



Royal College of Arts Science and Commerce (Autonomous)

Affiliated to University of Mumbai

Program: Bachelor of Science

Course : Community Engagement Project (CEP)

Syllabus for Semester IV

Syllabus for Undergraduate Programme
as per National Education Policy (NEP-2020)
with effect from the academic year 2025-2026



Principal
**ROYAL COLLEGE OF ARTS
SCIENCE & COMMERCE
PENKAR PADA, MIRA ROAD,
DIST : THANE. PIN : 401107.**



Royal College of Arts Science and Commerce (Autonomous)

Affiliated to University of Mumbai

Program: Bachelor of Science

Course : Community Engagement Project (CEP)

Syllabus for Semester IV

Syllabus for Undergraduate Programme
as per National Education Policy (NEP-2020)
with effect from the academic year 2025-2026

SEMESTER IV

SEMESTER IV

Course/ Paper Title	Chem-Connect : Awareness & Empowerment
Course offered as	Community Engagement Project (CEP)
Course Code	RUCHCEP401
Semester	4
No. of Credits	2
Hours Allotted	60 Hours
Marks Allotted	50 Marks

Course Objectives (CLO):

CLO 1	To enhance curiosity and interest in science by demonstrating fundamental chemistry experiments to school / Junior college students
CLO 2	To create awareness about common food adulterants and methods to detect them.
CLO 3	To provide practical skill training in selected livelihood activities for empowering women from slum areas.
CLO 4	To promote health, hygiene, and physical fitness awareness among MBMC school students and Madrasa children through educational activities and active participation in the Annual Sports Meet

Course Outcomes (CO) :

	On completing the course, the student will be able :
CO 1	to develop a deeper understanding of concepts through hands-on demonstrations.
CO 2	to identify adulterants in different food samples through simple tests.
CO 3	to acquire hands-on skills in the chosen activity, enabling them to use it for self-employment.
CO 4	to demonstrate improved knowledge of personal health and hygiene practices, engage actively in physical activities, and exhibit teamwork and sportsmanship during the Annual Sports Meet.

CEP 1 : Chem-Connect : Awareness & Empowerment

Module 1	Orientation, Training and Planning (20 hours)
Module 2	Community Engagement Activities (30 hours)
2.1	Demonstration of chemistry experiments to School/Jr college students (10 hours)
2.2	Awareness about adulterants in food and demonstration to identify adulterants in different food samples (10 hours)
2.3	To conduct workshop such as soap making/candle making/extraction of essential oils/organic farming at college for empowerment of women from slum area. [Select any one workshop]- (10 hours)
	Group will select any one activity from 2.1 to 2.3
2.4	To create awareness about health , hygiene and fitness amongst MBMC school student and Madrasa children and conduct Annual Sports Meet for them (20 hours)
Module 3	Report Writing & Presentation (10 hours)

Group Size : 5- 6 students / group

Module 3 : Documentation and Presentation

Report Format :

Project report should be typed on **A4 sheets, Font Size 12, Times New Roman, one and a half spacing on executive bond paper**. The project report shall have appropriate chapter scheme and be presented in a minimum of 20 pages.

(Approximately minimum of 4000 to 5000 words).

Report should be arranged in the following order

Title Page

- Title of the Report (Font Size 14)
- Name of the Student
- Roll Number/Seat Number
- Program Title
- Name of the Mentor
- Month of Submission

Certificate by the Institute

Certificate by Mentor

Student's Declaration

Acknowledgement

Abstract : A brief summary of the community interactions, key observations, and main conclusions (200-300 words)

Table of contents

- Include headings and subheadings with page number

List of Figures and Tables

List all figures and tables included in the report with corresponding page numbers

Chapter 1 : Introduction

- Purpose of the visit
- Background Information
- Scope of Report

Chapter 2 : Literature Review

Chapter 3: Methodology

Chapter 4: Description of the community interactions, Observations and Analysis

Chapter 5: Conclusion and Recommendations

References

Appendices

Evaluation Pattern :

Internal Assessment (20 Marks):



