

S. P. Mandali's
Ramnarain Ruia Autonomous College
(Affiliated to University of Mumbai)



Syllabus For:

Program: Integrated M.Sc. in Bioanalytical Sciences

(S.Y.B.Sc. Syllabus)

Program Code: RUSBAS

(As Per Guidelines of National Education Policy 2020 – Academic Year 2024-25)

(Choice Based Credit System)

GRADUATE ATTRIBUTES

GA	GA Description
	A student completing Bachelor’s Degree in Science program will be able to:
GA 1	Recall and explain acquired scientific knowledge in a comprehensive manner and apply the skills acquired in their chosen discipline. Interpret scientific ideas and relate its interconnectedness to various fields in science.
GA 2	Evaluate scientific ideas critically, analyse problems, explore options for practical demonstrations, illustrate work plans and execute them, organise data and draw inferences.
GA 3	Explore and evaluate digital information and use it for knowledge upgradation. Apply relevant information so gathered for analysis and communication using appropriate digital tools.
GA 4	Ask relevant questions, understand scientific relevance, hypothesize a scientific problem, construct and execute a project plan and analyse results.
GA 5	Take complex challenges, work responsibly and independently, as well as in cohesion with a team for completion of a task. Communicate effectively, convincingly and in an articulate manner.
GA 6	Apply scientific information with sensitivity to values of different cultural groups. Disseminate scientific knowledge effectively for upliftment of the society.
GA 7	Follow ethical practices at work place and be unbiased and critical in interpretation of scientific data. Understand the environmental issues and explore sustainable solutions for it.
GA 8	Keep abreast with current scientific developments in the specific discipline and adapt to technological advancements for better application of scientific knowledge as a lifelong learner.

PROGRAM OUTCOMES

PO	Description
	A student completing Bachelor’s Degree in Science program in the subject of Bioanalytical Sciences will be able to:

PO 1	This course will impart high quality science education in a vibrant academic ambience with the faculty of distinguished teachers and scientists.
PO 2	It will also equip students for the future who will take up the challenge of doing quality research & teaching and also contribute to industrial production and R & D in the fields of Bioanalysis, Bioinformatics and Nutraceutical Sciences.
PO 3	It will amalgamate classical analytical chemical techniques with modern genomic and proteomic technologies of manufacturing and analysis to better characterize the products useful as medicines as well as nutraceuticals.

Ramnarain Ruia Autonomous College

Semester III

Course Code: RUSGEBAS201

Subject VII

Course Title: Entrepreneurship Skills I

Type Course: General Elective

Academic Year 2024-25

S. Y. B.Sc.

COURSE OUTCOMES:

COURSE OUTCOME	DESCRIPTION
CO 1	Comprehend the skills and mind-set required to start an enterprise.
CO2	Appraise the value of entrepreneurial skills and innovation.

Paper Code	Semester III	Credits/Hours
RUSGEBAS201	Entrepreneurship Skills I	2/30
Unit I Enterprise: Growth, Networking & Innovation		15
1. Entrepreneurial motivation – qualities & functions of entrepreneurship. 2. The process of entrepreneurship development, 3. Types of Enterprise – Merits and Demerits 4. Farmers Producer company, its structure. 5. Case study of Successful Entrepreneurs from India.		
Unit II Knowledge & Financial Management		15
1. Entrepreneurship development and Business Knowledge. 2. Government policies and schemes for enterprise development – Analysis of business model and startups. Mudra Yojana, Start Up India. 3. Sources of Finance. 4. Critical Success Factors of KM 5. cost classification and business model analysis.		

Reference Books:

Entrepreneurship Skills I	<ul style="list-style-type: none">• Eric Ries: The Lean Startup• Kimiz Dalkir: Knowledge Management in theory and Practice• Jugaad Innovation: Radjou, Prabhu, Ahuja
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Ramnarain Ruia Autonomous College

Semester IV

Course Code: RUSGEBASE211

Subject VI

Course Title: Entrepreneurship Skills II

Type of Course: General Elective

Academic Year 2024-25

S. Y. B.Sc.

COURSE OUTCOMES:

COURSE OUTCOME	DESCRIPTION
CO 1	Evaluate the importance of building a novel enterprise.
CO2	Apply entrepreneurial strategies in practical life.
CO3	Develop entrepreneurial mindset

Paper Code	Semester IV	Credits/Hours
RUSGEBASE211	Entrepreneurship Skills II	2/30
Unit I Launching and Organizing an Enterprise		15
1. Environment scanning – Economies and Diseconomies of scale. 2. Enterprise selection, market assessment & project feasibility report. 3. Raw material Planning & case studies. 4. Case Studies of successful Indian Brands. 5. Quality control and Quality Norms.		
Unit II Principles of Corporate Management		15
1. Principles of Management 2. Functions of management (Planning, Organizing, Directing, Controlling, Coordinating) 3. Management by Objectives (MBO), Management by Wandering Around (MBW) 4. Leadership – qualities and style of leadership.		
Reference Books:		
Entrepreneurship Skills II	Jugaad Innovation: Radjou, Prabhu, Ahuja	