



Code	Subject Title	Cr. Hrs	Semester
<b>ZOOL-417</b>	<b>Applied Microbiology</b>	<b>2</b>	<b>VII</b>
Year	Discipline		
<b>4</b>	<b>Zoology</b>		

### **Course Contents**

Control of microorganisms: Fundamentals of control, control by physical and chemical agents, antibiotics and other chemotherapeutic agents. Microorganisms and disease: Host-microbe interactions. Resistance and immunity. Air, food and water-borne human infections. Human contact disease. Infectious diseases of animals. Environmental Microbiology: Fundamentals of microbial ecology. Microbiology of Air. Soil microbiology. Microbiology of domestic water and sewage. Microbiology of food, milk and milk products. Industrial microbiology: Scope of industrial microbiology in food production, control of insects, human therapy, petroleum, mining and bioremediation. Biotechnology and its role in modern human comforts.

### **Recommended Books**

- Pelczar, M.J. Jr., Chan, E.C.S. and Krieg, N.R. 1986. Microbiology– McGraw Hill Inc., New York.
- Benson, H.J., 1994. Microbiological applications. WmC Brown Publishers, Dubuque, USA.
- Alcamo, E. 1994. Fundamentals of Microbiology. The Bengamin/Cummings Publishing Co. Inc. Redwood city, CA 94065.
- Pelczar, M.J. Jr., Chan, E.C.S. and Krieg, N.R. 1993. Microbiology concepts and applications – McGraw Hill Inc., New York.