Course Specification

(Postgraduate Programs)

Course Title:	**Thesis**
Course Code:	**CHM 6299**
Program:	**Master of science in chemistry**
Department:	**Chemistry**
College:	**Science**
Institution:	**Imam Mohammad Ibn Saud Islamic University**
Version:	*Course Specification Version Number*
Last Revision Date:	*Pick Revision Date.*

Table of Contents

A. General information about the course:

1. Course Identification:

1. Credit hours: 6 (0Lectures, 12Lab, 0Tutorials)				
2. Course type				
A.	☐University	☐College	☐Department	☐Track
B.	☒ Required		☐Elective	
3. Level/year at which this course is offered: (Level 4/ Year 2)				
4. Course General Description:				
The presented thesis reflects the ability of the master's student to complete the chosen research assignment in a scientific and independent manner. The student's cognitive skills, which he acquired during the university studies and the theoretical part of the master's program, are refined. The course includes the compilation of published research in the field of the research plan, its study, and practical experiments that serve a research plan in order to reach the desired results of scientific publication.				
5. Pre-requirements for this course (if any)**:**				
1. He/she must have completed all admission requirements. (After completing the first semester and with a GPA of 3.75 or above, the student has the right to submit his/her desires to choose the supervisor of the thesis project,). **2. He/she must have passed at least 50% of the academic courses (The student has the right to submit the thesis project to the department, according to the student's desire for the minor and according to the possibilities).** **The GPA should not be less than (very good).**				
6. Co-requirements for this course (if any)**:**				
None				
7. Course Main Objective(s):				
• **Application of acquired scientific knowledge to solve problems at the proposed research point** • **Conducting literary studies, and a critical review of current information on the state of knowledge in the field of research** • **The ability to plan or think scientifically and choose the right way to achieve the goal of the research** • **Collecting, evaluating and analyzing scientific data systematically** • **Demonstrate the ability to interpret and discuss findings and conclusions** • **Demonstrate ability to discuss the research project** • **The ability to write and present results in a scientific wayAcquiring the skill of critical review and discussing it in a scientific manner.**				

2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	180	100 %
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours: (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	subject dependent
2.	**Laboratory/Studio**	subject dependent
3.	**Field**	subject dependent
4.	**Tutorial**	0
5.	**Others (specify)……**	0
	Total	180

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods:

B.1. *Inorganic Chemistry Track*

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	**To outline a good understanding of Inorganic Chemistry with sufficient background in relevant fields.**	**K1. *Inorg.*; K2. *Inorg.*; K3. *Inorg;* K4. *Inorg.***	▪ **Follow up-to To Demonstrate mastery of appropriate research techniques and procedures. Formulate Discussion on the**	▪ **Supervisor Evaluation.** ▪ **Referees reports on written thesis. Defense committee evaluation**

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
			basis of observations, obtain and analyze data to test	
1.2	**To describe and carry out independent research and analysis of the obtained data, and contribute substantive work in Inorganic Chemistry.**	**K1. *Inorg*; K3. *Inorg*; K4. *Inorg*.**	Precisely describe all research results and forms of scientific investigation used in written thesis.	▪ Referees reports on written thesis. Defense committee evaluation
1.3	**To outline the newest progress and development in Inorganic Chemistry and related fields.**	**K2. *Inorg*.; K3. *Inorg*.**	Summarize existing literature, interpret and compare within existing research findings.	▪ Referees reports on written thesis. Defense committee evaluation
1.4	**To record a comprehensive mastery of thesis understanding to develop, update, and present information inclusive of various or relevant topics, including the limitations of the research methods used in their work.**	**K1. *Inorg*; K2. *Inorg*.; K4. *Inorg*.**	Written Thesis including, practical experimental documents describing methods, data, and limitations of research, and results that are suitable for eventual Defense.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.0	Skills			
2.1	**To Summarize and evaluate concepts and theories of Inorganic Chemistry and relevant topics via searching and assessing current literature.**	**S1. *Inorg*.; S2. *Inorg*.; K3. *Inorg*.**	Independent developing under the guidance of the supervisor through discussion weekly.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation.
2.2	**To create and plan a research project independently with manipulating research laboratory instruments, highly**	**S1. *Inorg*.;** **S2. *Inorg*.; S3. *Inorg*.**	Independent developing in preparing a research topic based on obtained observations	▪ Supervisor Evaluation. ▪ Referees reports on written thesis.

