

Scalability of fashion-tech value chains: Addressing future sustainable development challenges

Skalbara mode-tech lösningar: att hantera framtida utmaningar för hållbar utveckling

7.5 credits

Ladok Code: AE1SM1

Version: 4.0

Established by: Committee for Education in Business and Working Life 2023-08-30

Valid from: Autumn 2024

Education Cycle: Second cycle

Main Field of Study (Progressive Specialisation): Textile Management (A1N)

Disciplinary Domain: Social sciences 50%, Technology 50%

Prerequisites: BSc. in Business Administration, Textile Management, Industrial Engineering, Textile Technology, Textile or Fashion Design, or equivalent. Furthermore knowledge in English equivalent to English 6.

Subject Area: Leadership, Organisation and Management

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

Content

The course focuses on the field of Fashion Tech and their value chains, aiming to advance students' knowledge on identifying future sustainable development challenges and how these can be solved by developing inter-disciplinary and scalable fashion-tech solutions (covering design, technology, management aspects). The course will discuss scalability from social innovation perspective in terms of scaling-out, scaling-deep and scaling-up dimensions.

Contents will be delivered through a preliminary theoretical part aimed to level the knowledge of the students as a prerequisite for the practical challenge-based part of the course. In the challenge-based part students will work in the interdisciplinary international groups to experience the process and the methodological approach of a project development activity that includes design, product life management, costing and pricing, research and materials management.

*Students will be selected from: Högskolan i Borås - Swedish School of Textiles (Sweden), Politecnico di Milano - School of Design (Italy), University of the Arts London – London College of Fashion (UK), TU/Delft - Industrial Design Engineering Faculty (The Netherlands), Ecole supérieure des Technologies industrielles avancées – Graduate School of Advanced Industrial Technologies (France).

Learning Outcomes

Upon successful completion of the course the student should be able to:

Knowledge and understanding

- 1.1 Describe and explain scaling and scalability in fashion-tech value chains,
- 1.2 Understand the role of fashion-tech solutions (covering design, technology, management aspects) in the context of future sustainable development risks and challenges,
- 1.3 Identify the implications of developing inter-disciplinary and scalable fashion-tech solutions in addressing societal trends and sustainability demands,

Skills and abilities

- 2.1 Apply innovative research and methodological approaches in the multidisciplinary Fashion Tech context,
- 2.2 Suggest fashion-tech tools and how to scale them in order to solve specific sustainable development challenges related to circularity, personal safety and health, climate change, social cohesion, etc.,
- 2.3 Develop innovative business model scalability approaches to accommodate the fashion-tech solutions related to products, processes and value chain,
- 2.4 Develop abilities to engage in dialogue and co-produce knowledge and innovation with various stakeholders across multiple disciplinary international contexts,

Evaluation ability and approach

3.1 Critically reflect from the SDG perspective on the economic, environmental, and societal impacts of implementing scalable fashion-tech solutions,

3.2 With the support of theory formulation, critically reflect on complexities associated with scaling fashion-tech value chains, and demonstrate awareness of the negative impacts of it.

Forms of Teaching

Teaching comprises both theoretical and practical activities, including digital lectures, self-studies, written essays/tests, peer interaction via forum participation, tutoring/coaching session with industry and academia representatives, and the final project assignment. Students will also be introduced to innovative ways of teaching that are based on digital tools used both to deliver the course and to develop project work and group collaboration between teammates.

The language of instruction is English.

Forms of Examination

The following examinations will form part of this course with respect to the stated learning objectives:

Examination: individual written exam

Learning outcomes: 1.1-1.2, 2.1-2.3, 3.2

Credits: 2,0

Grade: A-F

Written group report

Learning outcomes: 2.1-2.4, 3.1-3.2

Credits: 2,0

Grade: Pass/Fail

Presentation: oral group presentation

Learning outcomes: 2.4, 3.1-3.2

Credits: 2,0

Grade: Pass/Fail

Peer interaction via digital forum participation

Learning outcomes: 2.4, 3.1-3.2

Credits: 1,5

Grade: Pass/Fail

The grade for the full course is set according to the A-F scale and is determined by the grade on the written individual exam. To get the final grade for the course, the students should receive 'pass' on all other forms of examinations in addition to the written group report.

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

Bertola, P. & Teunissen, J. (2018). Fashion 4.0. Innovating fashion industry through digital transformation. *Research Journal of Textile and Apparel*, 22(4), pp. 352-369.

Gabriel, M. (2014). *Making it Big: Strategies for scaling social innovations*. Nesta: London.

Gasparin, M., Green, W., Lilley, S., Quinn, M., Saren, M. & Schinckus, C. (2021). Business as unusual: A business model for social innovation. *Journal of Business Research*, 125(2021), pp. 698-709.

Grimm, R., Fox, C., Baines, S. & Albertson, K. (2013). Social innovation, an answer to cotemporary societal challenges? Locating the concept in theory and practice. *The European Journal of Social Research*, 26(4), pp. 436-455.

Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation*. The Young Foundation: London.

Riddell D., Moore, M-L. & Vocisano, D. (2015). Scaling Out, Scaling Up, Scaling Deep: Advancing Systemic Social Innovation and the Learning Processes to Support it. *The Journal of Corporate Citizenship*, 2015(58), pp. 67-84.

Toeters, M. (eds.) (2019) *Unfolding Fashion Tech: Pioneers of Bright Futures*. Onomatopoe: Eindhoven

A selection of additional literature can be included in the course (maximum 300 pages).

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

This syllabus is a translation from the Swedish original.

Course is given as an elective course.