

Yashwantrao Chavan College of Science Karad

Department of Microbiology (PG)

Course Outcomes (COs)

CC-301: Biostatistics, Bioinformatics and Scientific Writing

After completion of this course, students will be able to,

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| CO 1 | Understand applications of different statistical parameters |
| CO 2 | Understand role of different statistical test for validation of experimental data |
| CO 3 | Understand the use of computer softwares for analysis of biological data |
| CO4 | Learn the ethics of scientific writing and publishing research |

CCS-302- Enzymology and Enzyme Technology

After completion of this course, students will be able to,

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| CO 1 | Learn basic concept of enzymology |
| CO 2 | Understand kinetics of enzyme catalyzed reaction |
| CO 3 | Know about industrial applications of enzyme |

CCS-303- Fermentation Technology

After completion of this course, students will be able to,

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| CO 1 | Understand the basic concepts of fermentation |
| CO 2 | Know about different types of fermentors & fermentation processes and problems |



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| CO 3 | Understand specific fermentations of industrially important products |
| CO 4 | Know about role of computer in fermentation technology |
| DSE-304- Quality Control Microbiology-I | |
| After completion of this course, students will be able to, | |
| CO 1 | Learn biosafety levels microbiology laboratory |
| CO 2 | Understand safe handling of biological materials in laboratory |
| CO 3 | Learn basics of sterilization and sterility assurance |
| CO 4 | Learn about safety cabinets and protective equipments |

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| CCPR-305- Laboratory course | |
| After completion of this course, students will be able to, | |
| CO 1 | Use statistical methods in data analysis |
| CO 2 | Learn basic practical skills in Bioinformatics & Scientific writing |
| CO 3 | Understand the effect of different factors on enzyme kinetics |
| CO 4 | Know about calibration and validation of laboratory instruments |

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| CC-401- Food and Dairy Microbiology | |
| After completion of this course, students will be able to, | |
| CO 1 | Understand different methods of food preservation |
| CO 2 | Learn different food borne diseases |
| CO 3 | Acquire knowledge about probiotic and different food safety and standards |
| CO 4 | Commercial values of fermented foods |



CCS-402- Industrial waste management

After completion of this course, students will be able to,

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| CO 1 | Characterize industrial effluents and their adverse effects on environment |
| CO 2 | Learn the role of microorganisms in treatment of industrial waste |
| CO 3 | Know about the rules and regulations of waste disposal |

CCS-403- Recombinant DNA Technology

After completion of this course, students will be able to,

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| CO 1 | Understand Modern tools and techniques in molecular biology. |
| CO 2 | Understand methods of cloning and its significance. |
| CO 3 | Learn the role of Recombinant DNA technology in industries |

DSE-404- Quality Control Microbiology-II

After completion of this course, students will be able to,

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| CO 1 | Learn the role of various regulatory agencies in pharmaceutical sector |
| CO 2 | Understand how to maintain the clean rooms and monitoring the environment |
| CO 3 | Learn the data keeping and auditing process |

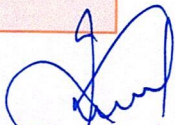
CCPR-405- A-Laboratory Course

After completion of this course, students will be able to,

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| CO 1 | Analyze microbiological quality of the milk and milk products |
| CO 2 | Learn about characterization and treatment of industrial effluents |
| CO 3 | Understand the basics of plant tissue culture |


HEAD
DEPARTMENT OF MICROBIOLOGY




Principal
Yashwantrao Chavan College
of Science, Karad.