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
	sensitive equipment, hazardous and non-hazardous materials with full capability to analyze the obtained results.			▪ Defense committee evaluation.
2.3	**To perform knowledge of basic lab safety and the requirements to assist in establishing a safe lab environment.**	**S2. *Inorg.***	Scientific evaluation and discussion in obtained results and difficulties faced.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.4	**To demonstrate creative and innovative approaches to student research thesis, accompanying writing of mini-Reports, operating electronic mail, and Network in communicating with others.**	**S1. *Inorg.*; S2.*Inorg.*; S3. *Inorg.*; S4. *Inorg.***	Outlines problems faced during research work for discussion with a per research group or others.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
3.0	Values, autonomy, and responsibility			
3.1	**To recognize ethical issues and responsibilities related to professionalism, data analysis and treatment.**	**V1. *Inorg.*; V2. *Inorg.***	▪ Written thesis containing the research results. Oral presentation of the thesis.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation
3.2	**To appraise effectively the collaboration and inter-professionalism in Lab. discussions or team works, as well as independently.**	**V1. *Inorg.*; V2. *Inorg.***	▪ Written thesis containing the research results. Oral Discussion of the thesis.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation

B.2. *Organic Chemistry Track*

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	**To outline a good understanding of Organic Chemistry with sufficient background in relevant fields.**	**K1. *Org.*; K2. *Org.*; K3. *Org.*; K4. *Org.***	▪ Follow up-to To Demonstrate mastery of appropriate research techniques and procedures. Formulate Discussion on the basis of observations, obtain and analyze data to test	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation
1.2	**To describe and carry out independent research with a Full elucidation of Chemical Structures or methods and contribute substantive work in Organic Chemistry.**	**K1. *Org.*; K2. *Org.*; K3. *Org.*; K4. *Org***	Precisely describe all research results and forms of scientific investigation used in written thesis.	▪ Referees reports on written thesis. Defense committee evaluation
1.3	**To outline the newest progress and development Organic Chemistry and related fields.**	**K2. *Org.*; K3. *Org.***	Summarize existing literature, interpret and compare within existing research findings.	▪ Referees reports on written thesis. Defense committee evaluation
1.4	**To record a comprehensive mastery of thesis understanding of Organic Chemistry to develop, update, and present information inclusive of various or relevant topics, including the limitations of the research methods used in their work.**	**K1. *Org.*; K2. *Org.*; K4. *Org*.**	Written Thesis including, practical experimental documents describing methods, data, and limitations of research, and results that are suitable for eventual Defense.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.0	Skills			

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
2.1	**To Summarize and evaluate Synthetic Methods, Stereochemistry, Functional Groups, and reactivity relationships concepts of Organic Chemistry and relevant topics via searching and assessing current literature.**	**S1. *Org.*; S2. *Org.*; S4. *Org.***	Independent developing under the guidance of the supervisor through discussion weekly.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation.
2.2	**To create and plan a research project independently with manipulating research laboratory instruments, highly sensitive equipment, hazardous and non-hazardous materials with full capability to analyze the obtained results.**	**S1. *Org.*; S2. *Org.*; S3. *Org.***	Independent developing in preparing a research topic based on obtained observations	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.3	**To perform knowledge of basic lab safety and the requirements to assist in establishing a safe lab environment.**	**S2. *Org.***	Scientific evaluation and discussion in obtained results and difficulties faced.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.4	**To demonstrate creative and innovative approaches to student research thesis, accompanying writing of mini-Reports, operating electronic mail, and Network in**	**S1. *Org.*; S2. *Org.*; S3. *Org.*; S4. *Org.***	Outlines problems faced during research work for discussion with a per research group or others.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
	communicating with others.			
3.0	Values, autonomy, and responsibility			
3.1	**To recognize ethical issues and responsibilities related to professionalism, data analysis and treatment.**	**V1. *Org.;* V2. *Org.***	▪ Written thesis containing the research results. Oral presentation of the thesis.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation
3.2	**To appraise effectively the collaboration and inter-professionalism in Lab. discussions or team works, as well as independently.**	**V1. *Org.;* V2. *Org*.**	▪ Written thesis containing the research results. Oral Discussion of the thesis.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation

