Program Specifications of MD degree in Medical Parasitology, Qena Faculty of Medicine, South Valley University

كود البرنامج : PARA300

N.	Courses	Code	Coordinator		Head of the department	
			Name	Signature	Name	Signature
1	Biostatistics + Computer	PARA 309	Rehab Gamal		Prof/ Ahmed Han	
2	Research Methodology	PARA 310	Rehab Gamal		Prof/ Ahmed Han	
3	Microbiology and immunology	PARA 312	Prof/Mohammed Elfaky		Prof/Mohammed Elfaky	
5	Genetics	PARA 313			Prof/Dorria Zagloul	
6	Medical parasitology	PARA 300	Eman Abdelazeem		Dr/ Osama hussein	

Program Coordinator
Eman Abdelazeem

Head of medical parasitologydepartment
Dr/Osama hussein

PROGRAM SPECIFICATION

South Valley University **Faculty of Medicine**

A- Basic Information

1. **Program title: MD. Degree of Medical Parasitology**
2. **Program type: Single**
3. **Department: (Major= 1 + Minors =2 + Optional= 2) Medical Parasitology + Minors: Research Methodology+ Bio Statistics & Computer + 2 of the optional courses: Biochemistry, Tropical Medicine, Clinical Pathology, Microbiology and Immunity, Community Medicine, Histology, Medical genetics and Pathology.**
4. **Coordinator: Dr. Asmaa mohammed Elkady.**

Professional Information :

1.Program aims:

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mastery of practice of speciality and necessary to provide further training and practice in the field of medical parasitology through providing:

1. Recent scientific knowledge essential for the mastery of practice medical parasitology according to the international standard.
2. Skills necessary for applying the scientific analytic methods in medical parasitology using available resources and saving the environment.
3. Ethical principles related to the practice in this speciality.
4. Active participation in community needs assessment and problems identification and solving.
5. Maintenance of learning abilities necessary for continuous medical education with ability to teach and train others to develop themselves in the field of medical Parasitology.
6. Upgrading self learning, modern technological aids and research abilities necessary for continuous professional development.

2. Intended learning outcomes (ILOs):

a- Knowledge and Understanding:

By the end of the program the student should be able to:

a1- Mention sufficient knowledge of the parasites affecting human beings allover the world and zoonoses.

a2- Define the geographical distribution and life cycle of each, inside and outside the body.

a3- Illustrate the parasites on morphological bases.

a4- Explain e the pathology, clinical symptoms and complications of each parasite.

a5- List the laboratory tests needed for diagnosis of each case.

a6- List the drugs and instructions used for treating each case.

a7- Define the control methods used against parasites.

a8- Describe sufficient knowledge about snails and their medical importance, especially of Egypt.

a9- Mention sufficient knowledge about parasitic immunity bases.

a.10- List the bases of molecular genetics.

a.11- Explain sufficient knowledge about the environment.

a.12- Mention the princibles and fundamentals of ethics and legal aspects of professional practice in the field of medical parasitology.

a.13- know the princibles and fundamentals of quality of assurance of professional practice in the field of medical parasitology.

a.14- Understand the effect of professional practice on the environment and the methods of environmental development and maintenance .

b- Intellectual Skills:

By the end of the study of doctoral program in medical parasitology the Graduate should be able of:

b1- Conclude different parasites affecting the same organ.

b2- Compare between different parasites present in the same sample.

b3- Differentiate between parasites inhabiting the same geographical location.

b.4- Analyze given data an for problem solving in the field of medical parasitology.

b.5- Using self learning skills in solving problems in the field of medical parasitology.

b.6-Select from the different diagnostic tools the ones that help help reaching a final diagnosis in the field of medical parasitology.

b.7-Conduct research studies that adds to knowledge.

b.8- Using analytical skills in anticipating risks.

b.9- Plan to improve performance in the field of medical parasitology.

b.9- Criticize in a scientific pattern at least 15 published papers in the different branches of Medical Parasitology (parasite distribution and public health or statistics, lab. Animals and pathology of parasites or drugs, parasites and immunology, snails….etc

b.10- Be persuasive and can support his/her ideas with solid scientific facts.

c- Professional and Practical Skills:

By the end of the study of doctoral program in medical parasitology the Graduate should be able to:

c1- Identify the infective and the diagnostic stages of the parasites

c2- Identify some stages of the parasites.

c3- Identify some of the medically important intermediate host especially those present in Egypt.

c4- Write and evaluate medical reports.

c5- Evaluate and develop methods and tools exiting in the area of medical parasitology

Perform one or more of the following skills:

c6- Perform some laboratory tests available in the department lab.

c7- Perform available immunological tests.

c8- deal with lab animals: infecting, sacrifice, dissecting and examining.

c9- collecting and rearing of snails or medically important arthropods.

