SYLLABUS

1. Course title:

Optimization of drilling parameters

2. Code:

ODP

3. Cycle of study:

2

4. ECTS credits:

7

5. Type of course:

(●) Mandatory ( ) Elective

6. Prerequisites:

No

7. Class restrictions:

No

8. Duration / semester:

1 1

9. Weekly contact hours:

9.1. Lectures: 3

9.2. Seminars: 0

9.3. Laboratory/Practice classes: 0

10. Faculty:

FMGCE Tuzla

11. Department/study program:

Well Production of Mineral Resources (WPMR) / Well Engineering (WE)

12. Lecturer:

Sanel Nuhanovic, Associate Professor

13. Lecturer's e-mail:

sanel.nuhanovic@untz.ba

14. Web site:

www.rggf.untz.ba

15. Course aims:

- familiar students with the basics methods for optimization of drilling and production parameters
- students will be able to understand, analyze and use a knowledge for practical problems solutions
- increase of verbal and written students communications skills
- provide a continuous work of students during the course time
- achieve a mutual communications between students and professors

16. Learning outcomes:

The students will be trained for:
- successful examination
- understanding of contents of this course for practical situations and problems solutions
- professional literature using for practical problems solutions
- individual and/or team problems solving

17. Course content:

- Selection of drilling rig
- Drilling optimization work flow; People and processes
- Drilling equipment optimization
- Motor and bits optimization
- Optimization of drilling variables
- Casing optimization
- Optimization of cementing works
- Drilling time optimization
- Drilling costs optimization
- Mathematical models of drilling optimization
- Optimization of oil and gas production methods

18. Learning methods:

- Lectures (L)

19. Assessment methods:

L:
Professors and assistants make notes of students presence to L during the semester. Student can have max 3 unjustified absences from L. In the case of student justified absences, professor can enable compensation activity for those students.
Presence of L, continual activity and participation in the discussions will be stimulated in the final evaluation of students with max 20 points (20 % of total points number).

The final exam:
At the end of semester, students will have the final exam. Successful final exam can be made in total 80 points. Minimum required number of points for successful exams are 54 points (include points for presence L, continual activity and participation in the discussions).

20. Assessment components:

- Presence of L .... max 20 points / min 14 points for satisfying
- The final exam .... max 80 points / min 40 points for satisfying

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T O T A L .... max 100 points / min 54 points for satisfying

Exam evaluation:

Total points < 54 .... 5 (F)

- II - 54 - 63 .... 6 (E)
- II - 64 - 73 .... 7 (D)
- II - 74 - 83 .... 8 (C)
- II - 84 - 93 .... 9 (B)
- II - > 93 .... 10 (A)

21. Required reading list:

- Prosper Aideyan: ''Drilling operations: Cost and risk management'', A Sigma Quadrant Engineering Publication, Houston, TX, USA, 2015. ISBN-13: 978-0-990683629
- Any other available literature

22. Web sources:

- Any literature available on the web browser whose theme is by optimization of drilling and oil and gas production parameters

23. Applicable starting from the academic year:

2020/2021.

24. Adopted in the Faculty/Academy session:

2020.