

Department of Chemistry

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

COURSE OUTLINE TEMPLATE

Course Title	Inorganic and Organic Quantitative Analysis Lab		
Course Code	CH 621	No. of Credits	2 (Practical)
Department	Chemistry	Faculty	Dr. Sunandan Sarkar
Programme	M.Sc.(Chemistry)		
Pre-requisites Course Code	Nil		
Course Coordinator(s) (if, applicable)	Dr. Sunandan Sarkar		
E-mail	ssarkar@nitt.edu	Telephone No.	9153484492(M)
Course Type	<input checked="" type="checkbox"/> Core course	<input type="checkbox"/> Elective course	

COURSE OVERVIEW

This course is offered to the M.Sc. II year (Chemistry) students. This is a 2 credit practical course and one practical class (6 hours) will be conducted per week.

COURSE OBJECTIVE

To introduce the students about the:

- (i) Inorganic quantitative estimation of mixtures of cations
- (ii) Quantitative estimation of organic compounds and analysis of oils

COURSE OUTCOMES (CO)

At the end, the students should be able to:

1. Understand the importance of the quantitative estimation and its applications
2. Employ the developed experimental skills to solve the real life problems

COURSE TEACHING AND LEARNING ACTIVITIES

S.No.	Week	Topic	Mode of Delivery
1	II week of July to I week of August	Estimation of phenol, aniline, ascorbic acid. Estimation of ketone by volumetric method & gravimetric method. Determination of acid value of an oil. Determination of saponification value of an oil.	C&T, PPT
2	II week of August to II week of September	Determination of acetyl value of an oil. Determination of iodine value of an oil. Estimation of lactose in milk. Estimation of glucose by Bertrand's method. Estimation of glucose by Fehling's method.	C&T, PPT

3	III week of September to I week of November	Analysis involving volumetric and gravimetric estimations of mixtures of cations Cu & Ni; Cu & Zn; Zn & Cu; Fe & Ni; Fe(II) & Fe(III)	C&T, PPT
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COURSE ASSESSMENT METHODS

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
Practical				
1	Practical class	Tuesday per week for a total of 4 months	6 hours per week	75%
2	Model practical	II week of November, 2017	6 hours	Nil
3	End semester	III week of November, 2017	6 hours	25%

Practical = Total (100)

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

1. Feedback from students during class committee meetings.
2. Anonymous feedback through questionnaire at the end of the semester.

COURSE POLICY (including plagiarism, academic honesty, attendance, etc.)

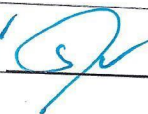
1. 75% attendance is compulsory for practical component.
2. For those who missed practical classes due to genuine reasons, extra practical classes will be conducted during the II week of November 2017.

ADDITIONAL COURSE INFORMATION

The faculty will be available for consultation at times as per the intimation by the faculty.

Coordinator *S. Sarkar*

CC-Chairperson



HOD

