



Course Specifications

Course Title:	Infection control in Hospital
Course Code:	373421-2
Program:	Bachelor in Clinical Laboratory Sciences; Level-6 (Program Code: 373000)
Department:	Clinical Laboratory Sciences Department
College:	College of Applied Medical Sciences
Institution:	Taif University

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A. Course Identification

1. Credit hours: 2 hours
2. Course type
a. University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: 12 th Level / Fourth Year
4. Pre-requisites for this course (if any): - Clinical Bacteriology (373322-3) - Clinical Virology and Mycology (373410-3)
5. Co-requisites for this course (if any): None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	3 hours /week= 30 hours/semester	100%
2	Blended	None	0%
3	E-learning	None	0%
4	Distance learning	None	0%
5	Other	None	0%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	30
2	Laboratory/Studio	None
3	Tutorial	None
4	Others (specify)	None
	Total	30

B. Course Objectives and Learning Outcomes

<p>1. Course Description</p> <p>Upon the succession of this course, the students should know and understand the nosocomial infection sites, sources of Infection in hospitals, infection control program (ICP) & role of infection control and laboratory departments, prevention of hospital associated infections for medical staff & patients and investigation of an infection outbreak.</p>
<p>2. Course Main Objective</p> <p>At the completion of this course, the learner will be able to:</p> <ul style="list-style-type: none"> Recognize sites, sources, modes of transmission and causative organism associated with healthcare setting. Apply preventive measures and control strategies for infections among healthcare workers and patients. Identify barrier and personal protective equipments against potentially infectious sources.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge and Understanding	
1.1	Define sites, sources, and transmission and causative organisms of health care associated infections.	K1
1.2	Recognize the measures of prevention and control of health care associated infections for medical staff & patients.	K1
2	Skills	
2.1	Employ effective problem-solving skills.	S4
3	Values:	
3.1	Demonstrate positive work ethics as well as professional attitude in health care setting.	V1
3.2	Exhibit responsible behaviour through creating awareness among community in context of infection control.	V2

C. Course Content

No	List of Topics	Contact Hours
1	<p>Introduction to infection control (Presentation)</p> <ul style="list-style-type: none"> - Key Definitions - Why Infection Control (IC)? - Most common sites for HAIs - Causative organisms of HAIs - Root Causes of HAIs <p>Dynamic HAI transmission cycle</p> <ul style="list-style-type: none"> - The transition from contamination to infection - Links in the chain of infection - Opportunities to break the chain of infection 	3
2	<p>Common types of health care associated infections (Presentation)</p> <ul style="list-style-type: none"> - Catheter-associated urinary tract infection - Surgical site infection - Intravenous device Infections - Ventilator-associated pneumonia 	3
3	<p>Antimicrobial-resistant microorganisms (Presentation)</p> <ul style="list-style-type: none"> - Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) - Vancomycin resistant enterococci (VRE) - <i>Clostridium difficile</i> 	3
4	<p>Blood Borne (BB) Pathogens in hospitals (Presentation)</p> <ul style="list-style-type: none"> - The primary blood borne pathogens - Additional blood borne pathogens - Other potentially infectious materials - How Do blood-borne pathogens enter the body? - Risk of transmission - The major risk factors for BB infections in developing countries? - Prevention of BB Infections - Management of HCWs exposed to blood-borne pathogens 	3

5	<p>Coronaviruses and COVID-19 (Presentation)</p> <ul style="list-style-type: none"> - Important properties of the Coronaviruses - How COVID-19 spreads - Symptoms of COVID-19 - Testing for SARS-CoV-2 - WHO COVID-19: case definitions - How to protect yourself and others - Principles of IPC strategies associated with health care for suspected COVID-19 	3
6	<p>Laboratory acquired infections (Presentation)</p> <ul style="list-style-type: none"> - Levels of laboratories - Hazard Classification-Risk Groups - Biosafety levels - Biological Safety Cabinets 	3
7	<p>Organizational structure (Presentation)</p> <ul style="list-style-type: none"> - I.C committee - I.C team - I.C manual 	3
8	<p>Nosocomial infection surveillance (Presentation) Important definitions</p> <ul style="list-style-type: none"> - What is Surveillance? - The aim of surveillance - Measures of Disease Frequency 	3
9	<p>Standard Precautions and Transmission-Based Precautions (Presentation)</p> <ul style="list-style-type: none"> - What is the difference between standard precautions and transmission-based precautions? - What are the practices the standard precautions? - Sharps precautions - Environmental cleaning and disinfection - Cleaning Spills of blood and other body fluids - Linen management - Contact precautions - Droplet Precautions - Airborne Precautions 	3
10	<p>Standard Precautions (continue) (Presentation)</p> <ul style="list-style-type: none"> - Hand Hygiene - Personal protective equipment - Medical Waste Management 	3
Total		30

