

Dyeing-, printing and Finishing Färgeri-, textiltryck- och beredningsteknik

9 credits9 högskolepoäng

Ladok Code: AT1TB1

Version: 2.0

Established by: Committee for Education in Technology 2019-06-14

Valid from: Autumn 2019

Education Cycle: First cycle

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

Disciplinary Domain: Technology

Prerequisites: General requirements for university studies.

Subject Area: Textile Technology **Grading Scale:** Fail (U) or Pass (G)

Content

The course aims to offer the student basic understanding and knowledge in processes, tools and notions that are needed to understand how the characteristics of textiles change through textile processes such as mechanical, thermic and chemical treatments. The focus is to critically examine and evaluate the different processes with reference to aesthetic and functional needs in relation to sustainable development within a globalised industry. The course also aims to give the student foundational knowledge in textile printing, digital printing as well as knowledge in dyeing and finishing techniques through theoretical instructions and practical exercises.

Learning Outcomes

Upon course completion the student should be able to:

Knowledge and understanding

- 1.1 explain the processes pre-treatment, dying, textile printing and finishing,
- 1.2 describe the choices of textile materials, chemicals and processes affect quality, aesthetic and functional qualities,
- 1.3 describe how the choice of colour, chemicals and processes affect the textile material's qualities in an aesthetical manner as well as in a functional manner and how these relate to environmental, economical aspects and the lifespan of the product,
- 1.4 describe how colour measurements, controls and testing methods occur and are used within dyeing and finishing,
- 1.5 describe how colours work together and their aesthetical effect on textile materials,
- 1.6 describe the demands in relation to classification and marking of chemicals as well as be able to apply safety regulations and precautions that are recommended.

Skill and ability

- 2.1 interpret the expectations of textiles and formulate these to relevant specification requirements,
- 2.2 identify relevant industrial preparation processes to give textile materials the desired qualities,
- 2.3 conduct a structured presentation, orally and in written form.

Evaluation ability and approach

- 3.1 Actively search, select and evaluate information about practical processes,
- 3.2 take into account current legislation in the area and be able to describe companies' responsibility for sustainable development

Forms of Teaching

The teaching forms of the course consist of:

- Lectures
- Labs
- Study visits

- Workshops
- Seminars

The language of instruction is English.

Forms of Examination

The course is examined through the following exam forms:

• Exam textile materials: home exam Learning outcomes: 1.1 - 1.3, 2.1, 3.1

Credits: 0.5

Grading scale: Fail or Pass

Exam

Learning outcomes: 1.1 - 1.4, 1.6, 2.1 - 2.2, 3.2

Credits: 2.5

Grading scale: Fail or Pass

• Labs with lab report

Learning outcome: 1.1 - 1.4, 1.6, 2.2, 3.1 - 3.2

Credits: 2.0

Grading scale: Fail or Pass Presentation of project

Learning outcome: 1.1 - 1.5, 2.1 - 2.3, 3.1 - 3.2

Credits: 4.0

Grading scale: Fail or Pass

To pass the course, the student must pass all exam forms.

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

Albers, Josef (2013). *Interaction of color. 50th anniversary edition;* 4th edition. New Haven: Yale University Press. Kadolph, Sara J (2014). *Textiles.* 11. ed.; international edition. Harlow: Pearson Education Limited

Kühlhorn, Lotta (2012). Rapport!: en bok om att göra mönster. Stockholm: Bonnier fakta

Kühlhorn, Lotta (2017). Kulör: en bok om vad färg gör. Stockholm: Bonnier fakta

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 programmes. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

Miscellaneous

The course is conducted in Swedish if there are no admitted international students.

The course is primarily offered as a programme course within the Bachelor Programme in Fashion Design and the Bachelor Programme in Textile Design.

The main focus of the course is on learning outcomes: 5b, 6a-b.

This syllabus is a translation from the Swedish original.