

**Module description**

Module title	PSYCH-MA-PFM-05: Psychophysics and Movement analysis
Subject	General Psychology
Associated degree	Master of Science (M.Sc.)
Module coordinator	Prof. Dr. Karl Gegenfurtner Karl.Gegenfurtner@psychol.uni-giessen.de
Frequency and duration	Winter and summer (2 semester course, 1.5h per week)
Language of instruction	German or English
Examination	Presentation and reports
ECTS	10 (for full 2 semester module; partial module = 5)
Prerequisites	none
Learning outcomes	<p>The students</p> <ul style="list-style-type: none"> • learn the most commonly used experimental paradigms of Psychophysics and Movement analysis. • learn to plan and run experiments, including experimental design, stimulus generation and data collection. • learn to evaluate the collected data, including pre-processing of raw data, data visualization and modelling.
Module content	<ul style="list-style-type: none"> • Controlled presentation of visual stimuli, incl. image histogram and power spectrum manipulation, binocular stimulation. • Psychophysical methods • Measurement and assessment of eye movement (saccades, pursuit, fixational) • Measurement and assessment of hand movements (grasping, reaching, free scribbling)