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SYLLABUS

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| Name and code of the course | **BIO210 GENERAL MICROBIOLOGY** |
| Instructors | Prof. Dr. Sevgi ERTUĞRUL KARATAY |
| Level | Undergraduate |
| Credit | 2.0 ECTS: 4.0 |
| Course Type | Compulsory |
| Course Content | Microbial Molecular Biology, DNA and RNA structure and function, Microbial replication, transcription and translation, Regulation of gene expression, Regulation of enzyme activity and synthesis, Viruses, structural properties, Bacteriophages and Retroviruses, Viroid, Prion, Microbial genetic and genetic engineering, Microbial ecology and Microbial diversity, Certain microbial groups from Bacteria, Archaea and Eukarya, Microbial Biotechnology, Medical Microbiology |
| Goals of the course | To teach the structure and function of microbial genes on molecular level and to be understand their industrial usage capacities, to teach the general features of the viruses, to give knowledge about some Archeal, Bacterial and Eukaryotic microbial groups and also about microbial biotechnology and medical microbiology. |
| Weekly course hours | 2 hours/week |
| Language | ENGLISH |
| Prerequisite | - |
| Recommended sources | 1) Brock Biology of Microorganisms, Madigan, Martinko and Parker, 2018. 15th Edition. Prentice Hall.  2) Shlegel, H.D. (1994) General Microbiology. Cambridge University Press.  3) Prescott, L. M., Harley, J. P., Klein, D. A. (1996) Microbiology Wm. C. Brown Publishers EnglandMicrobial Biotechnology, Energy and Environment, Rajesh arora, CAB International, 2012  Sustainable Biotechnology; Om V. Singh, Steven P. Harvey, 2010, Springer |
| Laboratory Practice | 2 hours/week |