Program	Level	Second cycle
	Name of the program	Pure Mathematics

COURSE				
Course title	**Introduction to Algebraic Topology**			
Course code	Semester	Course status	ECTS	Contact hours (L+AE+LE)
PMAT 535	III	Elective course	7	3+2+0
Lecturer				
Course Goals	The course aims to expand existing knowledge in topology and acquire basic knowledge in algebraic topology, which enables further study of this area of mathematics.			
Learning Outcomes	At the end of the course, the student understands basic concepts from algebraic topology such as homotopy, fundamental group and covering space. He is familiar with basic theorems on fundamental group, fixed point, and covering spaces and main constructions. He is qualified to attend courses in algebraic topology.			

COURSE CONTENT

- Homotopy and Homotopy type
- The Fundamental group. The fundamental group of the Circle
- The Fundamental group of the S^n
- Covering Spaces.
- The van Kampen Theorem.
- The classification of Covering Spaces

LITERATURE

[1] Topology, James R. Munkres, Prentice Hall, 2000
[2] Algebraic Topology, A First Course, W. Fulton, Springer- Verlag, 1995
[3] Topologija, M. Mrjanović, S. Vrećica, Zavod za Udžbenike, Beograd 2011.

STUDENT WORKLOAD (hours in a semester)							
Lectures	45	Exercises	30	Individual work	100	T o t a l	175

GRADING			**REMARKS**
Criterion	Maximum points	Minimum points	
Midterm exams	50	30	
Final exam	50	25	
T o t a l	100	55	