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Define sites, sources, and transmission and causative organisms of health care associated infections.	<ul style="list-style-type: none"> Lectures 	<ul style="list-style-type: none"> Written Exams
1.2	Recognize the measures of prevention and control of health care associated infections for medical staff & patients.	<ul style="list-style-type: none"> Lectures 	<ul style="list-style-type: none"> Written Exams
Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.0	Skills		
2.1	Employ effective problem-solving skills	<ul style="list-style-type: none"> Lectures Problem-Based Learning 	<ul style="list-style-type: none"> Written Exams
3.0	Values		
3.1	Demonstrate positive work ethics as well as professional attitude in health care setting.	<ul style="list-style-type: none"> Group Discussion 	<ul style="list-style-type: none"> Activities
3.2	Exhibit responsible behaviour through creating awareness among community in context of infection control.	<ul style="list-style-type: none"> Service Learning 	<ul style="list-style-type: none"> Activities

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Mid-Term Exam	5 th week	30%
2	Activities	Throughout the semester	10%
3	Final Exam	12 th /13 th Week	60%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

- Course instructors are available for individual consultation in their free time. They are usually full-time permanent members present on-campus from 8:00 am to 2:30 pm on all working days. Appointments can be made in person with the instructor through email etc. Days and time availability of each instructor are posted on their doors. Course instructors provide a range of academic and course management advice including course planning and its progression.
- Each student at the department of Clinical Laboratory Sciences has an academic adviser who is available for individual consultation and guidance. Appointments can be made in person with the instructor through email etc. Days and time availability of each adviser are posted on their doors. The academic adviser can provide support with time management, exam preparation, clarification of subject requirements, feedback on performance and dealing with personal issues as well.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<ul style="list-style-type: none"> Riedel, Stefan, et al. Jawetz, Melnick & Adelberg's Medical Microbiology (2019). 28th edition
Essential References Materials	<ul style="list-style-type: none"> None
Electronic Materials	<ul style="list-style-type: none"> www.WHO.com www.CDC.com www.ASM.com www.theific.org
Other Learning Materials	<ul style="list-style-type: none"> Journals, Scientific Magazines and Articles. Journal of clinical microbiology Canadian journal of infection control American journal of epidemiology and infection control

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show, Blackboard and A/V
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Student's feedback on effectiveness of teaching.	<ul style="list-style-type: none"> Students 	<ul style="list-style-type: none"> Indirect: Questionnaire Survey at the end of each semester.
Quality of learning resources (laboratory and library) related to each course.	<ul style="list-style-type: none"> Students Staff members 	<ul style="list-style-type: none"> Indirect: Questionnaire Survey at the end of each semester related to learning resources.
Evaluation of teaching	<ul style="list-style-type: none"> Peer evaluators 	<ul style="list-style-type: none"> Indirect: Peer evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Evaluation of exam quality and assessment.	<ul style="list-style-type: none"> Exam committee Students 	<ul style="list-style-type: none"> Direct: Exam paper/ exam blueprint review Indirect: Questionnaire Survey at the end of each semester.
Achievement of course learning outcomes	<ul style="list-style-type: none"> Course Coordinators Development and accreditation committee 	<ul style="list-style-type: none"> Direct: Student's Performance assessed through item analysis and rubrics.

