

Subject Code: 2SC1000222	Subject Title: History of Microbiology
Course Type: Subject Elective	

Course Objective:

This is a basic course includes historical milestones in the fields of microbiology. It covers topics related to various inventions of tools and techniques that revolutionized the different applied areas of microbiology.

Teaching scheme (hours) per week		Credit			Theory Marks		Practical Marks		Total
Theory	Practical	Theory	Practical	Total	Uni. Assessment	Cont. Assessment	Uni. Assessment	Cont. Assessment	
2	--	2	--	2	35	15	--	--	50

Unit	Content	Lectures	Weightage
1	Unit :1 History of Microbiology-1: ✓ History of Microscope (Anton van Leeuwen Hoek) ✓ Theory of Abiogenesis (Spontaneous Generation) ✓ Scientists that helped in disproving the theory of spontaneous generation ✓ History of Louis Pasteur (Pasteurization, Vaccination & others) ✓ History of Robert Koch (Germ Theory of the Disease, Koch's Postulates, Discovery of Methods for Isolation & Pure Culture Techniques)	15	50%
2	Unit: 2 History of Microbiology-2: ✓ History of Antibiotics (Alexander Fleming & Penicillin) ✓ History of Vaccines (Edward Jenner, Louis Pasteur) ✓ History of Viruses ✓ History of Microbiology (Aristotle, Lazzaro Spallanzani, Francisco Redi, Ross, Robert Hooke, Fanny Hesse, Richard Petri, Schwan, Schroeter, Elie Metchnikoff, Joseph Lister, Selman Waksman & others) ✓ Golden era of Microbiology	15	50%

Learning Outcome:

By going through the course contents, the student will get educated about the historical milestones in the fields of microbiology. They will also learn about how the present day techniques were invented and the role of various scientists in making those inventions that made our life easier than ever.

References:

1. Microbiology by M.J.Pelczar, ECS Chan & NR Krieg
2. Principles of Microbiology by R.M. Atlas
3. Microbiology by Prescott, Harley & Klein
4. Elementary Microbiology Vol.-1 by H.A.Modi
5. Textbook of Microbiology by R.C.Dubey & D.K.Maheshwari