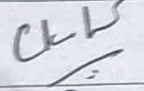
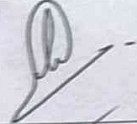
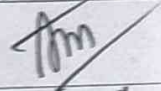

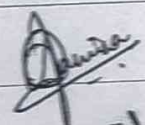
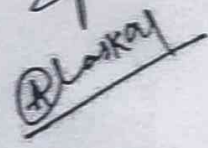
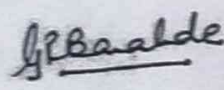
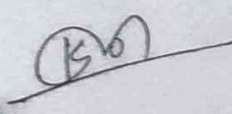

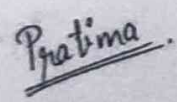
- Participation and Attendance – **10 Marks**
- Documentation and Report – **10 Marks**

Externals Assessment (30 Marks):

- Presentation – **20 Marks**
- Viva – **10 Marks**


Total : 50 Marks

Board of studies in Chemistry


Category	Name and Designation	Affiliation	Signature	
1	Chairperson (Head of Department)	Dr. Aqeela A. S. Qureshi, Associate Professor	Royal College of Arts, Science and Commerce. Mira Rd	
2	Internal BOS Members	Prof. Kalpana Patankar Jain. Principal	Royal College of Arts, Science and Commerce. Mira Road	
		Dr. Chitralekha Kotian Associate Professor		
		Dr. Gunwanti Negi Assistant Professor		
		Dr. Vibha Bhagat Assistant Professor		
		Dr. Mustaqeem Mohammed - Assistant Professor		
		Ms. Aamina Kadari - Assistant Professor		
3	External Subject Expert	Prof. Atul Chaska - Professor	Institute of Chemical Technology, Matunga, Mumbai.	
		Prof. Gayatri Barabde - Professor	The Institute of Science, Mumbai [Dr. Homi Bhabha State University (HBSU)]	
4	Vice-Chancellor Nominee	Prof. Krishnakant T. Waghmode	Ruparel College of Arts, Science & Commerce,	
5	Industry Representative	Shailesh G. Poojary - Chief Manager, Parle Quality Systems, Parle Products	Parle Products VS Khandekar Marg, Vile Parle East Mumbai-400057	
6	Postgraduate meritorious alumnus	Ms. Pratima Rajesh Yadav PhD. Scholar from ICT, Mumbai.	Institute of Chemical Technology, Nathalal Parekh Matunga, Mumbai	

Justification for B.Sc. (CHEMISTRY)

1.	Necessity for starting the course:	The necessity for starting the B.Sc. (Chemistry) course lies in its role as a foundational, interdisciplinary, and practical program that prepares students for higher education, diverse career opportunities and active participation in addressing scientific and societal challenges. The course also prepares students to contribute to solving real-world scientific and societal challenges.
2.	Whether the UGC has recommended the course:	Yes
3.	Whether all the courses have commenced from the academic year 2023-24	The course has already commenced in the university and in the academic year 25-26, it is restructured under NEP 2020
4.	The courses started by the University are self-financed, whether adequate number of eligible permanent faculties are available:	This course is aided based on sanction given by University of Mumbai to affiliated colleges time to time.
5.	To give details regarding the duration of the Course and is it possible to compress the course?	The duration of the program is three years (6 semesters). It is not possible to compress the course.
6.	The intake capacity of each course and no. of admissions given in the current academic year:	The intake capacity is 120 and no. of admission is 61 based on sections received from the University.
7.	Opportunities of Employability / Employment available after undertaking these courses:	B.Sc. (Chemistry) graduates are versatile and can adapt their skills to various industries, make them valuable assets in the workforce. Additionally, continuous learning and staying updated on industry trends can enhance career prospects and open up new opportunities.


 BoS Chairperson
 Dr. Aqeela A. S. Qureshi
 Head, Department of Chemistry
 Royal College, Mira Road




 Principal
 Prof. (Dr.) Kalpana Patankar Jain
 Royal College, Mira Road

Principal
ROYAL COLLEGE OF ARTS & COMMERCE
 SCIENCE & COMMERCE
 Penkar Pada, Mira Road,
 Dist Thane, Pin - 401107.