No. 18

| Course syllabus for Second cycle studies | | | | | |
|---|---|---|---|---|---|
| 1. | **Course title** | Nonwoven Textile | | | |
| 2. | **Code** | CDE4E11 | | | |
| 3. | **Study Program** | Clothing Design and Engineering | | | |
| 4. | **Study program organizer (unit, institute, department, division)** | Faculty of Technology and Metallurgy, Institute of Textile Engineering | | | |
| 5. | **Degree (first, second, third cycle)** | First Cycle | | | |
| 6. | **Academic year / semester** | 2th year<br>4th semester | 7. | **Number of ECTS** | 5 |
| 8. | **Instructors** | Dr. Emilija Toshikj, Associate Professor | | | |
| 9. | **Prerequisites for course enrollment** | | | | |
| 10. | **Objectives of the course syllabus (competences):**<br>The aim of the course is for students to acquire knowledge about the scientific achievements in the field of nonwoven textiles and to develop abilities for their practical application in production.<br><br>**Acquired skills (competences):**<br>Students are equipped to know nonwoven materials depending on their development, classification, and application, and the raw materials for their production, and to understand the characteristics of felt and the technological procedures for felt production. Students are capable of understanding the strengthening of felt and additional finishing processes. Students will acquire knowledge about the classification and application of nonwoven materials, the raw materials for production, and the technological procedures for producing felt. | | | | |
| 11. | **Content of the course:**<br>Development, division, and application of nonwoven materials. Raw materials for production. Characteristics of the felt. Technological procedures for the production of felt (mechanical, aerodynamic, etc.). Strengthening of the felt (mechanical, chemical). Additional processing. | | | | |
| 12. | **Study methods:** Method of oral presentation, method of programmed instruction, method of independent work with a textbook, method of problem-based teaching (problem situation, problem, problem task, and problem question, conditions for implementing problem-based teaching and levels of application of the problem-based teaching method), method of using technical aids (need and opportunities for using computers and dialogic educational methods), selection and combination of teaching methods. | | | | |
| 13. | **Total available time** | | 120 | | |
| 14. | **Allocation of available time** | | | | |
| 15. | **Teaching activities** | 15.1. | Lectures-theoretical instruction | | 30 |
| | | 15.2. | Exercises (laboratory, | | 15 |

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| | | | auditorium), seminars, team work | |
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| 16. | **Other types of activities** | 16.1. | Project tasks | |
| | | 16.2. | Independent tasks | 25 |
| | | 16.3. | Home learning | 50 |

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| 17. | **Grading system** | | |
| | 17.1. | Tests | 80 points |
| | 17.2. | Successfully completed laboratory/auditorium exercises | 12 points |
| | 17.3. | Activity and participation | 4 points |
| | 17.4. | Homework and/or seminar work | 4 points |

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| 18. | **Grading criteria (points/grade)** | Up to 61 points | 5 (five) (F) |
| | | From 61 to 69 points | 6 (six) (E) |
| | | From 70 to 79 points | 7 (seven) (D) |
| | | from 80 to 89 points | 8 (eight) (S) |
| | | From 90 to 95 points | 9 (nine) (B) |
| | | from 95 to 100 points | 10 (ten) (A) |

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| 19. | **Prerequisites for taking the final exam** | 12 points from activity 17.2. and a minimum of 4 points from activities from 17.3 to 17.4. |
| 20. | **Language in which lectures are conducted** | English |
| 21. | **Method for monitoring the quality of lectures** | Anonymous Student Survey |

22. **LITERATURE**

22.1. Compulsory literature

| No. | Author | Title | Publisher | Year |
|---|---|---|---|---|
| 1. | M. Prendzova | Nonwoven Textile, internal script | Faculty of Technology and Metallurgy | 2007 |
| 2. | W. Albrecht, H. Fuchs, W. Kittelmann | Nonwoven Fabrics | WILEY VCH, Verlag GmbH&Co. KgaA, Weinheim | 2001 |
| 3. | | | | |

22.2. Additional literature

| No. | Author | Title | Publisher | Year |
|---|---|---|---|---|
| 1. | D. Hoffer | Netkane Tekstilije | SITTH, Zagreb | 1976 |
| 2. | S. Šunka, V. Petrović | Technology of Nonwoven Textiles | Technical Faculty, Zrenjanin | 1996 |
| 3. | | | | |