

City College of San Francisco  
Course Outline of Record

I. GENERAL DESCRIPTION

A. Approval Date	October 2013
B. Department	Fashion
C. Course Number	FASH 67B
D. Course Title	Computerized Pattern Development: Gerber
E. Course Outline Preparer(s)	Wendy Miller
F. Department Chairperson	<u><i>Diane Green</i></u> Diane Green
G. Dean	<u><i>Nicholas Akinouye</i></u> Nicholas Akinouye

II. COURSE SPECIFICS

A. Hours	Lecture: 3 weekly (52.5 total)
B. Units	3
C. Prerequisites	FASH 26
Corequisites	None
Advisories	None
D. Course Justification	Industry demands that design students be familiar with computer assisted pattern development software. There are many such professional software platforms used in the apparel and sewn products industry, including Gerber. Knowledge of any of them facilitates use of all of them. Ability to develop patterns using CAD software packages is necessary for technical fashion professionals.
E. Field Trips	Optional
F. Method of Grading	Letter, Pass/No Pass
G. Repeatability	0

III. CATALOG DESCRIPTION

Overview of the functions and capabilities of the Gerber computerized pattern development system. Industry pattern development including drafting, modifying, and grading patterns. Digitizing and plotting patterns.

IV. MAJOR LEARNING OUTCOMES

Upon completion of this course a student will be able to:

- A. Describe how computers are integrated into the modern design and production facility.
- B. Create, store and access digital pattern files using Gerber.
- C. Digitally draft basic pattern blocks using Gerber.
- D. Modify digital pattern blocks to create patterns for original styles using Gerber.
- E. Digitize full-size paper patterns to create digital patterns using Gerber.
- F. Grade styles to achieve multiple sizes using Gerber.

V. CONTENTS

- A. How computers are integrated into the modern design and production facility
  1. CAD pattern development software systems
    - a. Gerber Technology's Acumark
    - b. PAD
    - c. Others
  2. Basic capabilities and functions

- a. Drafting pieces
- b. Modifying pieces
- c. Grading pieces
- d. Digitizing paper patterns
- 3. Transportability of digital files
- 4. Other computerized functions in the facility
  - a. Illustration and design
  - b. Cutting systems
- B. Creating, storing, and accessing digital pattern files in Gerber
  - 1. Basic commands
  - 2. Creating and saving files
  - 3. Accessing files
- C. Digitally drafting basic pattern blocks with Gerber
  - 1. Overview of basic functions and commands
  - 2. Use of commands to create basic pattern blocks
- D. Design and modification of digital pattern blocks to create patterns for original styles with Gerber
  - 1. Overview of basic pattern making commands
  - 2. Use of commands to develop and modify patterns for original styles
- E. Digitizing and plotting full-size paper patterns to create digital patterns
  - 1. Use of digitizer
  - 2. Use of plotter
  - 3. Entering pattern data
  - 4. Testing digitized pattern on plotter
- F. Grading styles to achieve multiple sizes
  - 1. Overview of grading theory and method
  - 2. Creating grade rules and grading libraries
  - 3. Applying grade rules to pattern pieces

## VI. INSTRUCTIONAL METHODOLOGY

- A. Assignments
  - 1. In class
    - a. Observation of lectures/demonstrations of software functions, and participation in classroom discussions
    - b. Practice exercises to develop pattern pieces for simple garments, such as a T-shirt, skirt, blouse
    - c. Practice exercises involving adding seam allowances, notches, labels, and other markings to pattern blocks
    - d. Practice exercises using multiple software functions to modify pattern blocks, such as moving or deleting lines, rotating darts, modifying points
    - e. Using a spec sheet to create patterns for a blouse and skirt design
    - f. Practice exercises using the digitizer, such as digitizing a paper pattern to create a digital file
    - g. Practice exercises using the plotter, such as printing pattern pieces or markers
    - h. Development of a full pattern for an original design of the student's choosing
    - i. Practice exercises such as making grade rules, and applying them to grade a pattern piece to create multiple sizes
    - j. Possible field trips to pattern makers using various CAD systems
  - 2. Out of class
    - a. Readings from textbook, instructor handouts, and program manuals
    - b. Projects such as creating function or menu reference cards for individual use

- c. Design sketching and research for original pattern ("h" above)
- B. Evaluation
  1. Participation in demonstrations and classroom discussions
  2. In-class and out of class practice exercises
  3. Pattern created from a spec sheet
  4. Correct use of digitizer and plotter
  5. Tests or quizzes on topics such as commands used to create basic pattern blocks, modifying blocks, digitizing paper patterns, grading
  6. Final exam on topics such moving or deleting lines, rotating darts, modifying points, or creating grade rules
- C. Textbooks and other instructional materials
  1. Mullet, Kathy, *Concepts of Pattern Grading: Techniques for Manual and Computer Grading*, Fairchild Publications, 2009
  2. Instructor handouts on topics such as production pattern conventions

#### VII. TITLE 5 CLASSIFICATION

CREDIT/DEGREE APPLICABLE (meets all standards of Title 5. Section 55002(a)).