

LABORATÓRIO CAD

Code: 333043

Main Scientific Area: Textile and footwear design

Lecturer: José Augusto Barros de Freitas

Language of Instruction: Portuguese

Regime: S1

Contact Hours: 30h Total Workload: 45h

ECTS: 3,0

Objectives

We think of CAD systems for industrial applications (Engineering, product design, construction (Architecture, Eng. Civil), however this technology started to be implemented in less traditional areas such as the medical, sport and even fashion. Currently there are 2D and 3D CAD tools that allow a methodology different work and even complement the already more traditional in the world of fashion design. The purpose of this Curricular unit is that students are able to acquire technical and theoretical knowledge that allows the realization of 3D and 2D models of importance in the fashion world. These models aim to facilitate in the creative process as well as in the production process. As well as knowing how to use in real context programs for creating models of clothing and other components necessary for creating a collection.

Learning Outcomes

Understand the concept of 3D CAD modeling;

Understand the concept of 3D techniques related to fashion manufacturing.

Understand concepts related to 3D bodies.

Understand the strategies for presenting 3D models.

Course Contents

1 - Introduction to CAD systems. Fields of application and relative importance of CAD systems in processes creative and productive.

2 - Creation of vector drawings using the most modern drawing systems. Vector construction of clothing models.

3 - Creation of two-dimensional drawings - 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 - Creating models, preparing materials and applying them to 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

The goals set for the UC correspond to the moments of work proposed for evaluation. In each working operation there will be a series of tasks that students will have to perform. The output of each extracted task will serve as input to the next stage, and so throughout the work.

Assessment Methods

The Assessment Method is continuous, with classroom exercises and two individual practical assignments.

The student's qualitative intervention in classes and their presence and punctuality are also valued.

In case the UC is taught online, the assessment must take place in person, even if combined with online assessment methods.

Formula for percentage management:

Attendance / Punctuality: 10%

Practical Exercise 1: 15%

Practical Exercise 2: 15%

Individual work 1: 30%

Individual Work 2: 30%