



NAAC- B<sup>+</sup>

Yashoda Shikshan Prasarak Mandal's  
Yashoda Technical Campus,  
Faculty of Pharmacy Wadhe, NH-4, Satara – 41501

### Course outcomes

Name of the course: Biostatistics Research Methodology

Course Code: BP801T

Semester: VIII

Class: Final Year B.Pharm

After completion of course students will be able to

CO	Course Outcomes
BP802T C01	Discuss the applications of Biostatistics such as Correlation, Mean, Median, Mode, Range and standard deviation.
BP802T C02	Discuss Regression, Probability theory, Sampling technique, Parametric tests and Non Parametric tests in context of research & biostatistics.
BP802T C03	Explain design of experiments for Phases of clinical trials and observational and experimental studies
BP802T C04	Accomplished the operation of M.S. Excel, SPSS, R and MINITAB, DoE (Design of experiment).
BP802T C05	Accomplished the statistical techniques in Design and Analysis of experiments

### CO-PO mapping

	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
Code											
BP801T C01	3	3	3	2	3	3	3	3	3	1	3
BP801T C02	3	3	2	2	3	2	2	2	3	2	3
BP801T C03	3	3	3	2	3	2	2	3	3	2	3
BP801T C04	3	3	3	1	3	2	3	3	3	2	3
BP801T C05	3	3	2	2	2	3	2	2	3	2	3
Average	3	3	2.6	2	2.8	2.4	2.2	2.6	3	1.8	3
Average Roundup	3	3	3	2	3	2	2	3	3	2	3

Correlation level 1,2,3 as defined below

1- Slight 2- Moderate 3 Strongly

Course co-ordinator

HOD

Principal



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Yashoda Shikshan Prasarak Mandal's  
**Yashoda Technical Campus,**  
Faculty of Pharmacy Wadhe, NH-4, Satara – 41501

### Course outcomes

Name of the course: Social and Preventive Pharmacy

Course Code: BP802T

Semester: VIII

Class: Final Year B.Pharm

After completion of course students will be able to

CO	Course Outcomes
BP802T C01	Explain about disease, health and health education and understand the knowledge of nutrition and hygiene.
BP802T C02	Discuss about prevention and control of various diseases
BP802T C03	Describe National health programs with objective, function and outcome
BP802T C04	Elaborate the National health intervention programme
BP802T C05	Illustrate about community services, rural sanitization and national urban health mission

### CO-PO mapping

	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
Code											
BP802T C01	3	3	3	2	3	3	3	3	3	1	3
BP802T C02	3	3	2	2	3	2	2	2	3	2	3
BP802T C03	3	3	3	2	3	2	2	3	3	2	3
BP802T C04	3	3	3	-	3	2	3	3	3	2	3
BP802T C05	3	3	2	2	2	3	2	2	3	2	3
Average	3	3	2.6	2	2.8	2.4	2.2	2.6	3	1.8	3
Average Roundup	3	3	3	2	3	2	2	3	3	2	3

Correlation level 1,2,3 as defined below

1- Slight 2- Moderate 3 Strongly

Course co-ordinator

Mr. Omkar Devade

HOD

Principal





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### Course outcomes

Name of the course: Pharmaceutical Marketing Management

Course Code:BP803ET

Semester:VIII

Class: Fourth Year B.Pharm

After completion of course students will be able to

CO	Course Outcomes
BP803ETCO1	Describe the concept of pharmaceutical marketing
BP803ETCO2	Enumerate the concept of product decision in pharmaceutical industry
BP803ETCO3	Understand the various components of promotion techniques of pharmaceutical products
BP803ETCO4	Explain the different pharmaceutical marketing channels and describe the role and responsibility of professional sales representative
BP803ETCO5	Discuss the roles and responsibilities of pricing authorities in India and emerging concepts of marketing

### CO-PO mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
Code											
BP803ETCO1	3	3	3	2	3	3	3	3	3	3	3
BP803ETCO2	3	2	2	2	2	2	3	2	2	3	2
BP803ETCO3	3	3	3	2	3	3	3	3	3	3	3
BP803ETCO4	3	3	3	2	3	3	3	3	3	3	3
BP803ETCO5	3	2	2	2	1	2	3	2	3	1	2
Average	3	2.6	2.75	2	2.4	2.6	3	2.6	2.8	3	2.6
Average Roundup	3	3	3	2	2	3	3	3	3	3	3

