



## SUBJECT DATASHEET

<b>Semester:</b>	2010/11/2
<b>Subject:</b>	Molecular Biology
<b>Code:</b>	VEMKLIB312M
<b>Responsible department:</b>	Department of Limnology
<b>Responsible department code:</b>	MKLI
<b>Responsible lecturer:</b>	dr. Szabolcs Nagy

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### Educational objectives:

To show the contexts of intraindividual biology at deeper, molecular level.

### Detailed content of the subject:

1 Introduction, history of molecular biology 2 DNA 3 Genome organization 4 RNA 5 Gene -> Protein 6 Replication, Telomere maintenance 7 DNA repair, recombination 8 Written examination 9 Transcription - prokaryotes 10 Transcription - eukaryotes 11 Epigenetics 12 RNA processing 13 Translation 14 Genome analysis 15 Written examination

### Requirements:

The half-hour oral examination is about 20-25 minutes after preparing the student with the exam questions / themes to express. Insufficient (1) the answer is, if the candidate has either a short outline of the topic or the topic is not able to provide definitions of basic concepts. Satisfactory (2) the answer is, if the candidate can interpret basic concepts of the issue. Fair (3) the answer is, if the candidate is aware of the basic concepts of issues and is able to help teachers present the topic in a logical context. Good (4) the answer is, if the candidate's response to a logical structure alone explains the item (exam) all relevant facts and relationships, but the compulsory literature associated with item no or incomplete knowledge. Excellent (5) the answer, if the candidate has all the items, as well as the required knowledge of literature, logically structured, independent, detail is excellent, fully exploring the relationships within bears witness to answer.

### Required and suggested references:

L. Allison: Fundamental molecular biology. Blackwell Publishing, 2006. Szeberényi J.: Molekuláris sejtbológia. Dialóg Campus Kiadó, 2004. Bálint M: Molekuláris biológia I-II. Műszaki Könyvkiadó, 2000. Bálint M: Molekuláris biológia III. Nemzeti Tankönyvkiadó, 2002. GM Cooper, RE Hausman. The Cell. A Molecular Approach. ASM Press, 2007. Virtual text: Molecular biology. [www.ergito.com](http://www.ergito.com)