A box of at least 75 prepared slides of different entities are required.

c10 attending and participating in scientific conferences, meetings, workshops and thesis discussion that update relevant recent topics in molecular biology, relevant biochemical and geno-typing of parasites, and emerging parasitic problems.

c11- Write a paper in a scientific way.

c12- Can create new successful ways in conducting informations and assessment of the performance of the students.

c13- Produce new ideas for diagnosis or control in his/her field.

d- General and Transferable Skills:

By the end of the study of doctoral program in medical parasitology the Graduate should be able to:

d1 Use appropriate computer program packages.

d2- Use the computer to enter parasitological web sites.

d3- Present reports in seminars effectively.

d4- Collect scientific data from the computer.

d5- Work in groups, as a leader or as a college.

d6- Use clear parameters in assessment of others.

d7- Collect data from medical centers and patients.

d8- Skillfully practice communication skills .

d9- Use the sources of biomedical information to remain current with advances in knowledge and practice (self learning).

d10- Maintain a professional image in manner, dress, speech as well as the interpersonal relationships.

d11- Work within limits of knowledge and experience.

d12- Participate in the medical progress by having the basis of medical research studies.

d13- Participate in related scientific meetings.

3. Academic Standards:

South Valley faculty of medicine adopted the general National Academic Reference Standards (NARS) provided by the national authority for quality assurance and accreditation of education (naqaae) for postgraduate programs. . Based on these NARS; Academic Reference Standards (ARS) were suggested for this program.

4- Curriculum structure and contents:

4.a- Program duration: 7 semesters.

4.b- Program structure: **(total: 90 credit hours =)**

البند	المقررات	مدة الدراسة	عدد الساعات		الساعات المعتمدة
			نظري	عملي	
PAR309	أ- دراسات متقدمة فى المجال الطبى: ١- الإحصاء البيولوجى والكمبيوتر Biostatistics + Computer	فصل دراسي واحد	30	30	٣
PAR309	٢- أساليب البحث العلمى Research Methodology		30	30	٣
PAR307	ب -العلوم الطبية الأساسية: يختار الطالب مقررين من العلوم التى تخدم فرع التخصص وتدرس بمفهوم تطبيقى وهى: • ميكروبيولوجيا		60		٤
PAR305	• باثولوجيا		60		٤
PAR331	• باثولوجيا إكلينيكي ة		60		٤
PAR304	• كيمياء حيوية		60		٤
PAR	• وراثة		60		٤
PAR309	• طب مجتمع		60		٤
PAR323	• طب الناطق الحارة		60		٤
PAR302	• هستولوجيا		60		٤
مجموع الساعات					١٤ ساعات
PAR308	مواد التخصص: - علم الطفيليات.	6 فصول دراسية	يقسم القسم الساعات بين العملى و المحاضرات النظرية حسب الاقتضاء بحيث لاتقل ساعات المحاضرات النظرية عن ٥٠% من إجمالى الساعات		٥٣ ساعة
PAR308	- علم الحشرات.				
PAR308	- علم القواقع والرخويات.				
PAR308	- علم المناعة.				
PAR308	- علم الطفيليات الجزئية.				
كراسة الأنشطة					8 ساعات
رسالة الدكتوراة	ويتم تسجيلها بعد اجتياز المقررات الخاصة بالفصل الدراسى الأول .				15 ساعة
الإجمالى					90 ساعة

5- Program Courses * 3courses are compulsory + 2 optional courses

5.1- Level of program:

First part : a- Compulsory

Cource title	Total No of hours	No of hours/week		Program ILOs Covered
		Lect.	Lab.	
Minors: Research Methodology+ Bio Statistics & Computer	**4** **4**	**2** **2**	**2** **2**	**a1,a2,a1b,3b6,c1,d1,d3,d7**

c. Optional

Cource title	Total No of hours	No of hours/week		Program ILOs Covered
		Lect.	Lab.	
Biochemistry	4	2	2	a5,a9 ,c5,d2,d4,d6
Tropical medicine	4	2	6 (clinical)	a4,a6,b1,d2,d4,d6.d8
Clinical Pathology	4	2	2	a5,a9,b2,c4,c5,d4,d6,d8
Microbiology &Immunology	4	2	2	a5,a9,b1,b2,c1,c2, d2,d8
Community Medicine	4	2	2	a1,a2, a7,a11, a12, b3,b4,b6, b7,b8, d2,d3, d4,d5, d6, d7,d8,d9
Histology	4	2	2	a5,a9,c4,c5,d2,d4,d6
Medical genetics	4	2	2	a10,b5,b7,c4, c5,d2,d4,d6, d9, d10
Pathology	4	2	2	a5,a9,c4,c5,d2,d4,d6