Correlation level 1,2,3 as defined below

1- Slight 2- Moderate 3 High

Course co-ordinator  
(Mr. A.P. Jadhav)

HOD

Principal

Name of the course: PV

Course Code: BP805T

Semester: VIII

Class: IV B.Pharm

After completion of course students will be able to


CO	Course Outcomes
BP805TC01	Discuss basic terminologies used in pharmacovigilance, adverse drug reactions, including establishment of pharmacogilance programme.
BP805TC02	Explain drug dictionaries and coding of pharmacovigilance
BP805TC03	Discuss phases of safety data generation including ICH guidelines. Surveillance, methods and communication in pharmacogilance and establishing pharmacovigilance programme
BP805TC04	explain safety data generation and ICH guidelines for pharmacovigilance
BP805TC05	Explain pharmacogenomics of adverse drug reactions, special population including CIOMS and CDSCO.


### CO-PO mapping


	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
Code											
BP805TC01	3	3	1	1	2	3	2	3	3	2	3
BP805TC02	3	3	3	1	2	3	1	2	2	1	3
BP805TC03	3	3	3	1	3	3	1	3	2	1	3
BP805TC04	3	3	3	1	3	3	3	3	2	1	3
BP805TC05	3	2	3	1	3	3	1	3	1	1	3
Average	3	2.8	2.6	1	2.75	3	1.6	2.8	2	1.2	3
Average Roundup	3	3	3	1	3	3	2	3	2	1	3

Correlation level 1,2,3 as defined below

1- Slight 2- Moderate 3 High

  
 Course co-ordinator  
 (Prof. R.P. Bhoite)

  
 HOD  
 (Dr. N. Purane)

  
 Principal  
 (Dr. V.K. Redasani)





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### Course outcomes

Name of the course: Quality Control & Standardization of Herbals [TH ] CourseCode:BP806ET

Semester: VIII

Class: -Final. Yr.B.Pharm

After completion of course students will be able to


CO	Course Outcomes
BP806ETCO1	Explain WHO guidelines for quality control of herbal drugs.
BP806ETCO2	Elaborate quality assurance in herbal drug industry.
BP806ETCO3	Appreciate EU and ICH guidelines for quality control of herbal drugs, Safety & efficacy of herbal medicines.
BP806ETCO4	Describe stability testing of herbals, Preparation of NDA, GMP requirements, D&C act provisions.
BP806ETCO5	Discuss Regulatory requirements of herbal medicines.


### CO-PO mapping


	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
<b>Code</b>											
BP806ETCO1	3	3	2	2	2	3	3	3	3	3	3
BP806ETCO2	3	2	2	2	2	3	3	3	3	2	3
BP806ETCO3	3	2	2	1	1	3	3	2	2	3	3
BP806ETCO4	3	3	2	2	1	3	3	3	2	3	3
BP806ETCO5	3	2	2	2	1	3	3	1	3	2	3
<b>Average</b>	3	2.4	2	1.8	1.4	3	3	2.4	2.6	2.6	3
<b>Average Roundup</b>	3	2	2	2	1	3	3	2	3	3	3

Correlation level 1,2,3 as defined below

1- Slight 2- Moderate 3 High

  
Ms. J.S. Pingle  
Course co-ordinator

  
HOD

  
Principal





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### Course outcomes

Name of the course: Computer Aided Drug Design

Course Code: BP807ET

Semester: VIII

Class: Final Year B.Pharm

After completion of course students will be able to

CO	Course Outcomes
BP807ETCO1	Elaborate stages of drug discovery and Lead development
BP807ETCO2	Explain Quantitative Structure Activity Relationship
BP807ETCO3	Summarize Molecular docking and virtual screening techniques
BP807ETCO4	Integrate Informatics & Methods in drug design including introduction to Bioinformatics, chemoinformatics. ADME databases, chemical, biochemical and pharmaceutical databases.
BP807ETCO5	Describe Molecular Modeling including introduction to molecular mechanics and quantum Mechanics, energy Minimization methods and conformational Analysis, global conformational minima determination.

