

UG	Department: Chemical Engineering
Course Code: CHP216	Course Name: Industrial Pollution Abatement Lab
Credit: 2	L-T-P: 0-0-3
Version: 1	Approved on:
Prerequisite Course: Nil	
At least seven experiments out of following need to be done.	
<ol style="list-style-type: none"> 1. Determination of Total Solids (TS), Total Suspended Solids (TSS), and Total Dissolved Solids (TDS) of a given wastewater sample. 2. Determination of Volatile Suspended Solids (VSS) and Fixed Suspended Solids (FSS) of a given water sample. 3. Determination of pH, Electrical Conductivity (EC), and Turbidity of a given water sample. 4. Determination of Dissolved Oxygen (DO) of a given water sample by Winkler's method. 5. Determination of Chemical Oxygen Demand (COD) of a given water sample. 6. Determination of Oil and Grease in a given wastewater sample. 7. Determination of Biological Oxygen Demand (BOD) of a given water/ wastewater sample. 8. Determination of Available Chlorine in a given sample of Bleaching Powder 9. Propose an experiment consistent with the theory subject of IPA and for which infrastructure is available in IPA Lab. giving complete details (as given in IPA Lab practical instruction sheet). 10. Propose an experiment consistent with the theory subject of IPA and for which infrastructure needs to be arranged in IPA Lab. giving complete details (as given in IPA Lab practical instruction sheet) 11. Some real life problem based on the course content of Industrial Pollution Abatement. The problem should have application of Numerical methods and/or statistics. Select a problem from journal research paper/ text book of the subject. The project must have some contribution of the team commensurate with the level of the Class. 	
Books	
<ol style="list-style-type: none"> 1. Clesceri, L. S., Greenberg, A. E., Eaton, A. D. (Eds.), , Standard Methods for Water and Wastewater Analysis, 20th ed., American Public Health Association (APHA), Washington, 1998 2. Maiti, S. K., Handbook of Methods in Environmental Studies, Vol. I, ABD Publishers, Jaipur, 2001 3. Mathur, R. P., Water and Wastewater Testing (Laboratory Manual), 4th ed., Nemchand and Brothers, Roorkee, 2005. 	