BERGEN COMMUNITY COLLEGE  
BUSINESS, ARTS & SOCIAL SCIENCES  
Fashion Apparel Design (FAB)  

Departmental Policy Syllabus  

FAB-231 Tech Packs: Digital Flats & Specs  

Course & Section:  
Instructor:  

Credits: 3 | Lecture [2.00], Laboratory [2.00]  
Email:  
Office Hours:  

Prerequisites: FAB-230  
Classroom:  

Co-requisites: ART-197

COURSE DESCRIPTION  
This course teaches students how to develop “tech packs” and garment specification sheets using manual and digital techniques such as flat garment measurement to communicate style development. An emphasis is placed on the accurate collection and communication of data for the development of first patterns, fittings, grading and production.

STUDENT LEARNING OUTCOMES  
After successfully completing all course activities, the student will be able to:

1) Accurately measure and record flat garments.
2) Explain the formulas behind grading and sizing garments based on market.
3) Create “tech pack” for garments that allow for evaluation of first prototype through to mass-market production.
4) Identify and apply technology to communicate technical garment specifications (PDM/PLM software – Gerber/Lectra Technology)
5) Manage product guidelines and expectations for quality assurance purposes.
6) Develop full technical product line assortment.

MEANS OF ASSESSMENT  
Students will be assessed through a variety of methods, including:

1) Tests
2) Assignments
3) Projects
REQUIRED TEXTBOOK & RESOURCES

Adobe Suite (cloud-based)
Microsoft Office: Excel


SUGGESTED RESOURCES

Adobe.com
GerberTechnology.com
Microsoft.com
Lynda.com

Tutoring Center
The tutoring center is located in L-125. Telephone: (201) 447-7489 and online at:
http://www.bergen.edu/tutoring/

Writing Center
Available in person room L-125 and online: http://www.bergen.edu/library/learning/write/

Library
The library has a number of textbooks, databases, multimedia and aids in its regular and reserve holdings, which may be used as a reference. In addition to the resources mentioned above students should be encouraged to make full use of the Sidney Silverman Library (in person and online at http://www.bergen.edu/library/).

RESEARCH, WRITING & EXAMINATION REQUIREMENTS

Tests
Students will be quizzed on terminologies and principles learned in class.

Assignments
Students will be given assignments related to each unit of study (ie. measuring, grading).
Project
Students will have two projects in this course. The first project is to create a manual tech pack, using Microsoft Excel, for two products previously developed by the student (FAB-221). The second project is to develop a full line product assortment presentation with technical requirements (concurrent with capstone class, FAB-250).

COURSE CONTENT
This course will cover the following units of study:

UNIT 1: Students will learn the basics of women’s garment sizing, as it pertains to juniors, missy, petite and women’s (plus) size markets. Vanity sizing, sample sizing and sizing standardization are discussed, in addition to the basics of grading.

UNIT 2: Students will learn to take accurate measurements for basic garments and record the information on an Excel spreadsheet. Students learn basics of sizing adaptation and using a grading grid with predetermined formulas.

UNIT 3: Students will learn to measure and spec more complex garment types, as well as duplicate the sizing and formulas.

UNIT 4: Students will learn to develop a full tech pack to communicate garment design and detail, including embellishments, top stitching, and label placement, relaying knowledge learned in Sewing I and II in order to identify appropriate sewing, finishing and hemming for garment designs.

UNIT 5: Student will learn how to work within specific market classifications to identify the appropriate finishing, detailing etc, as well as understand the garment production and sample making process, including cutting, sewing and bundling, with an emphasis on mass production.

UNIT 6: Students will learn the basics of fitting, altering and approving first prototypes, along with understanding the acceptable margin of error.

UNIT 7: Students will learn how to merchandise a full product assortment, and represent it correctly, using line sheets, as well as Product Lifecycle Management (PLM) and Product Development Management (PDM) software, currently used in the fashion industry.

GRADING POLICY
Tests 20%
Assignments 20%
Projects 60%
## GRADING SCALE

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<th>Percentage</th>
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<tr>
<td>90-100%</td>
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<td>86-89%</td>
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## BCC ATTENDANCE POLICY

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

## FAB ATTENDANCE POLICY

Class participation and in-class work are key to succeeding in fashion apparel design. Three or more absences will result in a full letter grade drop for this course. Six or more absences will result in an automatic failing grade.

## COURSE OUTLINE

**Week 1:**
Class Introduction and overview of expectations. Overview of product lifecycle management, building on Trend Analysis & Product Development course, FAB-230. Learn the basics of accurate ensuring and recording, for the creation of tech packs and first sample prototype development. Understand sizing standards, global variations and trends.

**Week 2-3:**
Demo, learn and practice taking and t-shirt measurements. Review and understand a grading grid. Record measurements in an Excel spreadsheet, using predetermined formulas to calculate sizes. Practice with a variety of basic tops including a T-shirt, shirt and top.
Week 4-5
Demo, learn and practice duplicating measuring methods already learned on more complex garments, including pants, jeans, shirts and jackets. Learn to develop and calculate variations of the grading formula, input measurements on a variety of different garments, with a range of different sizing formulas.

Week 6-8
What goes into a tech pack? Images, measurements, garment details (labels, embellishments), directions (sewing, hemming, seaming). Practice, collecting, scanning and curating all elements required for the perfect tech pack using Microsoft Excel.

Complete Tech Pack project.

Week 7-9
Students choose a specific market classifications to determine size range, grading formulas etc. Practice taking a single design and reinterpreting it for various market categories for the purpose of comparison. Overview the production process and procurement of a garment from sourcing through cutting, sewing, distribution etc.

Week 10-11:
Review product Lifecycle Management (PLM) and Product Development Management (PDM) software currently used in the fashion industry with a focus on Gerber and Lectra, including industry visits to show technology in use. Understand quality assurance procedures, practices and acceptable margins of error.

Week 12-14:
Developing full product line assortment based around the accurate sample measurements of an original design, choosing the appropriate size range, grading, detailing (top stitching, embellishments, etc.) for the chosen market. Develop a full tech pack of sketch, technical flat, detail call outs, sewing details and finishing, labeling, fabric, trim etc.

Week 15:
Complete final projects. Presentations.

Note to Students: This Course Outline and Calendar is tentative and subject to change, depending upon the progress of the class.