



**COURSE PLAN (PART II)**

**COURSE TEACHING AND LEARNING ACTIVITIES**

Sl.No.	Week	Topic	Mode of Delivery
1.	2 <sup>nd</sup> Week of January 2021 (3 Contact Hours)	Introduction to Environmental Quality Measurements Laboratory-Importance-Instrumentation Techniques	Online /MS Teams
2.	3 <sup>rd</sup> Week of January 2021 (3 Contact Hours)	Determination of pH; Determination of Electrical Conductivity and Turbidity	Online /MS Teams
3.	4 <sup>th</sup> Week of January 2021 (3 Contact Hours)	Determination of Alkalinity and Acidity	Online /MS Teams
4.	5 <sup>th</sup> week of January 2021 (3 Contact Hour)	Determination of Total Hardness; Calcium and Magnesium Hardness	Online /MS Teams
5.	1 <sup>st</sup> week of February 2021 (3 Contact Hours)	Determination of Sulphates; Determination of Fluorides	Online /MS Teams
6.	2 <sup>nd</sup> Week of February 2021 (3 Contact Hours)	Determination of Total Solids, Suspended solids, Dissolved solids, Volatile Solids and Fixed Solids Determination of Iron	Online /MS Teams
7.	3 <sup>rd</sup> Week of February 2021 (3 Contact Hours)	Estimation of Residual Chlorine Estimation of Dissolved Oxygen	Online /MS Teams
8.	4 <sup>th</sup> Week of February 2021 (3 Contact Hour)	<b>Assessment 1</b>	Online /MS Teams
9.	1 <sup>st</sup> week of March 2021 (3 Contact Hours)	Determination of Biochemical Oxygen Demand (BOD); Determination of Chemical Oxygen Demand (COD)	Online /MS Teams
10.	2 <sup>nd</sup> Week of March 2021 (3 Contact Hours)	Analysis of Bacterial Cell Morphology Using Light Microscope Microbial Staining	Online /MS Teams
11.	3 <sup>rd</sup> Week of March 2021 (3 Contact Hours)	Flame sterilization and Tube Transfer Basic Pure Culture Techniques	Online /MS Teams
12.	4 <sup>th</sup> Week of March 2021 (3 Contact Hour)	Preparation of Broth, Slant & Stab Cultures	Online /MS Teams
13.	5 <sup>th</sup> week of March 2021 (3 Contact Hours)	Estimation of Bacterial Cell Concentration Standard Plate Count Test	Online /MS Teams
14.	1 <sup>st</sup> week of April 2021 (3 Contact Hours)	Bacterial Examination in Milk Bacterial Examination in Soil	Online /MS Teams
15.	2 <sup>nd</sup> week of April 2021 (3 Contact Hours)	Determination of Particulate Matter In The Ambient Air	Online /MS Teams
16.	3 <sup>rd</sup> week of April 2021 (3 Contact Hours)	Determination of Sox, NOx in the Ambient Air	Online /MS Teams
17.	4 <sup>th</sup> week of April 2021 (3 Contact Hours)	<b>Assessment-2</b>	Online /MS Teams
18.	5 <sup>th</sup> week of April 2021 (3 Contact Hours)	Soil Analysis-pH, Conductivity	Online /MS Teams
19.	1 <sup>st</sup> week of May 2021 (3 Contact Hours)	Cation Exchange capacity, sodium Adsorption ratio	Online /MS Teams
20.	2 <sup>nd</sup> week of May 2021 (3 Contact Hours)	Record Submission / Compensation Assessment	Online /MS Teams
21.	3 <sup>rd</sup> week of May 2021 (3 Contact Hours)	<b>Final Assessment</b>	Online /MS Teams

**COURSE ASSESSMENT METHODS**

Sl. No.	Mode of Assessment	Week / Date	Duration	% Weightage
1.	Assessment 1 (Written Test)	4 <sup>th</sup> week of February 2021	60 Minutes	15%
2.	Assessment 2 (Written Test)	4 <sup>th</sup> week of April 2021	60 Minutes	15%
3.	Assessment 3 (Record Work)	-	Throughout the semester	40%
4.	Final Assessment (Viva-voce)	3 <sup>rd</sup> week of May, 2021	-	30%

**ESSENTIAL READINGS : Textbooks, reference books Website addresses, journals, etc**

- Guideline manual: Water and Wastewater Analysis, central Pollution control Board, Ministry of Environment & Forest, New Delhi, India
- Experimental methods in wastewater Treatment, IWA Publishing

**COURSE EXIT SURVEY (mention the ways in which the feedback about the course is assessed and indicate the attainment also)**

It is proposed to take feedback from the students to evaluate the execution of the course

- Direct feedback collected from the students through online mode from individual and as the class as a whole.
- Feedback from the students during class committee meetings
- Exit survey from the students at the end of the session

**COURSE POLICY (COMPENSATION ASSESSMENT)**

1. Attending all the assessments, (Assessment 1 to 4) is MANDATORY for every student.
2. If any student is not able to attend Assessment-1 / Assessment-2 due to genuine reason, student is permitted to attend the respective assessment as compensation assessment (CPA) with the same weightage.
3. At any case, CPA will not be considered as an improvement test.

**ATTENDANCE POLICY**

The attendance will be taken in all the contact hours. Students are encouraged to attend all the classes without absence. Also, the students are encouraged to participate in various co-curricular and extracurricular activities to enrich the academic / campus life.

- a) At least 75% of attendance in each course is mandatory. Students with less than 75% in any course by the end of 9<sup>th</sup> week will be identified and alerted by the respective class committees.
- b) A maximum of 10% shall be allowed under On Duty (OD) category.
- c) Students with less than 65% of attendance shall be prevented from writing the end assessment and shall be awarded as 'V' grade.

**ACADEMIC DISHONESTY AND PLAGIARISM**

**Academic Dishonesty**

- a) Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty
- b) Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- c) The department disciplinary committee constituted with the faculty member, PAC Chair person, and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student found guilty.

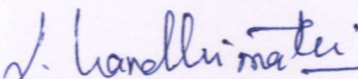
**Plagiarism** means knowingly presenting another person's ideas, findings or work as one's work by copying or reproducing them without due acknowledgement of the source, with intent to deceive the examiner into believing that the content is original to the student.

Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e. their intellectual property) so used as one's own work

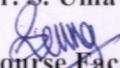
**ADDITIONAL COURSE INFORMATION**

1. All the students are advised to check their NIT-T webmail regularly to know the updates. All the correspondence (schedule of classes/ schedule of assessment/ course material/ any other information regarding this course) will be communicated through webmail.
2. Queries / Clarifications / Discussions (if required) may be E-mailed to me / contact me during working hours (4.00 PM to 5.00 pm) from Monday to Thursday with prior intimation.

**FOR APPROVAL**



Dr. R. Gandhimathi  
Dr. S. Uma

  
Course Faculty



Chairman (Class Committee)



Dr. G. Swaminathan  
**Professor and Head**  
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