

**TISHK INTERNATIONAL UNIVERSITY**  
**FACULTY OF APPLIED SCIENCE**  
**Department of MEDICAL ANALYSIS,**  
**-2022 Fall**  
**Course Information for MA 301 MEDICAL PARASITOLOGY I**

<b>Course Name:</b> MEDICAL PARASITOLOGY I					
<b>Code</b> MA 301	<b>Regular Semester</b> 5	<b>Theoretical</b> 2	<b>Practical</b> 2	<b>Credits</b> 3	<b>ECTS</b> 4
<b>Name of Lecturer(s)- Academic Title:</b>	Adel Kamal - Professor Adel Kamal - Professor Goran Nuri - MSc				
<b>Teaching Assistant:</b>	Omar Sardar				
<b>Course Language:</b>	-				
<b>Course Type:</b>	Main				
<b>Office Hours</b>	Sunday 10:00-11:00				
<b>Contact Email:</b>	adel.kamal@tiu.edu.iq adel.kamal@tiu.edu.iq goran.nori@tiu.edu.iq  Tel:07504472908 07504472908 07500000000				
<b>Teacher's academic profile:</b>	PhD PhD Medical microbiology				
<b>Course Objectives:</b>	During Medical parasitology classes student, they learnt and earned knowledge of: 1.the life cycle, lab diagnostic, pathogenicity, treatment infective stage, intermediate and final host of most protozoa parasites. 2. life cycle, lab diagnostic, number of intermediate hosts, final host, and treatment of each cestoda, Nematode and other type of parasite worms 3.different between Ectoparasits and endoparasites and pathogenicity of Ectoparasites with the life cycle and diagnostic of Ectoparasites in Kurdistan region/Iraq				
<b>Course Description (Course overview):</b>	In this course student will learn general information about parasites, protozoa, and description about different protozoa species, different forms, function of each structures, type of disease that cause, lifecycle of each species, genetic materials and treatments, moreover methods that used for detection of parasites.				

**COURSE CONTENT**

Week	Hour	Date	Topic
1	2	4-7/10/2021	Introduction of parasitology
2	2	10-14/10/2021	Define of parasitology and type parasite and hosts
3	2	17-21/10/2021	How parasite enter the body?
4	2	24-28/10/2021	Pathogenicity of parasites
5	2	31/10-4/11/2021	Immunity of parasite
6	2	7-11/11/2021	Laboratory diagnosis of parasites
7	2	14-18/11/2021	Midterm Exam
8	2	21-25/11/2021	Midterm Exam
9	2	28/11-2/12/2021	Treatment and prevention of parasite infection
10	2	5-9/12/2021	Taxonomy of parasites
11	2	12-16/12/2021	Intestinal protozoa
12	2	19-23/12/2021	Mastigophora (Flagellata)
13	2	26-30/12/2021	Ciliophora

14	2	2-5/1/2022	Haemoflagellates
15	2	9-13/1/2022	Final Exam
16	2	16-20/1/2022	Final Exam

### COURSE/STUDENT LEARNING OUTCOMES

1	students know how diagnosis most and common parasites by different techniques especially immunology and molecular techniques both of techniques available in private labs.
2	Students know what type of samples used for detecting parasites and using concentration method to detection ova of worms from stool.
3	during detecting parasites in fresh samples. preparation and fixed those parasites in slide by Canada balsam for keeping those slide in parasitology lab for next stage students.
4	using Realtime –PCR for detecting common parasites in clinical lab like T. gondii, E. histolytica, Giardia lamblia...
5	Understanding the general disease concepts and the pathogenesis mechanisms

### COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES

(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced )

Program Learning Outcomes	Cont.
1 Evaluate clinical laboratory data by interpreting laboratory results and relating the data to various disease states.	I
2 apply principles of evidence-based medicine to determine clinical diagnoses.	A
3 apply the basic principles of gross and microscopic anatomy, physiology, biochemistry, immunology, microbiology/virology.	A
4 formulate and implement acceptable treatment modalities to various disease states.	A
5 use technology effectively in the delivery of instruction, assessment, and professional development.	A
6 exhibit essential employability qualities by demonstrating laboratory safety, analyzing laboratory results, and displaying professional conduct.	A
7 exhibit organizational skills, accountability, and ethical behavior.	A
8 apply skills needed in operating laboratory equipment for testing, assessing quality assurance for lab equipment, and adhering to standard safety practices in the laboratory environment.	A
9 apply problem-solving and decision-making skills.	A
10 apply and promote health policies and regulatory standards in the field career.	A
11 develop research in the field of medical analysis using qualitative and quantitative methods.	A

<b>Prerequisites (Course Reading List and References):</b>	<ul style="list-style-type: none"> <li>- Using diagram of life cycles from CDC (centre of control disease and control) website and using those books below: 1.ELizabeth A. Zeibig (2013.) Clinical Parasitology a Practical Approach 2nd edition. Elsevier St. Louis, Missouri, USA. 2. John W. Ridley. (2012). Parasitology for Medical and Clinical Laboratory Professionals. Delmar, Cengage Learning, USA. 3. Larry, R.; John, J and Steve, N (2013). Foundations of Parasitology .9 edition McGraw Hill. Florida USA. 4.Using different Journals about medical parasitology such as: Journal of Bacteriology &amp; Parasitology, Applied parasitology, Experimental parasitology, Parasitology international, Korean Journal of parasitology and European Journal of Parasitology with other international Journals.</li> </ul>
<b>Student's obligation (Special Requirements):</b>	For each student is obligated to know: 1.draw and label all stages of parasites in lab. 2.bring fresh samples of blood, urine, sputum and stool to lab. for diagnostic common parasites in Erbil such as Giardia lumblia and Entamoeba histolytica in stool, Plasmodium sp in blood, Trichomonas vaginalis in urine. 3.Attending all students in theory and practical classes are obligated
<b>Course Book/Textbook:</b>	John W. Ridley. (2012). Parasitology for Medical and Clinical Laboratory Professionals. Delmar, Cengage Learning, USA. Larry, R.; John, J and Steve, N (2013). Foundations of Parasitology .9 edition McGraw Hill. Florida USA.
<b>Other Course Materials/References:</b>	Using different Journals about medical parasitology such as: Journal of Bacteriology & Parasitology, Applied parasitology, Experimental parasitology, Parasitology international, Korean Journal of parasitology and European Journal of Parasitology with other international Journals.
<b>Teaching Methods (Forms of Teaching):</b>	Lectures, Practical sessions, Presentation, Project, Assignments, , ,

### COURSE EVALUATION CRITERIA

Method	Quantity	Percentage (%)
Attendance	1	5
Participation	1	5
Quiz	1	5
Homework	1	5
Midterm Exam	1	20
Laboratory	1	10
Practical Exam	1	10
Final Exam	1	40
<b>Total</b>		<b>100</b>

**Examinations:** True-False, Fill in the Blanks, Multiple Choices, Short Answers, Matching, , ,

**Extra Notes:**

### ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD

Activities	Quantity	Workload Hours for 1 quantity*	Total Workload
Theoretical Hours	16	2	32
Practical Hours	16	2	16
Final Exam	1	8	8
Attendance	1	2	2
Participation	1	6	6
Quiz	1	1	1
Homework	1	6	6
Midterm Exam	1		0
Laboratory	1		0
Practical Exam	1		0
<b>Total Workload</b>			<b>71</b>
<b>ECTS Credit (Total workload/25)</b>			<b>2.84</b>

**Peer review**

Signature:

Name:

Lecturer

Signature:

Name:

Head of Department

Signature:

Name:

Dean