Study program	Level of studies		**First cycle**	
	Study program name		**Physics Education**	
Course name	**PHYSICS LABORATORY II**			
Course ID	Semester	Course status	ECTS credits	L+E
PHY3311	**III**	**MANDATORY**	**3**	**0+2**
Lecturer				
Aims and intended learning outcomes	The aim of the course is to familiarize students with practical laboratory exercises as well as with phenomena and physical laws in the field of thermodynamics. Students are expected to: 1. gain self-confidence in handling laboratory equipment 2. learn the basic methods of physical quantities measurements in the field of thermodynamics 3. collect acceptable data by measuring, analyze them, interpret the obtained results and draw the appropriate conclusions			

Course content

Surface tension
Thermal expansion of solids
Gas processes
Basic calorimetric measurements
Specific heat capacity of metals and gases
Phase transitions
Thermal conductivity
Determination of the convective heat transfer coefficient

Student workload (hours)		Grading	
Lectures and Exercises	30	Assessment method	Points
Exam preparation	30	Laboratory reports	40
Assignments	10	Test	20
Other	5	Final practical exam	40
Total	75		
		Total	100

Literature

1. Uputstva za vježbe „Fizikalni praktikum II“ (interna skripta), Prirodno-matematički fakultet, Sarajevo.
2. Hadžiselimović, E. (2005), *Osnove termodinamike i molekularne fizike*, bosniaARS, Tuzla.
3. Tanović, L., Tanović, N. (1988), *Fizika: Osnove termodinamike i molekularno-kinetičke teorije gasova*, Svjetlost, Sarajevo.
4. Dimić, G. L. (1990), *Metrologija u fizici D viši kurs*, DP Građevinska knjiga, Beograd.

Remarks