COURSE		**ENGINEERING MATHEMATICS II**		
LECTURER		Assoc. Prof. Emil Ilić-Georgijević Ph.D.		
STUDY	***STATUS***	***SEMESTER***	***NUMBER OF LESSONS L+E***	***ECTS***
B – CE,G	Compulsory	2	4+3	8

OBJECTIVES

- To obtain knowledge in integral calculus of functions of one and several variables.
- To obtain knowledge in ordinary differential equations.

LEARNING OUTCOMES

Student should understand and be able to apply notions related to definite, double, triple, line and surface integrals. Student should also be able to know how to solve various types of ordinary differential equations.

COURSE CONTENT

Definite integral. Multiple and line integrals. Surface integrals. Fundamentals of field theory: scalar and vector fields, gradient, divergence and curl, classification of vector fields.
Ordinary differential equations.

RECOMMENDED LITERATURE

1. Adnađević, Kadelburg: Matematička analiza II, Beograd, 1998.
2. V. Cigić :"Matematika II", Mostar, 2001.
3. B.P. Demidovič, Zadaci s primjenom na tehničke nauke, Zagreb 1986.
4. Ušćumlić, Miličić: Zbirka zadataka iz više matematike I, II.
5. D. Mihailović i...,Elementi matematičke analize I i II, N-K, Bgd-1991.
6. Mitrinović, J.D.Kečkić: Matematika II, Naučna knjiga, Beograd

Examination:
Two in-class written exams, each of which worths 50 points.
If in total student obtains at least 55 points, the final mark is formed in accordance with the Law of higher education.
Otherwise, student takes an integral written exam (50 points) and the mark is formed in the following way:
50% of points obtained on in-class exams + points obtaned on an integral exam.