Course Specifications

Course Title:	**Clinical Immunology**
Course Code:	**373311-2**
Program:	**Bachelor's in Clinical Laboratory Sciences (Level-7)**
Department:	**Clinical Laboratory Sciences**
College:	**Applied Medical Sciences**
Institution:	**Taif University**

Table of Contents

A. Course Identification

1. Credit hours: 2 hours	
2. Course type	
a. University ☐ College ☐ Department ☑ Others ☐	
b. Required ☑ Elective ☐	
3. Level/year at which this course is offered: Level 5/third Year	
4. Pre-requisites for this course (if any)**:** Basic immunology 373239-3	
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**	2 hours /week= 30 hours/semester	100%
2	**Blended**	None	0%
3	**E-learning**	None	0%
4	**Correspondence**	None	0%
5	**Other**	None	0%

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	30
2	Laboratory/Studio	None
3	Tutorial	None
4	Others (specify)	None
5	Total	30
Other Learning Hours*		
1	Study	26
2	Assignments	4
3	Library	None
4	Projects/Research Essays/Theses	None
5	Others(specify)	None
	Total	30

***The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

This course will describe the development, function and regulation of the cells of the immune system in relation to immunological disorders in the human body, and study the methods followed in the clinical laboratories to diagnose these diseases.

2. Course Main Objective

To study the normal and abnormal process associated with immunological disorders and learn various diagnostics approaches applied to immunological clinical laboratories.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge:**	
1.1	Identify the clinical basis of the immune response in normal and abnormal conditions, and the modulation in the immune system components.	K1
1.2	Describe the significance of clinical immunological markers and the methods employed in the clinical laboratory.	K2
2	**Skills :**	
2.1	Evaluate proper immunological procedures in accurate and precise testing and data analysis.	S2
3	**Competence:**	
3.1	None	

C. Course Content

No	List of Topics	Contact Hours
1	Tolerance of the immune system and Hygiene hypothesis	**4**
2	Immunization - 1 (Bacterial vaccine)	**2**
3	Immunization - 2 (viral vaccine)	**2**
4	Allergy and Hypersensitivity -1 (type I and II)	**2**
5	Allergy and Hypersensitivity -2(type III and IV)	**2**
6	Tumor Immunology -1	**2**
7	Tumor Immunology -2	**2**
8	Immunodeficiency -1	**2**
9	Immunodeficiency -2 (Pathogeneses of HIV)	**4**
10	Autoimmune disorders -1	**2**
11	Autoimmune disorders -2	**2**
12	Transplantation	**2**
13	Immunotherapy	2
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**		
1.1	Identify the clinical basis of the immune response in normal and abnormal conditions, and the modulation in the immune system components.	Lectures	- Exams
1.2	Describe the significance of clinical immunological markers and the methods employed in the clinical laboratory.	Lectures	- Exams
2.0	**Skills**		
2.1	Evaluate proper immunological procedures and data analysis.	- Lectures. - Problem based learning	- Exams
3.0	**Competence**		
3.1	None		

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Mid-Term Exam	8th Week	30%
2	Activity	Throughout the semester	10%
3	Final Exam	17th/18th Week	60%
4	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	Richard Coico and Geoffrey Sunshine, 2015, Immunology a Short Course 7th edition, Wiley-Blackwell Todd, I., Spickett, G., & Fairclough, L. (n.d.). Lecture Notes: Immunology (7th ed.). Wiley
Essential References Materials	None
Electronic Materials	Saudi Digital Library, PubMed, Google Scholar
Other Learning Materials	Journals and Articles.

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	Indirect: Questionnaire Survey at the end of each semester.
Alignment map of course ILOs with that of program ILOs.	Development and accreditation committee	Direct: Student's Performance
Availability of learning resources, facilities and equipments related to each course.	Students and faculty	Indirect: 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 and accreditation committee	Indirect: 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 Meeting
Reference No.	Meeting No.10
Date	10-9-1440