

SAN DIEGO COMMUNITY COLLEGE DISTRICT
COLLEGE OF CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

CLTX 661

COURSE TITLE

PATTERNMAKING FUNDAMENTALS

TYPE COURSE

NON-FEE

VOCATIONAL

CATALOG COURSE DESCRIPTION

This course provides a study of patternmaking techniques, combining traditional methods with computer-aided drafting (CAD) tools. Students learn to create patterns using flat patternmaking and draping, and how to translate them into two-dimensional (2D) and three-dimensional (3D) digital CAD formats. CAD software enhances efficiency, precision, and creativity in patternmaking processes. Practical skills will be developed through hands-on project-based learning. (FT)

LECTURE/LABORATORY HOURS

72 - 80

ADVISORIES

Completion of CLTX 511 Sewn Product Construction 1, CLTX 531 Pattern Fitting 1 with a grade of 'C' or better, or equivalent

RECOMMENDED SKILL LEVEL

Knowledge of general math and basic computer skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility

SDCCE students demonstrate interpersonal skills by learning and working cooperatively

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in a diverse environment.

2. Effective Communication

SDCCE students demonstrate effective communication skills.

3. Critical Thinking

SDCCE students critically process information, make decisions, and solve problems independently or cooperatively.

4. Personal and Professional Development

SDCCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

5. Diversity, Equity, Inclusion, Anti-Racism, and Access

SDCCE students critically and ethically engage with local and global issues using principles of equity, civility, and compassion as they apply their knowledge and skills: exhibiting awareness, appreciation, respect, and advocacy for diverse individuals, groups, and cultures.

COURSE GOALS

1. Learn to develop patterns using the techniques of draping and drafting.
2. Gain an understanding of flat-pattern principles and rules.
3. Learn to derive solutions to problems in patternmaking.
4. Build confidence in the ability to construct product patterns.
5. Develop accurate measuring skills.
6. Gain the ability to create construction samples.
7. Explore the various career options and diverse patternmaking job opportunities that exist in the industry.
8. Discuss the ecological impact of patternmaking and sampling in cut and sew industries.
9. Gain an understanding of the importance of employability skills and the entrepreneurial mindset in the cut and sew industry workplace.

COURSE OBJECTIVES

1. Create accurate and precise patterns through a variety of methods including pattern blocks and pattern manipulation.
2. Execute basic pattern creation utilizing drafting and draping techniques.
3. Explain how patternmaking problems may be resolved.
4. Use 2D CAD software for patternmaking and modification.
5. Critically assess and refine pattern measurements for fit and style.
6. Analyze and evaluate completed construction samples.
7. Describe the diverse types of patternmaker roles in the industry.
8. Explain and demonstrate ethical and ecologically sustainable patternmaking practices.
9. Explain entrepreneurial and soft skills and their application in the industry and

workplace.

SECTION II

COURSE CONTENT AND SCOPE

1. Introduction to Patternmaking Fundamentals and the Patternmaking for Product Development Certificate Program
 - 1.1. Clothing and Textiles (CLTX) programs and pathways
 - 1.1.1. San Diego College of Continuing Education (SDCCE) programs and pathways
 - 1.1.2. Credit by exam
 - 1.2. Course learning management system
 - 1.2.1. Canvas
 - 1.2.2. Other supporting software used
2. Essential Entrepreneurial and Soft Skills in the Classroom and Work Environments
 - 2.1. Definition of entrepreneurial and soft skills
 - 2.2. Examples of entrepreneurial and soft skills
 - 2.2.1. Communication skills
 - 2.2.2. Conflict resolution skills
 - 2.2.3. Problem solving
 - 2.2.4. Design thinking
 - 2.2.5. Digital tool skills
3. Historical Survey of Patternmaking in the Cut and Sew Industry
 - 3.1. Evolution of patternmaking to digital processes
 - 3.2. Systems for product development
4. Patternmaking Tools, Supplies, Equipment and Terminology
 - 4.1. Paper
 - 4.2. Measuring, marking & cutting tools
 - 4.3. Patternmaking paperwork
 - 4.3.1. Specification sheets
 - 4.3.2. Product briefs
 - 4.3.3. Tech-packs
 - 4.3.4. Technical specifications
 - 4.3.5. Globally recognized organizations
 - 4.3.6. Independent non-governmental international organizations
 - 4.4. Digital and physical 3D forms
 - 4.5. Prototyping and sampling supplies
 - 4.6. Equipment
 - 4.6.1. Computers and scanners
 - 4.6.2. Software
 - 4.6.3. Printers & plotters
 - 4.6.4. Sewing machines
 - 4.6.5. Pressing tools
 - 4.7. Patternmaking terminology
 - 4.8. Terms
 - 4.8.1. Symbols and icons

