



COURSE DATASHEET

Semester:	2015/16/2
Course:	Microscopic analyses
Code:	VEMKLIB232A
Responsible department:	Department of Limnology
Department code:	MKLI
Responsible instructor:	Gábor László Seress

Course objectives:

An overview about microscopy, a multidisciplinary research tool .

Course content:

1 Basic principles of microscopy 2 Parts of a light microscope 3 Settings, Koehler illumination 4 Color filters, polarized microscopy, dark field microscopy 5 Stereomicroscopy 6 Inverted microscopes 7 Fluorescent microscopy 8 Staining techniques 9 Cell counting 10 image analysis 11 Flow cytometry 12 Confocal laser scanning microscopy 13 Immunocytochemistry 14 Fluorescent in situ hybridization 15 Scanning and transmission electron microscopy

Requirements, evaluation and grading:

Presentation of lab notes + the result of 2 written examinations (

Required and recommended readings:

Bernolák K., Szabó D., Szilas L.: A mikroszkóp (zsebkönyv). 1979, Műszaki Könyvkiadó, Budapest Lovas B.: Mikroszkóp-mikrokozmosz. 1995. Gondolat Kiadó, Budapest Barabás J., Vadász J.: Mikroszkópos fényképezés és filmezés. 1966. Műszaki Könyvkiadó, Budapest