B.3. *Analytical Chemistry Track*

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	**To outline a good understanding of Analytical Chemistry principles and concepts with sufficient background in relevant fields.**	**K1. *Anal.*; K2. *Anal.*; K3. *Anal.*; K4. *Anal.***	▪ Follow up-to To Demonstrate mastery of appropriate research techniques and procedures. Formulate Discussion on the basis of observations, obtain and analyze data to test	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation
1.2	**To describe and carry out independent research with an understanding of pollutants, Modern Analytical Atomic Spectroscopy Methods and contribute**	**K1. *Anal.*; K2. *Anal.*; K3. *Anal.*; K4. *Anal.***	Precisely describe all research results and forms of scientific investigation used in written thesis.	▪ Referees reports on written thesis. Defense committee evaluation

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
	substantive work in Analytical Chemistry.			
1.3	**To outline the newest progress and development Analytical Chemistry and related fields.**	**K2. *Anal.*; K3. *Anal.***	Summarize existing literature, interpret and compare within existing research findings.	▪ Referees reports on written thesis. Defense committee evaluation
1.4	**To record a comprehensive mastery of thesis understanding of Analytical Chemistry to develop, update, and present information inclusive of various or relevant topics, including the limitations of the research methods used in their work.**	**K1. *Anal.*; K2. *Anal.*; K3. *Anal.*; K4. *Anal.***	Written Thesis including, practical experimental documents describing methods, data, and limitations of research, and results that are suitable for eventual Defense.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.0	Skills			
2.1	**To Summarize and evaluate Modern Analytical Atomic Spectroscopy Methods, and Electrochemical analytical techniques in Environmental Chemistry and Water Pollution and relevant topics via searching and assessing current literature.**	**S1. *Anal.*; S2. *Anal.*; S3. *Anal.***	Independent developing under the guidance of the supervisor through discussion weekly.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation.
2.2	**To create and plan a research project independently with manipulating research laboratory instruments, highly sensitive equipment, hazardous and non-**	**S1. *Anal.*; S2. *Anal.*; S4. *Anal.***	Independent developing in preparing a research topic based on obtained observations	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
	hazardous materials with full capability to analyze the obtained results.			
2.3	**To perform knowledge of basic lab safety and the requirements to assist in establishing a safe lab environment.**	**S2. *Anal.***	Scientific evaluation and discussion in obtained results and difficulties faced.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.4	**To demonstrate creative and innovative approaches to student research thesis, accompanying writing of mini-Reports, operating electronic mail, and Network in communicating with others.**	**S1. *Anal.*; S2. *Anal.*; S3. *Anal.*; S4. *Anal.***	Outlines problems faced during research work for discussion with a per research group or others.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
3.0	Values, autonomy, and responsibility			
3.1	**To recognize ethical issues and responsibilities related to professionalism, data analysis and treatment.**	**V1. *Anal.*; V2. *Anal.***	▪ Written thesis containing the research results. Oral presentation of the thesis.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation
3.2	**To appraise effectively the collaboration and inter-professionalism in Lab. discussions or team works, as well as independently.**	**V1. *Anal.*; V2. *Anal.***	▪ Written thesis containing the research results. Oral Discussion of the thesis.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation

3.D. *Physical Chemistry Track*

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	**To outline a good understanding of Physical Chemistry principles, concepts and theories with sufficient background in relevant fields.**	**K1. *Phy.*; K2. *Phy.*; K3. *Phy.*; K4. *Phy..***	▪ Follow up-to To Demonstrate mastery of appropriate research techniques and procedures. Formulate Discussion on the basis of observations, obtain and analyze data to test	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation
1.2	**To describe and carry out independent research with an understanding of thermodynamics and kinetics for materials and materials and contribute substantive work in Physical Chemistry.**	**K1. *Phy.*; K2. *Phy.*; K3. *Phy.*; K4. *Phy.***	Precisely describe all research results and forms of scientific investigation used in written thesis.	▪ Referees reports on written thesis. Defense committee evaluation
1.3	**To outline the newest progress and development Physical Chemistry and related fields.**	**K2. *Phy.*; K3. *Phy.***	Summarize existing literature, interpret and compare within existing research findings.	▪ Referees reports on written thesis. Defense committee evaluation
1.4	**To record a comprehensive mastery of thesis understanding of Physical Chemistry to develop, update, and present information inclusive of various or relevant topics, including the limitations of the research methods used in their work.**	**K1. *Phy.*; K2. *Phy.*; K3. *Phy.*; K4. *Phy.***	Written Thesis including, practical experimental documents describing methods, data, and limitations of research, and results that are suitable for eventual Defense.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.0	Skills			

