



SUBJECT DATASHEET

Semester:	2009/10/2
Subject:	Microscopic analyses
Code:	VEMKLIB233M
Responsible department:	Department of Limnology
Responsible department code:	MKLI
Responsible lecturer:	dr. Szabolcs Nagy

Educational objectives:

An overview about microscopy, a multidisciplinary research tool .

Detailed content of the subject:

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:

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

Required and suggested references:

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