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- 4.9. Ergonomic and health safety principles
- 5. Patternmaking Principles, Methods and Techniques
 - 5.1. Principles
 - 5.1.1. Dart manipulation
 - 5.1.2. Adding volume
 - 5.1.3. Reducing and contouring
 - 5.1.4. Drafting accuracy
 - 5.2. Methods
 - 5.2.1. Flat drafting
 - 5.2.2. Draping
 - 5.2.3. Digital
 - 5.2.4. Product analysis
 - 5.2.5. Intellectual property
 - 5.2.6. Drafting alterations
 - 5.3. Techniques
 - 5.3.1. Pivot method
 - 5.3.2. Slash method
 - 5.3.3. Pinning methods
 - 5.3.4. Cutting methods
 - 5.3.5. Interpreting methods
 - 5.3.6. Truing methods
 - 5.3.7. Accurate measuring methods
- 6. Documentation/Portfolio of Skills
 - 6.1. Portfolio
- 7. Career Options and Diverse Patternmaking Job Opportunities
 - 7.1. Payroll employee
 - 7.2. Self-employment
 - 7.3. Freelancing
 - 7.4. Employment resources
 - 7.4.1. Online marketplaces
 - 7.4.2. Social media
 - 7.4.3. Networking
- 8. Application of Sustainable Principles in the Context of Patternmaking
 - 8.1. Definition
 - 8.2. Impact of industry on the environment
 - 8.3. Zero waste

APPROPRIATE READINGS

Reading assignments may include, but are not limited to, subject matter textbooks, workbooks, instructor written handouts, industry-related publications, online help pages, articles posted on the internet, information from web sites, online libraries, resource manuals, videos and tutorials. Topics will be related to patternmaking and the cut and sew industry.

WRITING ASSIGNMENTS

Appropriate writing assignments may include, but are not limited to:

1. Maintaining a portfolio of class notes, skill samples, testing samples, and completed learning project actualizations.
2. Analysis of a product brief.
3. Written description of visual communication tools, such as a written narrative about the theme and visual inspiration research the student chose to create and actualize a project.

OUTSIDE ASSIGNMENTS

Outside assignments may include, but are not limited to:

1. Independent, further exploration of a class topic.
2. Independent research on patternmaking developments and new trends in the clothing and textile industry.
3. Practical application of patternmaking skills on textile products outside of class assignments.
4. Practical application of sustainable best practices learned in class.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments that demonstrate critical thinking may include, but are not limited to:

1. Student Self-evaluation of the completed patternmaking projects using designated rubrics.
2. Prepare pattern files according to the required specifications of the project.
3. Independent pattern creation based on physical product analysis for product development.

EVALUATION

A student's competency will be based on multiple measures of performance. Assessment will measure the development of independent critical thinking and basic patternmaking skills.

Evaluation of the student's ability will be based on, but not limited to, the following criteria:

1. Completion of the course patternmaking projects.
2. Completion of a patternmaking skills portfolio/workbook demonstrating competence of course content.
3. Completion of class participation requirements.

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Upon successful completion of all courses included in the program, a Certificate of Program Completion will be issued.

METHOD OF INSTRUCTION

Methods of instruction may include, but are not limited to:

1. Classroom lectures
2. Demonstrations
3. Laboratory
4. Classroom discussions
5. Project based learning opportunities
6. Work based learning opportunities
7. Web-based resources
8. Field trips
9. Guest speakers
10. Video resources
11. Collaborative learning
12. Individual/small group instruction

This course, or sections of this course, may be offered through distance education.

TEXTS AND SUPPLIES

Integrating Draping, Drafting and Drawing, Abbing, Bina; Maggio, Kathleen, Bloomsbury, current edition

Patternmaking for Fashion Design, Armstrong, Helen, Pearson, current edition

Fashion Patternmaking Techniques for Accessories, Donnanno, Antonio, Promopress, 1st edition 2019

Supplies:

Patternmaking rulers and drafting tools, at least 32GB USB flash drive dedicated to the patternmaking program, requisite sewing and project supplies as requested by instructor in syllabus, access to a sewing machine, access to computer and internet to complete assignments.

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PREPARED BY: Kenneth Lord-Imazumi, Shirley Pierson DATE: November 2023

REVISED BY: _____ DATE: _____

Instructors must meet all requirements stated in Policy 5500 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 5500
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog