Course title: Selected Chapters of Calculus-didactical approach	
Lecturers: Đurđica Takači, Ljiljana Gajić	
Status: obligatory/elective **elective**	
ECTS: 15	
Requirements:	

Course objective:
The aim of course is to enable students to carry out independent research in the field of education, didactic-methodical approach to Calculus contents.

The outcome of the course: Students will develop the ability to apply different didactical methods and approaches to different calculus contents.

Syllabus
Theoretical instruction
The field of real numbers, Functions, Limits and continuity, Derivative of a function, Examination and the graphs of functions, Indefinite integrals.

Suggested literature:

1) Љ.Гајић Предавања из анализе 1, Симбол, Нови Сад, 2005
2) О. Хаџић, Ђ. Такачи, Математичке методе Нови Сад 2000
3) Ђ.Такачи, А. Такачи Диференцијални и интегрални рачун, Стилос Нови Сад, 1997
4) Derek Holton,The Teaching and Learning of Mathematics at University Level: An Icmi Study Springer,2001
5) William Flannery , Calculus Without Tears: Lesson Sheets for Learning Calculus for Students from the 4th Grade Up Publisher: Berkeley Science Books 2002
6) John P. D'Angelo Douglas B. WestMathematical Thinking: Problem-Solving and Proofs бу , Prentice Hall; December 17, 1999

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	

Teaching methodology
Lectures, solving problems with and without computer. Exercises and coloquiums in Computer laboratory.

Grading (maximal number of points 100)			
Pre-exam requirements	points	**Final exam**	points
Activities during lectures	**4**	Oral exam	**40**
Practical teaching	**4**		
Colloquia	**52**		
Seminar papers			