2.1	**To Summarize and evaluate Kinetics, Thermodynamics and Materials Science and its applications in Nanomaterials, and Hybrid Materials, and relevant topics via searching and assessing current literature.**	**S1. *Phy.*; S2. *Phy.*; S3. *Phy.***	Independent developing under the guidance of the supervisor through discussion weekly.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation.
2.2	**To create and plan a research project independently with manipulating research laboratory instruments, highly sensitive equipment, hazardous and non-hazardous materials with full capability to analyze the obtained results.**	**S1. *Phy.*; S2. *Phy.*; S4. *Phy.***	Independent developing in preparing a research topic based on obtained observations	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.3	**To perform knowledge of basic lab safety and the requirements to assist in establishing a safe lab environment.**	**S2. *Phy.***	Scientific evaluation and discussion in obtained results and difficulties faced.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. ▪ Defense committee evaluation.
2.4	**To demonstrate creative and innovative approaches to student research thesis, accompanying writing of mini-Reports, operating electronic mail, and Network in communicating with others.**	**S1. *Phy.*; S2. *Phy.*; S3. *Phy.*; S4. *Phy.***	Outlines problems faced during research work for discussion with a per research group or others.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation.

3.0	Values, autonomy, and responsibility			
3.1	**To recognize ethical issues and responsibilities related to professionalism, data analysis and treatment.**	**V1. *Phy.*; V2. *Phy.***	▪ Written thesis containing the research results. Oral presentation of the thesis.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation
3.2	**To appraise effectively the collaboration and inter-professionalism in Lab. discussions or team works, as well as independently.**	**V1. *Phy.*; V2. *Phy.***	▪ Written thesis containing the research results. Oral Discussion of the thesis.	▪ Supervisor Evaluation. ▪ Referees reports on written thesis. Defense committee evaluation

C. Course Content:

No	List of Topics	Contact Hours
1.	***Subject dependent*** • The thesis contents provide a comprehensive foundation across the required breadth of specific subjects for a degree in Chemistry at Masters level. • Literature Survey: The published literature is one of the most potent tools of the thesis research has available. • Conduct of research • Written Report and Oral and Presentation of the research progress. Written work: Written work of the thesis.	**180**
	Total	**180**

D. Students Assessment Activities:

- Tasks of the thesis are individuality processed, and the supervisor, weekly evaluate the effort deployed by the student.
- The students frequently prepare a written report parallel with open discussion with the supervisor to evaluate the work progress.
- Bi-annual report clarifying the thesis progress, difficulties, the predicted progress, before the end of each semester, submitted to the supervisor.
- Written work: Written work consists of the thesis, attention is paid to the following points:
  - Clarity: Well written of the thesis.
  - Technical merit: Clarify the scope and limitations of the work undertaken.
  - Literature awareness; the work presented in the thesis should be set in context by adequate references.
  - Conduct of Research Thesis: Activity and capability of the student for dealing with instruments and analyzing the obtained results will be evaluated in thesis defense.
  - Oral presentations: will be evaluated in thesis defense.

The Written thesis and Defense committee evaluation will be the *Assessment Methods (***Assessment *procedures for defence and approval of the thesis)***.**

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	**Written thesis**	**Around 9th of the semester** **CGC***	**Written thesis**
2.	**Public Presentation of the dissertation**	**Around 17th of the semester**	**Public Presentation of the dissertation**

***CGC**

a) The validity of the thesis for discussion based on the supervisor's report.
b) The master's student must pass all the courses of the program.
c) Compliance with the provisions of **Article 36-page 27** of the Executive Regulations of Imam University.