### CO-PO mapping

	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
Code											
BP807ETCO1	3	3	1	1	1	3	3	2	3	3	3
BP807ETCO2	3	3	1	3	1	3	3	2	3	3	3
BP807ETCO3	3	3	3	3	1	3	3	2	3	3	3
BP807ETCO4	3	3	3	3	1	3	3	2	3	3	3
BP807ETCO5	3	3	3	3	1	3	3	2	3	3	3
Average	3	3	2.2	2.6	1	3	3	2	3	3	3
Average Roundup	3	3	2	3	1	3	3	2	3	3	3

Correlation level 1,2,3 as defined below


1- Slight 2- Moderate 3 High

  
Ms. Devale R.P.

Course co-ordinator

  
Dr. Bhagwat A.M.

HOD

  
Dr. Redasani V.K.

Principal



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### Course outcomes (2022-23)

Name of the course: Cosmetic Science

Course Code: BP809ET

Semester: VIII

Class: Final Year B.Pharm

After completion of course students will be able to

CO	Course Outcomes
BP809ETC01	Explain about cosmetics and cosmeceuticals products
BP809ETC02	Demonstrate practical skills in the area of formulation science and analytical techniques required to scientifically design and develop various cosmetic products.
BP809ETC03	Demonstrate practical and analytical skills in the area of sunscreen and sun protection in context to skin hair and oral care.
BP809ETC04	Summerise principles of cosmetic evaluation
BP809ETC05	Describe basic cosmetic problems associated with skin, hair and oral care find out their causes.

### CO-PO mapping

	PO1	PO 2	PO3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
Code											
BP809ETC01	3	1	2	3	2	3	3	2	2	2	3
BP809ETC02	3	3	3	3	1	3	1	2	2	2	3
BP809ETC03	3	3	3	3	1	3	1	2	2	2	3
BP809ETC04	3	1	2	3	2	3	2	2	2	2	3
BP809ETC05	3	3	3	3	2	3	2	2	2	2	3
Average	3	3	3	3	1	3	2	2	2	2	3

Correlation level 1,2,3 as defined below

1- Slight 2- Moderate 3 High

*(Ms. N.D. Naikwadi)*  
(Name & Sign)

Course co-ordinator

*(Dr. P.D. Jadhav)*  
(Name & Sign)

Dr. P.D. Jadhav  
HOD

*(Dr. V.K. Pedasani)*  
(Name & Sign)

Dr. V.K. Pedasani  
Principal





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### Course Outcomes

**Name of the course:** Advanced Instrumentation Techniques

**Course Code:** BP811ET

**Semester:** VIII

**Class:** IV B.Pharm

**After completion of course students will be able to**

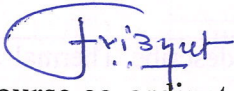
CO	Course Outcomes
BP811ETC01	Understand and explain NMR Spectroscopy and Mass Spectrometry
BP811ETC02	Understand and describe Thermal and XRD methods of analytical techniques
BP811ETC03	Understand and explain calibration and validation of analytical instruments
BP811ETC04	Understand and describe radio immune assay and extraction techniques of analysis
BP811ETC05	Understand and explain hyphenated techniques of analysis

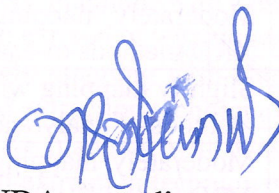
### CO-PO mapping

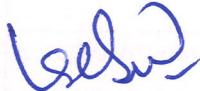
	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11
<b>Code</b>											
BP811ETC01	3	1	1	2	1	2	2	2	2	1	2
BP811ETC02	3	1	1	2	1	2	2	2	2	1	2
BP811ETC03	3	1	3	2	1	3	3	3	3	1	3
BP811ETC04	3	1	1	2	1	2	2	2	2	1	2
BP811ETC05	3	1	1	3	1	3	3	2	2	1	3
<b>Average</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>

**Correlation level 1,2,3 as defined below**

**1- Slight 2- Moderate 3 High**

  
Course co-ordinator  
(Bhagwant A.M.)

  
NBA co-ordinator

  
HOD/Principal