Program	Level of studies		**First cycle**	
	Program name		**Educational Physics**	
Course name	**Computational Physics I**			
Course ID	Semester	Course status	ECTS credits	L+E
PCS7611	**VII**	**MANDATORY**	**6**	**2+2**
Lecturer	**Prof. dr. Senad Odžak**			
Aims and intended learning outcomes	The aim of the course is to introduce students at a more advanced level into Computational physics through lectures and practical exercises. It is expected that students successfully adopt the content of the course and that the acquired knowledge is successfully applied in their further academic education and/or scientific work.			

Course content

Computers in physics. Information in physics. Operational systems. Programming in physics. Comparative studies of high level programming languages (Fortran, C and/or others).

Student workload (hours)		Grading	
Lectures and Exercises	75	Assessment method	Points
Exam preparation	70	Course Tests (Multiple assignments)	60
Assignments	0	Final Exam (Theory)	40
Other	5		
Total	150		
		Total	100

Literature

1. Lecture Notes
2. L. Nyhoff, L. Sanford, FORTRAN 77 for Engineers and Scientists with an Introduction to Fortran 90 (4th ed.), 1995.
3. Brian W. Kernighan, Denis M. Ritchie, Programski jezik C, Savremena administracija, Beograd, 1989.

Remarks

The successful completion of the course implies achieving at least 55% of the total numer of points in both the course tests and final exam. Course tests imply solving physical problems with computers. All examinations are done by using the written method.