program.

Advisory boards and relationships with builders and commercial construction industries are a vital source of information and donations of materials.

B. Community Engagement:

1. Please provide examples of how the program/discipline fosters relationships within the communities FSCC serves (community partnership, participation, advisory board, etc.)

Advisory Board meetings are held twice a year and students have completed projects for local high schools or organizations. For example, the Carpentry students at CTEC participated in building a bench that was donated to the Fort Scott Chamber of Commerce.

For the past two years, CTEC has hosted a job fair that has attracted over 25 businesses and provided opportunities for students who are graduating from FSCC. This helps with placing students, in addition, instructors often discuss with business partners work opportunities for students.

Local industry is very supportive with donations to the program as well as providing internship opportunities for students.

C. Program Development:

1. What marketing/recruiting strategies are used by the program/discipline?

FSCC promotes the program extensively through advertising and on its website. Local representatives work extensively with local high schools to encourage enrollment and the local KansasWorks organization also promotes the FSCC Construction Trades program.

2. How, and by what means, does the discipline use external professional and community resources to enhance discipline practices?

Local businesses donate material to the program which is extremely beneficial to the program. Through the Advisory Board meetings, local leaders discuss new trends, tools, or technology that needs to be addressed with the program. Students also have the opportunity to tour local facilities, participate in job shadow opportunities or work in the field as an intern.

3. Does the discipline have a means for students to assess the program outside of the official student evaluations? If so, explain.

///. Results

A. Continuous Improvement:

1. Please summarize the action plan, including findings from the last Program Review.

The NCCER curriculum is still the best information and format to use in the classroom. The online testing has been a great change and use of resources. Our shop time and community service are having a direct impact on students learning and growth. We are developing our lesson plans/planned hands on activities into workbooks that will allow students to have resources for “learning while doing” as well as providing a list of all the skills they need to develop prior to completing the program.

2. Provide a list of accomplished action items from the previous Program Review.

We utilized the NCCER Connect options and found that our online testing was most successful. The entire NCCER Connect package is not something we want to do when we have in-person classes and are only restricted by class time. We continue to work on projects that are going to provide the knowledge and skills that are recognized by NCCER and our industry partners. We produce students with the entry level work skills and employability skills.

3. What items are pending/not completed from the last Program Review? Please provide rationale.

None that I know of other than determining that a complete switch to NCCER Connect was not necessary

4. List any resources needed to complete the pending items.

Without COVID restrictions, the inperson delivery of instruction is a much better learning method for our students and it always helps our instructors become better at delivering their training instructions.