

INSTITUTE	FACULTY OF SCIENCE
PROGRAM	MASTER OF SCIENCE (CHEMISTRY)
SEMESTER	4
COURSE TITLE	DISSERTATION/PROJECT
COURSE CODE	02CY1554
COURSE CREDITS	18

Objective:

- 1 The objectives of this course are to prepare the students to adapt to the research environment and understand how projects are executed in a research laboratory
- 2 It will also enable students to learn practical aspects of research and train students in the art of analysis and thesis writing

Course Outcomes: After completion of this course, student will be able to:

- 1 Students will be able to learn how to select and defend a topic of their research, how to effectively plan, execute, evaluate and discuss their experiments.
- 2 Students should be able to demonstrate considerable improvement in thesis writing.
- 3 Students will be able to conduct research independently.
- 4 Students will be competent in research design and planning.

Pre-requisite of course: To have practical aspect on theoretical knowledge and increase practical skills in the lab

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	0	0	0	0	120	280

Contents : Unit	Topics	Contact Hours
Total Hours		

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	Dissertation/Project Literature, Experimental, Analysis data, Conclusion	
Total Hours		

Textbook :

- 1 Introducing research methodology: A beginner's guide to doing a research project, Flick, Sage, 2015

References:

- 1 Research methodology, Research methodology, PANNEERSELVAM, PHI Learning Pvt. Ltd, 2014
- 2 Research methodology: Methods and techniques, Research methodology: Methods and techniques, Kothari, C. R., New Age International, 2004

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking
10.00	20.00	25.00	25.00	10.00	10.00

Instructional Method:

- 1 The course delivery method will depend upon the requirement of content and need of students.
- 2 The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.
- 3 Viva-voce examination will be conducted at the end of semester for evaluation of performance of students.
- 4 Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Lab.

Supplementary Resources:

- 1 https://www.youtube.com/watch?v=ur-pIS0CxOg&list=PLsh2FvSr3n7eJR5_YtdRvwoYv4JZ00hqe
- 2 <https://www.youtube.com/watch?v=1vf8ZvADxfY&list=PLLhSIFfDZcUWRlgiXMkd1rNeLSz1You4O>