

CAD LABORATORY

Code: 333043

Main Scientific Area: Textile and footwear design

Lecturer: Sérgio Miguel da Silva Oliveira

Language of Instruction: Portuguese

Regime: S1

Contact Hours: 30h Total Workload: 45h

ECTS: 3,0

Objectives

CAD systems are thought of for industrial applications (Engineering, product design, construction (Architecture, Civil Engineering)), however this medical technology has begun to be implemented in less traditional areas such as the area, sports and even fashion. Currently, there are 2D and 3D tools that allow a work methodology that is more different from fashion design. realization of 3D and 2D models of importance in the fashion world. These models aim to facilitate the creative process as well as the production process. In this way, we will also know how to use programs to create models and other creation components in a real context to create a collection.

Learning Outcomes

Understand the concept of 3D CAD modeling; understand the concept of 3D techniques related to fashion manufacturing. Understand the concepts related to 3D bodies. Understand the presentation strategies of 3D models.

Course Contents

1 - Introduction to CAD systems (CLO3D). Fields of application and relative importance of CAD systems in creative and productive processes. 2 - Creation of vector drawings using the most modern drawing systems. Vector construction of clothing models. 3 - Creation of two-dimensional drawings - The technical drawing. 4 - Creation of three-dimensional drawings using the most modern drawing systems. Development of practical cases. 5 - Graphic manipulation of drawings with application to the development of garments. Practical exercises on the preparation of files with a view to cutting raw materials by stamping process. 6 - Creation of models, preparation of materials and application in products.

Recommended Bibliography

Sandra Burke, Fashion Computing: Design Techniques and CAD, Burke Publishing , April 2005 Kevin Tallon- Creative Fashion Design with Illustrator, Batsford. 2006, ISBN-10: 0713490225, ISBN- 13:978-0713490220

Susan Lazear Adobe- Illustrator for Fashion Design, Prentice Hall. 2008. ISBN-10: 0131192744, ISBN-13: 978-0131192744

Sham Tickoo- SolidWorks 2008 for Designers. Cadcim.2008. ISBN-10: 1932709428, ISBN-13: 978- 1932709421

Introdução à utilização de sistema CAD de modelação tridimensional: Conceitos de Computação Gráfica e prática, SAMPAIO, A.Z, 2005, Relatório ICIST, DTC no 08/05, Lisboa 2005, ISSN: 0871-7869. Computer graphics: principles and practice , FOLEY, VAN DAM, FEINER, HUGHES, 1997, 2oed in C, Addison Wesley, 1997, ISBN 0201848406.

Griffiths L. Understanding Marvelous Designer: a guide for CG artists. Wild Web Works; 1st Ed.

Learning and Teaching Methods

Introduction to CAD (Marvelous) concepts and application that will allow students to acquire key knowledge for the most appropriate interpretation and analysis of 3D fashion models, developing the ability to define modeling concepts and their practical applications, in the manufacturing and development process. in the dynamics that determine fashion cycles and their evolution; · Through the acquisition of analysis and research content of 3D models with a methodology appropriate to the timings of the fashion industry, it will allow students to become aware of the terminologies used as well as their complexity, being able to later work them through practical exercises; · Finally, the elaboration and presentation of a 3D fashion/modeling project related to a piece of clothing, will allow students to put into practice all the contents learned throughout the UC.

Assessment Methods

The Assessment Method is continuous, with class exercises, two individual practical assignments and two group practical assignments. The qualitative intervention of the student in the classes and his presence and punctuality are also valued. Formula for percentage management: Behavioral factors: 5% Learning Assessment: 5% Individual work 1: 30% Individual Work 2: 30% Group Work1 :30%