**BBI1206 Microbiology**

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| 1.week Morfology of microbes and groups of mikrobes.Shape of bacteria. Organization of unicellulars.2. week Cultivation and inhibition of bacteria3.week Most important bacteria groups4. week Light utilization5.week Metabolism of procariota and respiration.6. week Utilization of microbes in industry.7. weekVirusies 8. week STERILISATION AND DISINFECTION Procedures of sterilisation Procedures of disinfection Determination of the microbiological efficacy of disinfectants INTRODUCTION TO THE USE OF PRACTICAL LABORATORY MICROSCOPES Bright-field light microscopy Fluorescence microscopy 9. week BASIC ALGOLOGICAL METHODS CELL- AND GERM-COUNTING METHODS Determination of cell counts with microscope PCR-based cell counts Determination of germ counts based on cultivation 10. week CFU-counting techniques The membrane filter technique The end point dilution technique (MPN method) STRAIN CULTURE AND CULTIVATION-BASED TECHNIQUES Demonstration of microbes in the environment Preparation of microbiological culture media Basic bacterial cultivation techniques Spread plate and pour plate methods 11. week Pheno- and genotypic characterisation of bacterial strains Colony- and cell morphology, staining procedures Study of bacterial enzymes SAMPLING METHODS IN MICROBIOLOGY .. Sampling from various environments Collection of air samplesDetermination of air microbs Collection of soil samplesDetermination of soil microbs12. week Sampling the surface of objects Hygienic control of the hands of operators Determination of surface microbsIsolation and streak plate technique Anaerobic cultivation techniques Transfer, maintenance and storage of pure cultures Investigation of cosmetic samplesInvestigation of food samples13. weekInvestigation of FUNGI14 weekInvestigation of Viruselectronmicroscop  |  |
| Requirement: Attending the practical course is obligatory. Term grade: 1.Preparation of a laboratory report. Presentation and evaluation of the results of the experiments and tests carried out. 2.Writing tests. The average of the grade of points 1. and 2. |  |