SYLLABUS

1. Course title:

Metal removal process II

2. Code:

3. Cycle of study:

1

4. ECTS credits:

5

5. Type of course:

(●) Mandatory ( ) Elective

6. Prerequisites:

Materials I, Materials II

7. Class restrictions:

8. Duration / semester:

1 VI

9. Weekly contact hours:

9.1. Lectures: 2

9.2. Seminars: 1

9.3. Laboratory/Practice classes: 1

10. Faculty:

Faculty of mechanical engineering

11. Department/study program:

Production engineering

12. Lecturer:

Prof.Ph.D Muhamed Mehmedović

13. Lecturer's e-mail:

muhamed.mehmedovic@untz.ba

14. Web site:

http://mf.untz.ba/

15. Course aims:

The basis aims of this course realization are:

to introduce students with classifications of metal removal processes,
to introduce students with conventional machining processes,
to introduce students with non conventional machining processes,
to introduce students with advanced machining processes.

16. Learning outcomes:

At the end of this course, the students should be able to:

Understand importance an possibilities of machining technologies application from the aspects of industrial requirements,
Understand of conventional as well as non conventional machining processes,
Choose of the appropriate machining technology as well as make plan of machining for the desired product,
Make analysis of machining processes with the goal of their improving.

17. Course content:

Classifications of metal removal processes (machining processes),
Turning and related operations,
Drilling and and associated technologies,
Milling cutters and associated technologies,
Other machining processes,
Grinding processes,
Other abrasive processes,
Nontraditional machining - Mechanical energy processes,
Electromechanical machining,
Thermal energy processes,
Chemical machining,
High speed machining and hard machining,
Micro machining and other advanced machining processes.

18. Learning methods:

The following methods are planned for successful learning:

- Lectures with the use of multimedia equipment and learning technique with active participation and student discussions,
- Laboratory exercises,
- Graphic papers preparation and working

19. Assessment methods:

Activities during lectures realization and exercises realization,
Semester's paper/homework,
Partially exams during lectures realization,
Final exam at the end of course,
Remedial exams.

Above mentioned assessments are taken into account as a cumulative exam only if the result is positive after each partial exam, and if its portion is more then 50% of the total of required knowledge and skills of this activities. The exam is successful finished if student has minimum 54% of cumulative points.

20. Assessment components:

Obligations of the student	Points
Presence and activities during course	5
Graphic papers	10
Tests from the theory	20
Tests from the exercises	20
Final examination	45

21. Required reading list:

Ekinović S. : „Material removal processes“, Faculty of Mechanical Engineering in Zenica, 2003.
Cukor G.: „Calculations in to metal removal processes“, Technical faculty Rijeka, Croation, 2006.
R. Childs T.; Maekawa K.; Obikawa T.; Yamane Y.: „Metal Machining, Theory and Applications“, First published in Great Britain, London, 2000 godina.

22. Web sources:

23. Applicable starting from the academic year:

2014/15

24. Adopted in the Faculty/Academy session: