

J.T.S.S.P.M.

Shri Shiv Chhatrapati College, Junnar.

Department of Chemistry

Add on Certificate course in Biomedical Waste Management

Course information:

Title of the Course: Add on Certificate course in Biomedical Waste Management

Number of Credit for the course: 2 Credit

Medium of Instruction: English

Eligibility: All B.Sc. students belongs to semester V are eligible to enroll for course.

Duration: - One month (30 lectures)

Instructors: - Faculty of Chemistry

Mode: - Classroom and field visit.

Clock hours (Credits) allotted for teaching: 16 hrs.

Clock hours (Credits) allotted for Practical/ Project/ Training/ Labs: 20 hrs.

Clock hours (Credits) allotted for Tutorial / Evaluation: 4 hrs.

Number of proposed students: 20 students per batch.

Fess if any to be Charged: Yes (Rs. 300/- per student)

Pattern of Evaluation:

Course No.	Course Name	Internal Project Marks	External Marks		Total Marks
			Theory	Practical	
1	Add on Certificate course in Biomedical Waste Management	20	50	30	100

Aims and Objectives of the Course:-

1. To develop basic understanding regarding Biomedical Waste Management.
2. Equip the students to appreciate the applied aspects of Bio-medical waste improving their chances of employment in the environmental related profession.

Instructional Design:-

This course is of three month duration which includes theory classes, field Visit, Assignment and Field Project.

ACADEMIC CALENDER

Semester II of each year

1.	Admission	January
2.	Theory & Practical Classes	January to February
3.	Examination	March
4.	Certificate Convocation	March
5.	Campus Interview through placement cell	As per the demand and Convenience of the Industry.

Note: 1. the working of the Institute is from Monday to Saturday i.e. six days in a week.

1. RULES FOR ATTENDANCE AND LEAVE

- 1.1 A student is required to put in a minimum of 75 percent attendance during each session in each subject. Non-compliance of this rule will render him liable to be debarred from appearing at the Diploma Examination.
- 1.2 Ordinarily, leave for 15 days in admissible to a student is an academic year.
- 1.3 Application of leave for absence must be handed over at the Education Section on the prescribed form.
- 1.4 Application for leave must be counter signed by the Parents
- 1.5 Application for Sick leave must be accompanied by a certificate from the Medical Officer

2. RAGGING : *Ragging is strictly prohibited vide directions of Hon'ble*

Supreme Court in SLP No2495 of 2006 dated 16.05.2007 and in Civil Appeal No 887 of 2009, dated 08.05.2009. Any student found guilty of ragging and /or abetting ragging is liable to be punished.

3. SCHEME OF EXAMINATIONS

3.1 The examinations are held at the appropriate time as per Institute's calendar. Class tests may also be held during the middle of the session. Marks obtained at these tests and examinations as well as the marks assigned for class work and lecture notes of each student will be recorded for his class marks in each term.

3.2 Classification of Results:

It is necessary to pass in each subject separately in Theory and Practical. The minimum pass marks in theory 35% and 50% in Practical. The candidate would be declared to have passed a particular course in case he secures a minimum of 50% marks in aggregate. The division to students at the end of examinations are given according to the following standards:-

First Division	75% and above
Second Division	60% and above
Third Division	50% and above

3.3 Supplementary Examination

3.3.1 If a candidate fails in maximum of any two subjects at the examination but secures 50% marks in aggregate, he will be allowed to appear in the supplementary examination for these two subjects.

3.3.2 A candidate allowed to appear in the supplementary examination would be provisionally promoted to the next higher class and in case he fails in the supplementary examination also, he would be reverted to the lower class on declaration of supplementary examination results.

3.3.3 The student who passes in the said examination of any course in supplementary examination will be declared as "PASSED" and no division will be awarded to him.

3.4 Re-admission of Failed Students

If a candidate fails in examinations (including supplementary examination). He will be permitted to take the re-admission again in the following year, provided he attends the Institute as a regular student in the same class in which he had failed. If a student fails three times in a particular class he will be not re-admitted in that class in the Institute. If after failing in the class once a candidate does not take re-admission in the same class in the immediate next session his/her case will not be considered in future for re-admission.

3.5 Course Structure and Examination Scheme:-

Course No.	Course Name	Contact Classes (Hour)	Laboratory Experiment (Hour)	Internal Project Marks	External Marks		Total Marks
					Theory	Practical	
1	Certificate course in Biomedical Waste Management	20	10	20	50	30	100

Grading system: Following Percentage based grading system will be applicable to the course.

Range of marks	Grade
90- 100	O
80-<90	A+
70-<80	A
65-<70	B+
55-<65	B
45- <55	C
40- <45	P
<40	Fail

Content of proposed course:

- Module 1 – Introduction to Biomedical Wastes (14 L)
- Module 2 –Disposal Methods for Biomedical Wastes (16 L)

Outcome for Students after completion of Course:

- Understand the components of biomedical waste management and pollution caused by biomedical waste.
- Understand the biomedical waste collection systems, route optimization techniques and processing of biomedical wastes.
- Understand the design, operation, and maintenance of different methods of biomedical waste treatment.

Outcome to the institution after completion of Course:

The course content should be taught and implemented with the aim to develop required skills in the students so that they are able to acquire following competency: Plan segregation, collection, transportation, recycling and disposal of biomedical waste in such a way that its impact is minimal on environment, economy and community. Make student employable in Hospitals, Government Institutions and Industries.

Justification of the Course:

The aim of the present course is to assess awareness regarding biomedical waste management as well as knowledge of effective recycling and reuse of waste among undergraduate students.

BOS Members

Internal BOS Members

- 1) **Dr. Shelar U.B.**
- 2) **Prof. Kale S.M.**
- 3) **Mr. Thorve S.S.**
- 4) **Mrs. Shaikh T.Y.**

External BOS Members

- 1) **Dr. Pingale S.S.**
(Ph.D Guide, Associate professor ACS College Narayangaon, Junnar)
- 2) **Dr. Kabadi E.M.**
(Associate professor A.W. College Otur, Junnar)