SYLLABUS

1. Course title:

Satellite Telecomunications

2. Code:

TK401

3. Cycle of study:

1

4. ECTS credits:

6

5. Type of course:

(•) Mandatory ( ) Elective

6. Prerequisites:

[TK204] Information Theory and Coding, [TK301] Digital Telecommunications

7. Class restrictions:

None

8. Duration / semester:

1 8

9. Weekly contact hours:

9.1. Lectures: 3

9.2. Seminars: 1

9.3. Laboratory/Practice classes: 1

10. Faculty:

Faculty of Electrical Engineering

11. Department/study program:

Electrical Engineering and Computer Science

12. Lecturer:

Ph.D. Asmir Gogić, assistant prof.

13. Lecturer's e-mail:

asmir.gogic@untz.ba

14. Web site:

(max. 50 characters)

15. Course aims:

The course aims to provide basic knowledge of satellite communication systems operation. Students will gain knowledge of satellite role in global communication systems.

16. Learning outcomes:

Students will gain skills required for analysis and simualtion of satellite based telecommunication systems.

17. Course content:

Basic principles of satellite communications. Signal propagation and channel characteristics. Satellite. Earth stations for satellite communications. Satellite links. Antennas. Modulation and channel coding in satellite communication systems. Communication satellite networks and systems. Mobile satellite systems. Global Positioning System (GPS), Very Small Aperture Terminal satellite systems (VSAT), Multiple Access Techniques, Digital video broadcasting over satellites.

18. Learning methods:

- Lectures aided with multi-medial presentations and active discussion with students
- Practical laboratory exercise

19. Assessment methods:

Written test during the semester and final written exam. Final exam covers all lectures covered during the semester and it includes multiple choice problems, theoretical questions and numerical problems. Students can take final exam only if he/she achieved minimum of 10 points during the semester.

20. Assessment components:

Activity	Points
Test, homework & projects during semester	50
Final exam	50
Total	100

21. Required reading list:

- Michael O. Kolawole, Satellite Communication Engineering, Marcel Dekker,Inc., 2002
- G.Maral, M.Bousquet, Satellite Communications Systems, Systems, Techniques and Techology, John-Willey & Sons
- Dennis Roddy, Satellite Communications, McGraw-Hill, 2001.

22. Web sources:

(max. 687 characters)

23. Applicable starting from the academic year:

2016/2017

24. Adopted in the Faculty/Academy session:

04.04.2016