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Introduction of Lecturers

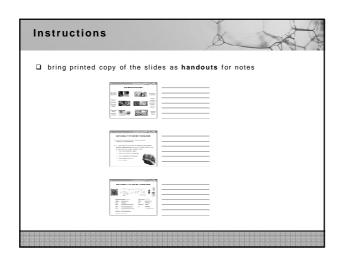


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- ☐ Loschmidt Laboratories, research specialist
- $\hfill \Box$   $\hfill$  metabolic and protein engineering
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## Introduction of Course EXTENSIVE MULTIDISCIPLINARITY PREREQUISITES: | basic knowledge of microbiology, molecular biology, biochemistry, immunology and genetics COURSE FOCUSE: | the specific aspects of modern biotechnology | examples of up to date applications in industry, agriculture, pharmacy, biomedicine nad environmental protection | the role of modern biotechnology in sustainable living

## Course content 2. Introduction to Molecular Biotechnology 3. Protein Engineering METHODOLOGICAL 4. Metabolic Engineering I. 5. Metabolic Engineering II. 6. Molecular Biotechnology in Industry TECHNOLOGICAL 7. Molecular Biotechnology in Medicine I. 8. Molecular Biotechnology in Medicine II. 9. Molecular Biotechnology in Agriculture 10. Molecular Biotechnology in Environmental Protection



## Instructions ☐ bring printed copy of the slides as handouts for notes ☐ find all materials including printed version of the slides at http://is.muni.cz/ ☐ be on time, come at least 5 min before the lecture opening ☐ attendance is mandatory $\hfill \Box$ if any problems with the lecture, please, contact lecturers $\hfill \Box$ be active and participate in discussions Lecturing system powerpoint slides as well as recommended literature in English $\hfill \Box$ lecturing, discussions and examination in Czech☐ 2 hrs per week ☐ lecture part I. (40 min) -> BREAK (10 min) -> lecture part II. (40 min) $\hfill \square$ essential knowledge indicated by exclamation $\triangle$ (appears in the tests) **Evaluation** $\hfill \Box$ four progress written tests during the lecturing period at the beginning of lecture 4., 6., 8. and 10. (duration 10 min) • 10 questions from previous topics (cummulative) $\hfill \Box$ one final written test during the examination period • 60 questions from entire content of the course duration one hour □ OVERALL EVALUATION comprises results of the progress tests (40%) and result of the final written test (60%)

Recommended literature	
<ul> <li>M. Wink (Ed.) 2011: An Introduction to Molecular Biotechnology:</li> <li>Fundamentals, Methods and Applications, 2<sup>nd</sup> Edition, Willey-Blackwell</li> </ul>	
□ B. R. Glick, J. J. Pasternak, C. L. Patten 2011: Molecular Biotechnology:  Principles and Applications of Recombinant DNA,  4™ Edition, ASM Press	
□ J. M. Walker, R. Rapley 2009: Molecular biology and biotechnology, 5th Edition, RSC Publishing	