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Department Council
Reference No.	Meeting Number 11
Date	19/05/2022





Course Specifications

Course Title:	Integrated Laboratory Science
Course Code:	373420-3
Program:	Bachelor in Clinical Laboratory Sciences; Level-6 (Program Code: 373000)
Department:	Clinical Laboratory Sciences Department
College:	College of Applied Medical Sciences
Institution:	Taif University

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A. Course Identification

1. Credit hours: 3 Hours
2. Course type a. University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/> <input type="checkbox"/> b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: 12th Level/ Fourth Year
4. Pre-requisites for this course: None
5. Co-requisites for this course: None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	5 hours/week= 50 hours/semester	100%
2	Blended	N/A	0%
3	E-learning	N/A	0%
4	Distance learning	N/A	0%
5	Other	N/A	0%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	50
2	Laboratory/Studio	N/A
3	Tutorial	N/A
4	Others (specify)	N/A
	Total	50

B. Course Objectives and Learning Outcomes

<p>1. Course Description</p> <p>The Integrated laboratory science course accompanies and deepens the knowledge gained in all clinical laboratory disciplines by the students among the second, third and fourth academic years. It applies concepts that have been taught in evidence-based learning modality. Furthermore, in this course the students will not follow a defined protocol, instead, they develop the skills of scientific thinking; making observations, proposing a hypothesis of diagnosing, designing and performing of different assays to prove the hypothesis.</p>
<p>2. Course Main Objective</p> <p>Upon completing of this course, the students will be able to apply the different learnt sciences on various clinical situations. They will learn how to convert analytical data to a model, judge if the models “make sense” and learn how to communicate and present these data correctly.</p>

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge and Understanding	
1.1	Recognize the role of basic medical integrative investigations and sciences in clinical practice.	K2
1.2	Identify different errors of analytical steps in multidisciplinary laboratory setting that lead to false results.	K2
2	Skills:	
2.1	Correlate multidisciplinary clinical laboratory data with the clinical manifestations of the disease and the risk factors.	S2
2.2	Employ competency in communication and problem-solving in a clinical laboratory setting.	S4
2.3	Design multidisciplinary dependent plans for analysis, diagnosis and researches of multi-risk factor diseases, under quality standards.	S5
3	Values:	
3.1	Demonstrate professionalism in using integrative knowledge to make evidence-based decisions.	V1

C. Course Content

a. Course Content (Theory)

No	List of Topics	Contact Hours
1	Introduction and Immunology cases discussion (Presentation)	5
2	Hematology cases discussion (Presentation)	5
3	Histopathology case study (Presentation)	5
4	Students oral discussion and presentation for specific case study	5
5	Microbiology cases discussion (Presentation)	10
6	Parasitology case discussion (Presentation)	5
7	Students oral discussion and presentation for specific case study	5
8	Biochemistry case discussion and Molecular case discussion (Presentation)	5
9	Students oral discussion and presentation for specific case study	5
Total		50

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Recognize the role of basic medical integrative investigations and sciences in clinical practice.	<ul style="list-style-type: none"> Lectures 	<ul style="list-style-type: none"> Written Exams
1.2	Identify different errors of analytical steps in multidisciplinary laboratory setting that lead to false results.	<ul style="list-style-type: none"> Lectures 	<ul style="list-style-type: none"> Written Exams
2.0	Skills		
2.1	Correlate multidisciplinary clinical laboratory data with the clinical manifestations of the disease and the risk factors.	<ul style="list-style-type: none"> Lectures Problem-Based Learning 	<ul style="list-style-type: none"> Written Exams
2.2	Employ competency in communication and problem-solving in a clinical laboratory setting.	<ul style="list-style-type: none"> Problem-Based Learning Group Discussion 	<ul style="list-style-type: none"> Scientific Activities
2.3	Design multidisciplinary dependent plans for analysis, diagnosis and researches of multi-risk factor diseases, under quality standards.	<ul style="list-style-type: none"> Lectures 	<ul style="list-style-type: none"> Scientific Activities
3.0	Values		
3.1	Demonstrate professionalism in using integrative knowledge to make evidence-based decisions.	<ul style="list-style-type: none"> Group Discussion 	<ul style="list-style-type: none"> Activities

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Activity 1	4 th week	20%
2	Mid-term /Activity-2	8 th week	20%
3	Activity 3	10 th week	20%
4	Final Exam	12 th week	40%
Total			100%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