****Assessment *procedures for defence and approval of the thesis***

1) All the Discussion/Defense members submitted to the head of the department within one week of the discussion date, a signed report including one of the following recommendations:

a. ***Acceptance*** (Excellent, Good) of the thesis **and** ***recommendation to award*** the degree.
b. ***Acceptance*** of the thesis **(**Satisfactory, Sufficient), ***with some modifications, without discussing*** it again and authorizing one of the members to recommend granting the degree after making sure that these amendments have been taken within time, not exceed three months from the date of the discussion, and the University Council may make an exception.
c. ***Completing the deficiencies*** **(**Satisfactory, Sufficient), in the thesis and ***re-discussing them during the period determined by the Council of Graduate Studies*** based on the recommendation of the relevant department council, provided that it does **not exceed one year from the date of the discussion.**
d. ***Not accepting the thesis*****.(** Insufficient**)**

2) Each member of the Discussion committee has the right to present his/her point of view or opinions Reservations in a detailed report to each department head and the dean of graduate studies within a period not exceeding Two weeks from the date of the discussion.

Criteria for evaluation of the thesis

Guidelines for Evaluation of Master of Science in Chemistry Thesis and Awarding Marks:

1. **Independent Scientific Thinking/Originality: it might be by Evaluation of the following:**

- The Significant independent contribution of the student to the outcome of the thesis,
- Demonstration of any Scientific Originality in the thesis or any new ideas or established ideas by a new approach.
- The novelty and importance of the obtained results and conclusion.

2. **General Scientific Competence: it might be by Evaluation of the following:**

- The familiarity of the student with the literature on the subject on the thesis.
- The aims of the thesis is clearly formulated

- The discussion and methods as well techniques are discussed properly
- The literature and methods used are adopted for the subject of the thesis.
- The research as well the context of the thesis have been carried out and written Carefully.

3. **Methodological Competence: it might be by Evaluation of the following:**

- The knowledge, understanding, and comprehension of the student of techniques, equipment, laboratory experiments, and precautions to be provided.
- The usefulness of applying the methods, techniques, and tools for future studies and work.

4. **Logical Coherence and Quality of Presentation:**

- The logic and appropriate structure and style of the thesis.
- The clarification of the results and conclusion during the presentation
- The response and answering of the questions at the end of the presentation.
- The formal requirements for literature (sources), tables, and experimental details match the standard of writing the thesis according to IMSIU requirements.
- The scientific and language of the thesis is correct and comprehensive.

5. **Work Process: from the previous items, the evaluator can determine the following:**

- The student has done the research thesis with dedication and care.
- The student has acquired the necessary knowledge from doing research and reading the literature, the research has been done and written independently.

✓ **The thesis and the presentation are graded on a 1-5 scale:**

1. **Insufficient**
2. **Sufficient**
3. **Satisfactory**
4. **Good**
5. **Excellent**

A separate sheet for the Thesis Evaluation will be attached, describing the Thesis Evaluation RUBRIC.

E. Learning Resources and Facilities:

1. References and Learning Resources:

Essential References	**Subject dependent**
Supportive References	**Subject dependent**
Electronic Materials	**Subject dependent**
Other Learning Materials	**Subject dependent**

2. Educational and Research Facilities and Equipment Required:

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	**Laboratories are equipped with appropriate instruments, tools, and chemicals with good safety precautions and an internet connection.**
Technology equipment (Projector, smart board, software)	**None**
Other equipment (Depending on the nature of the specialty)	**Software in Chemistry relevant for the subject, Workstations for Molecular Dynamics**

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	▪ Students ▪ Peer Reviewer (Defense Committee) Program Leader	▪ Written Thesis Defense ▪ surveys, Collective Reports
Quality of learning resources	▪ Students ▪ Faculty (Academic Advisory- GCC) ▪ Program Leader ▪ Employers ▪ Graduates	▪ Surveys, Collective Reports Defense
The extent to which CLOs have been achieved	▪ Program Leader, ▪ Peer reviewer (Defense Committee) ▪ Students ▪ Employers Graduates	▪ Surveys, Collective Reports Defense
Other		

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

COUNCIL /COMMITTEE	Council of Chemistry Department
REFERENCE NO.	10 (No. 2/10)
DATE	21/04/1444- 15/11/2022