Syllabus

Course Description

Course Title	Laboratory of Physics applied to Mechanics
Course Code	42606
Course Title Additional	
Scientific-Disciplinary Sector	NN
Language	German
Degree Course	Professional Bachelor in Wood Technology
Other Degree Courses (Loaned)	
Lecturers	dr. Fahimeh Masoumi, Fahimeh.Masoumi@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/46525
Teaching Assistant	
Semester	Second semester
Course Year/s	1
CP	4
Teaching Hours	0
Lab Hours	40
Individual Study Hours	60
Planned Office Hours	12
Contents Summary	1. Theoretical exercises on classical physics 2. Practical exercises on Newtonian mechanics, including mechanical forces, energy, momentum, electrical phenomena and thermodynamics
Course Topics	Kinematics, Dynamics, Thermodynamics, and Electrodynamics
Keywords	Kinematics, Dynamics, Thermodynamics, Electrodynamics
Recommended Prerequisites	
Propaedeutic Courses	
Teaching Format	Exercises, labs, and project work.

Mandatory Attendance	Strongly recommended. A student report based on the activities and experiments performed during the laboratory sessions is the basis for the assessment of the course. The evaluation for non-attending students is based on a 30 min presentation and a 30 min oral exam.
Specific Educational Objectives and Learning Outcomes	This course supports the lecture 42605 Physics, and provides theoretical as well as practical exercises to develop problem solving skills related to the same topics. Knowledge and understanding 1. Knowledge and understanding of physical laws of: - Mechanics - Thermodynamics Applying knowledge and understanding 2. Ability to analyse and simple experiments on mechanics, thermodynamics. Making judgements 3. Students are expected to develop the ability to judge the plausibility of measurements. Communication skills 4. Further development of a quantitative, technical, and scientific terminology to express ideas and opinions about physical phenomena. 5. Ability to visualize and present results. Ability to learn 6. Development of an analytic attitude enabling the student to divide a problem into sub-tasks which can be solved using previously acquired knowledge.
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	Formative assessment: Form: In-class exercises Length /duration: Continuously as part of course-accompanying exercises ILOs assessed: 1-4, 6 Summative assessment for attending students:

	Form: Report Length /duration: 5 pages ILOs assessed: 1-6 Summative assessment for non attending students: Presentation: 30 minutes; ILOs assessed: 1, 3-6 Oral form: 30 minutes; ILOs assessed: 1-4, 6 The course is evaluated on a simple pass/fail basis. No marks are given.
Evaluation Criteria	The following will be assessed: • The correctness and presentation of results, and the correct use of physical quantities and units • The correctness of the answers and arguments presented, and the terminology used. For non-attending students the presentation and oral exam must both be passed individually The course is evaluated on a simple pass/fail basis. No marks are given.
Required Readings	Blackboard and blackboard of course: 42605 Physics.
Supplementary Readings	Various textbooks can be used as a reference, for example: • Physik für Bachelors, Johannes Rybach, Carl Hanser Verlag, 3. Auflage, 2007 (only in German). • Mechanics and Thermodynamics, Wolfgang Demtröder, Springer International Publishing, 2017. • Electrodynamics and Optics, Wolfgang Demtröder, Springer International Publishing, 2013. • Physics for Scientists and Engineers with Modern Physics, Douglas C. Giancoli, Pearson, 4th edition, 2008.
Further Information	
Sustainable Development Goals (SDGs)	Quality education