

## Introduction in Performance and Evaluation of Physics Experiments

Course number	5683
Hours per week:	2
ECTS:	2
Scheduled:	Summer Term
Format:	Laboratory Course
Examination:	Oral exam
Lecturer:	Prof. Manfred Stollenwerk
Objectives:	Knowledge about scientific working methods Training in writing scientific reports Knowledge about error estimation, calculation and propagation in experiments Consolidation of physical knowledge
Contents:	Introduction into handling of measurement errors Several exciting physical experiments (in the field of optics, thermodynamics and mechanics), individually performed in groups of 2-3 students.
Pre-requisites	
Recommended Reading:	<ul style="list-style-type: none"><li>• Mansfield, Michael. Understanding Physics. Chichester: Wiley, 2011.</li><li>• Giancoli, Douglas C. Physics. Prentice-Hall International editions. Englewood Cliffs, NJ: Prentice-Hall, 1995.</li><li>• References Jewett, John W. Physics for scientists and engineers with modern physics. Belmont, Calif.: Thomson / Brooks/Cole, 2008.</li><li>• Halliday, David and Resnick, Robert. Fundamentals of physics extended. Hoboken, NJ: Wiley, 2005.</li></ul> <p>Or other standard books about fundamentals of physics.</p>