Liverpool John Moores University

Title:	Computer Applications in Fashion
Status:	Definitive
Code:	**4502DFT** (119310)
Version Start Date:	01-08-2012
Owning School/Faculty:	Liverpool School of Art & Design
Teaching School/Faculty:	Liverpool Community College

Team	Leader
Stuart Borthwick	Y

Academic Level:	FHEQ4	**Credit Value:**	24.00	**Total Delivered Hours:**	105.00
Total Learning Hours:	240	**Private Study:**	135		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	15.000
Practical	64.000
Tutorial	6.000
Workshop	20.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Evidence of understanding of CAD/CAM through written report	40.0	
Technology	AS2	Technical file with evidence of skills workshops and CAD work to support and complement design, pattern, garment modules.	60.0	

Aims

To introduce Computer Aided Design (CAD) applications for fashion design and pattern manipulation and construction.

To develop their understanding of the United Kingdom clothing industry as it adopts new technology to create a competitive advantage in a global economy.
To enable students to gather research from a diversity of sources and to select, manipulate, and evaluate information electronically, using a variety of software.
To prepare students with key computer applications skills required for employment in clothing industry.

Learning Outcomes

After completing the module the student should be able to:

1 To recognise the potential effects of current technological developments on the fashion industry by analysing and evaluating the benefits of CAD and CAM to the success of the fashion industry.
2 To develop CAD skills by experimenting with the different tools and functions through practical work and gathering research electronically, using IT Skills.
3 To apply CAD skills to aid the design and visualisation of fashion using dedicated software, techniques and processes.
4 To use CAD skills for the process of pattern manipulation and garment manufacturing using industry software.
5 To critically evaluate, present and justify CAD portfolio outcomes.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Understanding CAD/CAM	1	2	
Technical file	3	4	5

Outline Syllabus

Students will be introduced through lectures and workshops to a range of new technologies related to Computer Aided Design and Computer Aided Manufacture Software used in the fashion industry. Lectures will be delivered to introduce and give a general knowledge of the use and functions of CAD/CAM used in the fashion industry. Students will be introduced to Photoshop, Illustrator, Gerber and Microsoft Office softwares. Students will also have to demonstrate their understanding of the new technologies available in the clothing industry and review their roles, and analyse the effects and benefits it brings to the industry in a competitive economy. Those workshops will offer opportunities for technical project activity related to Design Techniques and Approaches and Pattern Technology modules. Student will extend their skills in design. This will involve gathering research material electronically, using a variety of specific fashion software for design visualisation and to develop image manipulation techniques. Student will extend their skills in pattern construction and pattern manipulation using Gerber Accumark system.

Learning Activities

This unit will be delivered through formal lectures for introduction of CAD and CAM software used in fashion industry. Students will be introduced to CAM systems: eg high-speed cutters to aid sample garment production, computer pattern cutting and construction, CAD systems: eg to produce fabric designs and sampling, to simulate garments in 2D and 3D, Electronic communication systems: eg the internet, email, video conferencing, Quick response' systems: times from design to finished garment, eg product lifecycle management. Student will produce a report about their understanding of the roles and benefits of CAD/CAM technology and will explore how fashion designers can use new technology to respond quickly to market trends. This unit will also be delivered through workshops and demonstration of CAD software used in fashion industry: CAD in design, garment visualisation and fabric design: continued exploration of designing, illustrating and fabric sampling process using a variety of software packages, eg scanning,
manipulating image techniques, filters, colourways, proportions, vector drawing and painting, …
CAD in pattern construction/ manipulation: competently use industry software, eg pattern adaptations, pattern manipulation, digitising/plotting/ Marker making.
Those workshops will offer opportunities for individual lead technical project activities related to Design Techniques and Approaches and Pattern Technology modules. Student will produce a technical file of CAD work with description of tools and functions used. CAD will support and complement design, pattern and garment modules.

References

Course Material	Book
Author	Taylor, P.
Publishing Year	1990
Title	Computers in the Fashion Industry
Subtitle	
Edition	
Publisher	Heinemann
ISBN	

Course Material	Book
Author	Eberle Von, H.
Publishing Year	2004
Title	Clothing Technology
Subtitle	
Edition	
Publisher	Verlag Eropa-Lehrmittel
ISBN	

Course Material	Book
Author	Center, M.

Publishing Year	2007
Title	Fashion Designers Handbook for Adobe Illustrator
Subtitle	
Edition	
Publisher	Blackwell
ISBN	

Course Material	Book
Author	Cooklin, G.
Publishing Year	2002
Title	Introduction to Clothing Manufacture
Subtitle	
Edition	
Publisher	Blackwell Science
ISBN	

Course Material	Book
Author	Carr, H. & Latham, B. revised by Tyler, DJ.
Publishing Year	2000
Title	Carr and Latham's The Technology of Clothing Manufacture
Subtitle	
Edition	3rd ed.
Publisher	Blackwell Science
ISBN	

Course Material	Book
Author	Beazley, A. and Bond, T.
Publishing Year	2003
Title	Computer - Aided Pattern Design & Product Development
Subtitle	
Edition	
Publisher	Blackwell
ISBN	

Course Material	Book
Author	Burke, S.
Publishing Year	2005
Title	Fashion Computing
Subtitle	Design Techniques and CAD
Edition	
Publisher	Burke
ISBN	

Notes

This module will be split into two parts. The first part will introduce students to CAD softwares. Students will research, experiment, and understand functions of software, roles and benefits it brings to competitive fashion industry. The second part students will develop their skills and will demonstrate a clear relationship to the work produced for modules: design techniques and approaches, pattern technology and garment technology. This module will also support students' academic skills through a diversity of workshops.