- Course instructors are available for individual consultation in their free time. They are usually full-time permanent members present on-campus from 8:00 am to 2:30 pm on all working days. Appointments can be made in person with the instructor through email etc. Days and time availability of each instructor are posted on their doors. Course instructors provide a range of academic and course management advice including course planning and its progression.
- Each student at the department of Clinical Laboratory Sciences has an academic adviser who is available for individual consultation and guidance. Appointments can be made in person with the instructor through email etc. Days and time availability of each adviser are posted on their doors. The academic adviser can provide support with time management, exam preparation, clarification of subject requirements, feedback on performance and dealing with personal issues as well.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<ul style="list-style-type: none"> • Michael Laposata, Laboratory Medicine Diagnosis of Disease in Clinical Laboratory, A Manual of Laboratory and Diagnostic Tests (2014), 2nd edition, McGraw-Hill, ISBN-10: 0071805540 ISBN-13: 978-0071805544
Essential References Materials	<ul style="list-style-type: none"> • None
Electronic Materials	Websites, Search engines (Saudi Digital Library, PubMed, Google Scholar) https://www.ascp.org/content
Other Learning Materials	Journals, Scientific Magazines and Articles. Journal of Laboratory and Clinical Medicine

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show, Blackboard and A/V
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Student's feedback on effectiveness of teaching and quality of courses.	Students	Direct: Questionnaire Survey at the end of each semester.
Alignment map of course ILOs with that of program ILOs.	Development	Direct and Indirect: Student's Performance
Availability of learning resources, facilities and equipments related to each course.	Students and faculty	Direct: Questionnaire Survey at the end of each semester.
Evaluation of teaching	Peer evaluators	Direct: Peer evaluation
Standard of student achievement	Examination Committee	Direct: Students grades
Periodical review of course effectiveness and planning for its improvement.	Teaching staff/ Development	Direct: Review by Department Committee

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Department Council
Reference No.	Meeting Number 11
Date	19/05/2022





Course Specifications

Course Title:	Student's Project
Course Code:	3734??-4
Program:	Bachelor in Clinical Laboratory Sciences; Level-6 (Program Code: 373000)
Department:	Clinical Laboratory Sciences Department
College:	College of Applied Medical Sciences
Institution:	Taif University

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A. Course Identification

1. Credit hours: 4 Hours
2. Course type
a. University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: 12th Level/ Fourth Year
4. Pre-requisites for this course (if any): Clinical Practice/ 373412-3
5. Co-requisites for this course (if any): None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	6 hours /week= 60 hours/semester	100%
2	Blended	None	0%
3	E-learning	None	0%
4	Distance learning	None	0%
5	Other (Laboratory)	None	0%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	60
2	Laboratory/Studio	N/A
3	Tutorial	N/A
4	Others (specify)	NA
	Total	60 Hours

B. Course Objectives and Learning Outcomes

1. Course Description

The main purpose of this course is to provide the students with skills required to plan, conduct, analyze, and present the findings of the research conducted. They will learn to write a professional research thesis, use library resources and search engines to find suitable journals and articles relevant to their work and extract important information from these. This course will also provide a platform for students to understand the importance of different types of scientific researches and methods of analysis of data. At the end of this course, students should be able to demonstrate the skills required to develop a research proposal, conduct the practical work for the proposed research, assimilate the results, prepare the dissertation of the research conducted and present their findings.

2. Course Main Objective

This course deals with applying knowledge and skills that are required to design and conduct the practical work. Through this course, the students will be able to display professional management of time, resources and quality issues of project and construct thesis, present and interpret thesis data.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge and Understanding	
1.1	Recognize techniques and procedures for the collection of samples, storage, handling and analysis.	K2
2	Skills:	
2.1	Perform laboratory work in safe and effective manner.	S1
2.2	Demonstrate skills to communicate the concepts, principles and information effectively by oral and written means.	S4
2.3	Apply knowledge in designing research, solving research problems, interpreting research data and correlating it with the aim of the research.	S5
3	Values:	
3.1	Display professional and responsible attitude while performing tasks related to the course.	V1

C. Course Content (Theory)

No	List of Topics	Contact Hours
1	Planning your own research project: Choosing a topic of student's specialty, making suitable literature review (Discussion with Supervisor)	5
2	Writing a Research Proposal: (Group Discussion) <ul style="list-style-type: none">- Clear statement of research question- Goals and objectives of research- Research project design- Setting time frame- Anticipated results- Budget	5

