ATD422–3-D COMPUTER PATTERNMAKING (BrowZwear) [Online]

Instructor:	e-mail:
	Term:
Voice mail:	Total class hours: 18
Office hours:	Class meets:

Course description: Learn 3-D CAD (computer-aided design) to fit and manipulate designs. Use various input and output devices. Students import, create, modify and correct designs, create variations and seam allowances. Students use BrowZwear Vstitcher August 2019 version.

Course objectives: Upon completion of the class, students will be able to:
- Translate 2D into 3D garments.
- Compare and critique different patterns and apparel design concepts.
- Build patterns from spec sheets and measurements.
- Add details and annotation.
- Fit and correct garments on an avatar fit model.
- File transfer to other formats.
- Speak knowledgeably at design and marketing meetings about what works and doesn't work about a given design.

Competencies assessed:
- Apply computer skills to improve fabric usage saving money and environmental impact.
- Make use of CAD software to most efficiently fit and update patterns.
- Compare patterns generated by different sources, spot errors and make corrections.

Prerequisites: Optitex Computer Patternmaking (ATD421)

Class format: Class time is divided between demo and supervised workshop time.

Required supplemental materials:
- USB device (2 GB recommended)
- Notebook or laptop/tablet for taking notes

For online classes
-- To take part, you need a laptop or desktop computer with (at least) 2G of memory and a 1Ghz processor (any computer bought in the last five years should be fine).
-- For bandwidth, you must have at least 0.5 Mbits/second upstream and 1 Mbits/second downstream. To check bandwidth use, https://speedtest.net/.
-- For browsers, we recommend Google Chrome, Mozilla FireFox or Microsoft Edge.
-- For audio, we strongly recommend using a headset. A headset will ensure that others can hear your voice clearly and you don't cause echo or background noise for others. You do not need to buy an expensive one -- any basic headset with a built-in microphone will work. A laptop with a built-in webcam and microphone will be sufficient as well if you're in a quiet area.

<u>**Standards of conduct**</u>: **Complete and on-time attendance is mandatory.**
- **No student can miss three or more classes and expect to pass this class.**
- Attendance is at the beginning of each class period. If you are late, you will lose half the attendance points for the day. If you arrive late, it is your responsibility to make sure you have been counted present. If you arrive more than 15 minutes after the beginning of a part of the class period, you will be counted absent for that part of the period.
- If you are absent, you lose the attendance points for that day. If you know ahead of time that you will not be in class, make arrangement with the instructor the night *before* class (by 10 p.m. and by telephone).
- It is the student's responsibility to keep track of assignments and turn them in on time should the students miss the class or arrive late.
- Professionalism means: Turn off your cell phone. Attend the full class. Focus and follow-through during classroom work. Have respect and work well with classmates. Use the same behavior in the classroom as you would on the job in the apparel industry.
- Late work will result in a one letter grade deduction.

information.

<u>**Incomplete**</u>: A student who, due to medical or other exceptional causes, cannot complete the required class work must document his/her situation and submit a written request for an incomplete grade to be entered. The instructor, the academic advisor and director must approve the grade and assign a time line for the work to be completed. Incompletes must be requested and approved no later than the end of the quarter for which the incomplete is requested. To remove an incomplete, a student must complete the required course work before the next quarter commences. If a student does not comply within the time line or does not complete the work, an "F" grade, or the grade calculated by the instructor on the incomplete form, will be entered to replace the incomplete. To initiate a request for an incomplete grade, the student must fill out an incomplete form and submit it to his/her instructor. The instructor will obtain the required signatures and submit the completed form with final grades.

<u>**Withdrawal:**</u> The student who withdraws from a course or from the program during the first six weeks of the quarter will be assigned a "W" code for each course. The "W" code is not used in computation of the student's grade point average; however, "W" credits are counted toward total credits attempted. The student who withdraws from a course or from the program after the ninth week of the quarter will be assigned a "WF" code for each course. The "WF" code is the equivalent of a grade of "F" and is used in computing the student's grade point average. Students wishing to withdraw from PFI must file an official status change form with the Academic Advisor. Last day to withdraw from the class is 48 hours before class starts.

<u>**Plagiarism:**</u> Presenting the writings, images or paraphrased ideas of another as one's own, is strictly prohibited. Properly documented excerpts from other's works, when they are limited to an appropriate amount of the total length of a student's paper, are permissible when used to support a researched argument.

