

**Florida Department of Education  
Curriculum Framework**

**Program Title: Pattern Making and Construction**  
**Career Cluster: Arts, A/V Technology & Communication**

<b>CCC</b>	
CIP Number	004500407xx
Program Type	College Credit
Standard Length	21 credit hours
CTSO	FCCLA
SOC Codes (all applicable)	51-6092 - Fabric and Apparel Patternmakers
CTE Program Resources	<a href="http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml">http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml</a>

**Purpose**

This certificate program is part of the Fashion Design AS degree program (1450040700).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

At the base of the fashion pyramid are the seamstresses, machinist, pattern makers, cutters and fabric sourcing agents required to produce the garments outputted by an apparel brand. This CCC addresses this layer that is made up of workers that require technical skills in order to support small designers to large brands. Though many local brands may produce large quantities overseas, the sample rooms and small batch production is often done locally. This CCC will service sewers that want industry proficiency in a short period of time, sewers who want to upgrade skills to include patternmaking for better pay, and those with training and/or education in other areas looking for proficiency in apparel construction for the purpose of business expansion. The local fashion industry needs qualified patternmakers which are in short supply, a concern that has been voiced numerous times by the Miami Fashion Institute's Advisory Board. A construction manager is to an architect, as a patternmaker is to a fashion designer. One creates the concept and the other executes. Skills obtained through this program can also be transferable to the accessory and home goods market, including upholstered furniture.

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 Arts, A/V Technology and Communication 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 Arts, A/V Technology and Communication career cluster.

The content includes, but is not limited to, industrial sewing, alterations, the design and construction of clothing, formalwear, costumes and accessories, embroidering and patternmaking. Upon successful completion of the certificate, students will obtain the following program learning outcomes:

1. Utilize industry tools and equipment in appropriate ways to create original patterns
2. Demonstrate the ability to operate various types of machinery used in the construction of apparel
3. Manipulate patterns using slopers and create a muslin prototype

**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 21 credit hours.

### **Standards**

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

- 01.0 Demonstrate appropriate basic skills essential to working in design occupations.
- 02.0 Identify the characteristics and care of textiles.
- 03.0 Select and safely use tools and equipment.
- 04.0 Operate and maintain a conventional and/or commercial/industrial sewing machine.
- 05.0 Select and prepare materials.
- 06.0 Demonstrate skill in the construction of simple garments.
- 07.0 Create an original pattern for a garment.

**Florida Department of Education  
Student Performance Standards**

**Program Title:** Pattern Making and Construction  
**CIP Number:** TBD  
**Program Length:** 21 credit hours  
**SOC Code(s):** 51-6092

01.0	Demonstrate appropriate basic skills essential to working in design services occupations. The student will be able to:
01.01	Identify the knowledge, skills, and attitudes necessary to perform occupational tasks (e.g., email, phone, conversations with clients).
01.02	Demonstrate the communication competencies required to perform occupational tasks.
02.0	Identify the characteristics and care of textiles. The student will be able to:
02.01	Identify and describe fiber characteristics.
02.02	Identify and describe types of fabric construction (e.g., knitted, woven, tufted).
02.03	Identify and describe types of fabric finishes (e.g., dyed, printed, performance/quality enhancements).
02.04	Identify and describe different types of natural and manufactured textiles; identify the pros/cons, uses, and care of each type.
02.05	Identify the laws and regulations governing the textile industry; include labeling laws and care symbols.
03.0	Select and safely use tools and equipment. The student will be able to:
03.01	Identify the tools and equipment used in design services for sewing, cutting, measuring, fabric marking, and drafting.
03.02	Select the appropriate tools and equipment for assigned projects; explain why the selection is appropriate for the project.
03.03	Demonstrate proper and safe usage of tools and equipment.
03.04	Identify and demonstrate safety procedures for the use of conventional and serger sewing machines and pressing equipment.
03.05	Explain the importance of observing Occupational Safety and Health Administration (OSHA) rules and regulations.
03.06	Clean and maintain various types of tools and equipment.
03.07	Keep an inventory record of tools, equipment, supplies, and materials using computer application software or other formatting options (e.g., written records).
03.08	Research innovations in materials and technologies that contribute to safeguards in the tools and equipment used in fashion design services.
03.09	Identify and apply drafting tools and techniques to a specific design services project (e.g., architectural ruler, light box, protractor, floor plans to scale, one-point perspective).

