

Textile Overview - Weaving Technology

Textil översiktskurs - Väveriteknik

3 credits

Ladok Code: AT1VK1

Version: 4.0

Established by: Committee for Education in Technology 2022-01-28

Valid from: Autumn 2022

Education Cycle: First cycle

Main Field of Study (Progressive Specialisation): Textile Technology (G1N)

Disciplinary Domain: Technology

Prerequisites: General entry requirements for university studies.

Subject Area: Textile Technology

Grading Scale: Seven-degree grading scale (A-F)

Content

The course aims to provide the student with basic knowledge in weaving technology for industrial weaving and about the structure and properties of industrially produced fabrics. The introductory lectures deal with manufacturing processes and machines from yarn to fabric. Then the course goes into the basic elements of weaving theory such as analysis, basic weaves, derivations, threadings, pattern chain and k-value for both single and double weaves. The course ends with production and cost calculations.

Learning Outcomes

After completing the course students will be able, with respect to:

Knowledge and understanding

- 1.1 describe basic concepts and processes for industrial production of woven materials,
- 1.2 account for basic single and double weaves with regard to threading and pattern chain,
- 1.3 account for derivations from basic weaves,
- 1.4 account for the k-values of a weave.

Skills and Abilities

- 2.1 perform yarn and fabric calculations,
- 2.2 perform production calculations on weave sets,
- 2.3 perform cost calculations on weave sets,
- 2.4 perform transformations with proportional coverage factor,
- 2.5 evaluate and assess different possibilities for production adaptations.

Forms of Teaching

The teaching is given completely at distance through digital lectures.

The language of instruction is English.

Forms of Examination

Course is examined through the following examination parts:

- Written test

Learning objectives: 1.1-1.4, 2.1-2.5 (all)

Credits: 3,0

Grading Scale: Seven-degree grading scale (A-F)

If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Materials

The course literature is in English.

Kadolph, Sara J. *Textiles: Pearson New International Edition*. (Senaste upplagan). Pearsons Educations Limited, (kan finnas tillgänglig som E-bok via högskolans bibliotek)

Supplementary material is also available at the university's learning platform.

Student Influence and Evaluation

The course is evaluated in accordance with current guidelines for course evaluations at the University of Borås in which students' views are to be gathered. The course evaluation report is published and returned to participating and prospective students in accordance with the above-mentioned guidelines, and will be taken into consideration in the future development of courses and education programs. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

Miscellaneous

The course is an independent overview course and is given at a distance, with the aim of giving the student a basic orientation in the subject. The course is part of a group of courses with the aim of contributing to the fulfillment of the prerequisites for applying to the university's master's program with a major in textile technology and is therefore primarily aimed at students studying for or holding a master's program with a major in technology.

This syllabus is a translation from the Swedish original.