<u>**Attendance Policy:**</u> Students who are absent from all scheduled classes over a 14-day period (2 weeks) are subject to automatic attendance suspension—from PFI, not just from this course. This means the student is administratively withdrawn from all courses

and cannot attend classes or continue in the current quarter unless he/she successfully appeals for reinstatement. Students who anticipate violating the attendance policy should contact the academic advisor immediately to discuss options such as withdrawing from PFI or navigating the appeals process.

Students with Disabilities: It is PFI policy not to discriminate against qualified students with a documented disability in its educational programs, activities or services. If you have a disability-related need for adjustments contact the academic advisor.

Before class starts: Become familiar with PFI's online Intranet, Populi. As an enrollee, your online orientation began with enrollment. You received a Populi username and password. You attended a student orientation session before the term started with instructions on how to log into Populi and your class. By two weeks before class starts, your instructor will load the class roster, syllabus, calendar, lessons, files and your first class assignment. By one week before your class starts, you are sent a reminder of log-in instructions and directed to go online to test your system then read the syllabus and first assignment and to download the first assignment. At this time, make sure you are completely set up and ready to work on your first day of class.

Help desk: Contact PFI's registrar, PFI's distance learning manager or Populi's 24/7 help desk (877) 476-7854, support@populiweb.com

Evaluation:

Attendance/Professionalism/Participation	10 %
Midterm quiz	10 %
Final project	30 %
5 activities	50 %
TOTAL	**100 %**

Grade Scale

Letter	Number	Rating
A	95-100	Excellent
A-	90-94	
B+	87-89	Good
B	83-86	
B-	80-82	
C+	77-79	Satisfactory
C	73-76	Fair
C-	70-72	
D+	67-69	Marginal
D	62-66	
F	<62	Failure

COURSE CALENDAR. Each class: LECTURE (1.3 hrs) & LAB (1.7 hrs)
This syllabus is subject to change at the instructor's discretion.

WEEK/DATE	TOPIC	ACTIVITY	ASSIGNMENTS

1/	Introductions. Terminology. Process. Goals and Objectives. Overview of tools & techniques	***Bring supplies to every class.*** **LECTURE:** What is 3D prototyping and how is it used Orientation to the working area Learning the screen (Interface) **CLASSWORK:** Intro to Vstitcher Avatars Camera Views + Navigating 3D Winter Activity #1	Set preferences & restart Export pref to practice folder Edit avatar, save then export vsa to practice folder Set up camera view to match instructor view, save then export
2/	Garment Creation	**LECTURE:** Fabrics & stitches Basic Garment Creation **CLASSWORK:** Basic Garment Creation & Transformation Arrange + clusters Stitching: single & multi, 2D & 3D Activity #2	• Create top, save .bw • Create bottom with elastic waistband save.bw • Change sleeves to long sleeve, save.bw • Stitch garment, save snapshot save .bw Arrange pieces, save snapshot save export .bw
3/	-3D Styling -Colors & Colorways -Fabrics & stitches	**LECTURE:** Styling Color palettes Fabrics & stitches Trims Artwork **CLASSWORK:** Snapshots + 3D Styling Materials: Fabric, seams, trim Colors & colorways Rendering + stylezone Activity #3	• Save 2 snapshots of each styling: hood up, sleeves down, save as .bw • Change fabric, apply stitching to garment, add 2D trim, add artwork • Import color palette, create 2 colorways • Render 1 normal image & 1 turntable
4/	Midterm	**LECTURE:** Midterm Review **CLASSWORK:** Activity #4	• Arrange and stitch garment • Use 2 different fabrics in one 1 garment • Add stitching and trims to garment • Save 2 snapshot with different styling/poses • Create 1 3D annotation comment • Create 2 colorways • Save then export file to practice folder. Upload .bw to stylezone
5/	2D functions 3D fitting	**LECTURE:** 2D functions Pattern creation & manipulation 3D fitting **CLASSWORK:** Layers & outfits 3D fitting Activity #5	• Start from a square, add points and darts, measure & adjust into a pattern sloper • Create a pleated skirt using insert & pleat tool • Create outfit, save 3 snapshots: top only, bottom only, outfit, "save as garment" & rename • Mark garment for fit corrections using pen tool & 3D annotations

| 6/ | Special functions
Final deliveries
Final project | **LECTURE:**
Special Functions
Realistic Details
Troubleshooting
Prepping for designers
CLASSWORK:
Multi-avatar
Send to floor
Smart Design
Final project | Import AAMA & clean up points
Arrange, prepare, stitch, style
Adjust pattern silhouette
Save snapshot
Save then export .bw to practice folder.
Upload to stylezone
Notebooks, final fitted version due at end of class |