04.0	Operate and maintain a conventional and/or commercial/industrial sewing machine. The student will be able to:
04.01	Identify the parts of a sewing machine.
04.02	Select the needles that appropriate for different fabric types; identify the process and demonstrate needle insertion.
04.03	Identify the steps and demonstrate threading a sewing machine.
04.04	Diagram and demonstrate the ability to wind the bobbin, thread the bobbin case, and insert the bobbin correctly into a sewing machine.
04.05	Demonstrate straight stitching.
04.06	Identify and demonstrate stitch length and width selection.
04.07	Demonstrate utility and decorative stitches.
04.08	Identify the tension and demonstrate tension adjustment.
04.09	Demonstrate cleaning and lubricating the machine following manufacturer's instructions.
05.0	Select and prepare materials. The student will be able to:
05.01	Identify and match pattern pieces.
05.02	Read and interpret instructions and specifications.
05.03	Identify fabric content.
05.04	Prepare fabric.
05.05	Adjust patterns according to pattern/teacher instructions.
05.06	Lay out, pin, cut, and mark fabric according to a pattern or teacher instructions.
05.07	Demonstrate stay stitching and ease stitching.
05.08	Match grain lines and patterns according to a pattern or teacher instructions.
05.09	Mark fabric for assembly according to a pattern or teacher instructions.
05.10	Mark fabric for trims according to a pattern or teacher instructions.
05.11	Match thread with fabric.
05.12	Identify, select, and use content labels according to fabric requirements.
06.0	Demonstrate skill in the construction of simple garments. The student will be able to:
06.01	Identify common ready-to-wear sizes
06.02	Identify and describe the characteristics of a properly fitted garment.
06.03	Take accurate body measurements, select pattern size, and determine figure type.
06.04	Interpret verbal, written, and visual directions.

06.05	Prepare fabric and adjust patterns by following pattern directions.
06.06	Lay out, pin, cut, and mark fabric according to pattern specifications.
06.07	Demonstrate stay stitching and ease stitching.
06.08	Demonstrate stitching darts and tucks.
06.09	Identify and match garment pieces using markings; stitch according to directions.
06.10	Match plaids, stripes and one-way designs.
06.11	Demonstrate correct pressing techniques according to fabric requirements.
06.12	Demonstrate casing and elastic installation.
06.13	Demonstrate machine hemming according to machine manual instructions.
06.14	Identify different types of sergers and their characteristics.
07.0	Create an original pattern for a garment. The student will be able to:
07.01	Plan and report on a fashion design project using established criteria.
07.02	Using appropriate software, insert body measurements to produce a pattern.
07.03	Draft and produce a paper pattern using personal measurements.
07.04	Create slopers for a bodice, skirt, and pants; construct the slopers using grey goods and create a mood board that includes a title, photographs of the sloper, and the purpose/use of a sloper (include in Professional Portfolio).
07.05	Create a muslin prototype of the pattern.
07.06	Evaluate the prototype for proper fit and adjust as needed.
07.07	Construct a specialty garment according to teacher instructions (the project must include a minimum number of construction skills as designated by the teacher).

## **Additional Information**

### **Laboratory Activities**

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

### **Career and Technical Student Organization (CTSO)**

Florida Family Career and Community Leaders of America (FCCLA) is the intercurricular career and technical student organization(s) providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered.

### **Accommodations**

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their counselor and/or instructors. Accommodations received in postsecondary 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 provided should be maintained in a confidential file.

### **Additional Resources**

For additional information regarding articulation agreements, Bright Futures Scholarships, Fine Arts/Practical Arts Credit and Equivalent Mathematics and Equally Rigorous Science Courses please refer to: <http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml>