



Course guides

320083 - CET - Clothesmaking with Textile Structures

Last modified: 29/05/2020

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 702 - CEM - Department of Materials Science and Engineering.

Degree: BACHELOR'S DEGREE IN TEXTILE TECHNOLOGY AND DESIGN ENGINEERING (Syllabus 2009). (Compulsory subject).

Academic year: 2020 **ECTS Credits:** 6.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: Xavier Capdevila Juan

Others:

PRIOR SKILLS

An adequate knowledge of materials, yarns, fabrics, textile processes and production organization is desirable.

REQUIREMENTS

have approved the subjects of textile materials and textile design structures

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. TEX: Ability to develop textile products and industrial manufacturing.

Transversal:

2. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.
3. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.

TEACHING METHODOLOGY

In the theoretical classes, the professor introduces the basics of docent materials from examples to facilitate the understanding and everything related to industrial practice.

In the practical sessions, student apply the material presented.

Students will have to work and study individually and autonomously to solve exercises i assimilate thers collateral materials

LEARNING OBJECTIVES OF THE SUBJECT

The subject class is structured in two parts: the first refers to the patterns cutting and materials utilisation and second referred to the tchnological analysis of operation for making garments



STUDY LOAD

Type	Hours	Percentage
Self study	90,0	60.00
Hours large group	30,0	20.00
Hours small group	30,0	20.00

Total learning time: 150 h

CONTENTS

PATTERN CONSTRUCTION

Description:

- . clothing sizes.
- . Methodology based designs of patterns.
- . grading increments.

Specific objectives:

Appreciate the natural proportions to the representation of human figure and therefore to clothing manufacture.
Designing forms from the size.

Related activities:

RA2

Full-or-part-time: 25h

Theory classes: 5h

Laboratory classes: 5h

Self study : 15h

CUT PLANNING

Description:

- . Making a lay plan
- . Cut order planning
- . Management of fabric faults

Specific objectives:

Improved use of fabric consumption.
Optimize marker planning and cut orders in production.

Full-or-part-time: 25h

Theory classes: 5h

Laboratory classes: 5h

Self study : 15h



SEWING TECHNOLOGY

Description:

- . Types of stitches and seams.
- Sewing machine needles and threads.
- Feeding systems

Specific objectives:

Specify sewing elements.
Design of seams

Related activities:

RA5

Full-or-part-time: 25h

Theory classes: 5h
Laboratory classes: 5h
Self study : 15h

MANAGEMENT PURCHASING

Description:

- Purchases and supply.
- Reception control clothing.
- Purchase lot size..

Specific objectives:

Relate the purchasing and supply functions with others business functions.
Determine purchase lot size

Related activities:

RA3 and RA4

Full-or-part-time: 25h

Theory classes: 5h
Laboratory classes: 5h
Self study : 15h

SEWABILITY

Description:

- Relationship needle-thread-fabric.
- Seam resistance.
- Needle penetration force
- Seam puckering.

Specific objectives:

Find the best relationship needle-thread-fabric.
Solve fabric damage, sewing faults.

Full-or-part-time: 25h

Theory classes: 5h
Laboratory classes: 5h
Self study : 15h



ANALYSIS OF SEWING OPERATIONS

Description:

- Operations plan.
- Analysis of sewing operations.
- Work study.
- Work measurement.

Specific objectives:

Rationalization of work
Determining production time

Related activities:

RA7 and RA8

Full-or-part-time: 25h

Theory classes: 5h
Laboratory classes: 5h
Self study : 15h

GRADING SYSTEM

- First examination: 40%
- Second examination: 40%
- Related activities: 20%

For those students who meet the requirements and submit to the reevaluation examination, the grade of the reevaluation exam will replace the grades of all the on-site written evaluation acts (tests, midterm and final exams) and the grades obtained during the course for lab practices, works, projects and presentations will be kept.

If the final grade after reevaluation is lower than 5.0, it will replace the initial one only if it is higher. If the final grade after reevaluation is greater or equal to 5.0, the final grade of the subject will be pass 5.0.

The renewal of the first test for suspensions by means of a test added on the final exam: maximum possible markable score 7. The resulting qualification will not be less than obtained by maintaining the original qualification of the first evaluation.

EXAMINATION RULES.

The class activities are reports on subjects not exposed in class and related work in class will give explanations on certain dates.

BIBLIOGRAPHY

Basic:

- Jones, I.; Stylios, G.K. Joining textiles: principles and applications. Woodhead Publishing, 2013. ISBN 9781845696276.
- Carr, Harold. The technology of clothing manufacture. 2nd ed. Oxford: Blackwell Scientific Publications, 1994. ISBN 0632037482.
- Cooklin, Ferry. Cooklin's garment technology for fashion designers. 2nd ed. Chichester: Wiley, 2012. ISBN 9781405199742.
- Eberle, Hannelore [et al.]. Clothing technology. Haan-Gruiten: Verlag Europa-Lehrmittel, 1999. ISBN 3808562218.
- Capdevila Juan, Xavier. Confección industrial de tejidos destinados a prendas de vestir : aspectos tecnológicos y de proceso. 3a ed. 2001. ISBN 8460075834.

Complementary:

- Capdevila Juan, Xavier. Tecnología del termofijado de entretelas. Barcelona: Entre Telas, 1992. ISBN 8488445008.
- Oficina Internacional del Trabajo. Introducción al estudio del trabajo. 4a ed. Ginebra: OIT, 1996. ISBN 9223071089.



RESOURCES

Computer material:

- INVESMARK. CAD PATTERN