3	Get started to do research work: (Group Discussion) Collection of samples from the hospitals or other source.	5
4	Working in the hospital laboratories (Practical Work) Analysis of collected samples and collection of data	5
5	Getting started to write dissertation (Group Discussion) Preparing the abstract <ul style="list-style-type: none"> - Aims and Objectives - Methods - Results - Keywords 	5
6	Structuring Introduction based on thorough literature review (Group Discussion)	5
7	Materials and Methods (Group Discussion) <ul style="list-style-type: none"> - Number of subjects matched with their sex and age. - Exclusion and inclusion criteria - Types of samples (patient's sample, control samples) - Type of study (cross-sectional etc) - Methods of analysis of samples (technique used) and analysis of data (program used). 	5
8	Discussion and Conclusion (Group Discussion) <ul style="list-style-type: none"> - Critically evaluate your own research outcomes and relate them to existing ones. - Reaching a conclusion that should clearly define the significance of your research and its impact on the community. 	5
9	Recommendations if any, derived from the research project (Group Discussion) Writing Bibliography: <ul style="list-style-type: none"> - Writing references from journals - Writing references from book 	5
10	Presentation of research (Presentation) Designing a scientific poster	5
11	Getting your research published <ul style="list-style-type: none"> - Choosing an authentic journal - Impacted and peer reviewed journals - Plagiarism 	10
Total		60

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Recognize techniques and procedures for the collection of samples, storage, handling and analysis.	<ul style="list-style-type: none"> Practical Session 	<ul style="list-style-type: none"> Practical Report
2.0	Skills		
2.1	Perform laboratory work in safe and effective manner.	<ul style="list-style-type: none"> Practical Session 	<ul style="list-style-type: none"> Practical Exam (Evaluation) Lab Report
2.2	Demonstrate skills to communicate the concepts, principles and information effectively by oral and written means.	<ul style="list-style-type: none"> Group Discussion 	<ul style="list-style-type: none"> Scientific Activities
2.3	Apply knowledge in designing research, solving research problems, interpreting research data and correlating it with the aim of the research.	<ul style="list-style-type: none"> Research Project Activity 	<ul style="list-style-type: none"> Scientific Activities
3.0	Values		
3.1	Display professional and responsible attitude while performing tasks related to the course.	<ul style="list-style-type: none"> Group Discussion (Student Learning Activity) 	<ul style="list-style-type: none"> Activity

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Mid-Term Exam	5 th week	40%
5	Final Exam	12 th /13 th week	60%
	Total		100%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

- Course instructors are available for individual consultation in their free time. They are usually full-time permanent members present on-campus from 8:00 am to 2:30 pm on all working days. Appointments can be made in person with the instructor through email etc. Days and time availability of each instructor are posted on their doors. Course instructors provide a range of academic and course management advice including course planning and its progression.
- Each student at the department of Clinical Laboratory Sciences has an academic adviser who is available for individual consultation and guidance. Appointments can be made in person with the instructor through email etc. Days and time availability of each adviser are posted on their doors. The academic adviser can provide support with time management, exam preparation, clarification of subject requirements, feedback on performance and dealing with personal issues as well.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	• None
Essential References Materials	• None
Electronic Materials	• Plagiarism checker programs
Other Learning Materials	• Journals related to each specialty

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms and Laboratories
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show, Blackboard and A/V
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Student's feedback on effectiveness of teaching.	<ul style="list-style-type: none"> Students 	<ul style="list-style-type: none"> Indirect: Questionnaire Survey at the end of each semester.
Quality of learning resources (laboratory and library) related to each course.	<ul style="list-style-type: none"> Students Staff members 	<ul style="list-style-type: none"> Indirect: Questionnaire Survey at the end of each semester related to learning resources.
Evaluation of teaching	<ul style="list-style-type: none"> Peer evaluators 	<ul style="list-style-type: none"> Indirect: Peer evaluation
Evaluation of exam quality and assessment.	<ul style="list-style-type: none"> Exam committee Students 	<ul style="list-style-type: none"> Direct: Exam paper/ exam blueprint review Indirect: Questionnaire Survey at the end of each semester.
Achievement of course learning outcomes	<ul style="list-style-type: none"> Course Coordinators Development and accreditation committee 	<ul style="list-style-type: none"> Direct: Student's Performance assessed through item analysis and rubrics.

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Department Council
Reference No.	Meeting Number 11
Date	19/05/2022