Second Part: a-compulsory

Course title	Total No of hours	N f hours/week o		Program ILOs Covered
		Lect.	Lab.	
Medical Parasitology	2	6	6	a1,a2,a3,a4,a5,a6,a7,a8,a9, a10,a11,b1,b2,b3, b4 ,b6,b7, b8, c1,c2,c3,c4,c5,c6.,c7, c8,c9 c10,c11,d1,d2,d3,d4, d5 ,d7,d8,d9, d10

6- Program admission requirement

1. General requirements

A. Candidates should have either:

1. MBBCh Degree from any Egyptian Faculty of Medicine or Equivalent Degree from Medical Schools approved by the Ministry of Higher Education.
2. Master Degree in Medical Parasitology.

2. Specific Requirements:

a. Candidates graduated from Egyptian Universities should have at least "Good Rank" in their final year examination, and grade "Good Rank" in Parasitology Course too.

b. Master Degree in Parasitology with at least "Good Rank".

c. Candidate should know how to speak & write English well.

d. Candidate should know have computer skills.

7- Regulations for progression and program completion

Duration of program is 7 semesters (3.5 years), starting from registration till acceptance of the thesis; divided to:

First Part: (≥6 months=1 semester):

- Program-related basic science ,Tropical medicine, Parasitology course, Research Methodology, Ethics and medical reports, Biostatistics and computer & SPSS.
- At least six months after registration should pass before the student can ask for examination in the 1st part.
- Two sets of exams: 1st in April — 2nd in October.
- For the student to pass the first part exam, a score of at least 60% in each curriculum is needed.

- Those who fail in one curriculum need to re-exam it only. Second Part: (≥24 months=4 semester):
- Program related specialized science Courses and ILOs. At least 24 months after passing the 1st part should pass before the student can ask for examination in the 2nd part.
- Fulfillment of the requirements in each course as described in the template and registered in the log book is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; as following:

- Two sets of exams: 1st in April— 2nd in October.
- At least 60% of the written exam is needed to be admitted to the oral and practical exams.
- 4 times of oral and practical exams are allowed before the student has to re-attend the written exam.

Thesis (24-48 months=4-8 semester):

- Could start after registration and should be completed, defended and accepted after passing the 2nd part final examination, and after passing of at least 24 months after documentation of the subject of the thesis.
- Accepting the thesis is enough to pass this part.

8-**methods of achievements and assessments**

Method of assessment	The assessed ILOs
1-Research assignment 2-Written Exams: 1. Short essay 2. MCQs 3. Commentary 4. Problem solving 5. Practical Exams 6. OSPE 7. Clinical Exams. 8. OSCE 9. Oral Exams. 10. - Structured Oral Exams	-general transferable skills, intellectual skills 1. knowledge 2. knowledge, intellectual skills 3. intellectual skills 4. general transferable skills, intellectual skills 5. Practical skills, intellectual skills 6. Practical skills, intellectual skills 7. Practical skills, intellectual skills 8. Practical skills, intellectual skills 9. knowledge 10. knowledge

Course Specifications in Research methods for health services (with computer use) and Applied biostatistics (with computer use) in MD Degree **in Medical Parasitology**

South Valley University **Faculty of Medicine**

1.Programs on which the course is given : MD Degree in Medical Parasitology.

2.Major or minor element of program : Minor

3.Department offering the program: Medical Parasitology.

4.Department offering the course: Community Medicine Dep.

5.Academic year / Level: (1st part).

A. Basic Information

Title: : Research methods, Statistics and Computer use for health

Lectures	Practical	Total
60	60	120

Lectures: 60h.(2 hour / week * 15 weeks) Practical: 60h. (2 hours / week * 15 weeks) Total: 120 h. (4/w)

B. Professional Information

1.Overall Aims of Course

1. To influence the students to adopt an analytical thinking for evidence based medicine
2. To use precisely the research methodology in researches and computer programs SPSS, Epi Info and Excel in data analysis

2. Intended Learning Outcomes of Courses (ILOs)

3. a)Knowledge and understanding:

By the end of the course, the student is expected to be able to

a1. Define terms of research methodology

a2. Describe the spectrum of research methodology

a3. Explain the strategies and design of researches

a4. Describe the sampling methods

a5. List at least four types of study designs

a6. Describe the study design, uses, and limitations

a7. Define causation and association

a8. Describe bias and confounding

a9. Explain evidence based Medicine

a10. Calculate different samples sizes

a11. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests

a12. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values

a13. Define the sources of data and methods of collection

a14. Describe five sampling techniques and list at least three advantages of sampling

a15. Summarize data, construct tables and graphs

a16. Calculate measures of central tendency and measures of dispersion

a17. Describe the normal curves and its uses

a18. Interpret selected tests of significance and the inferences obtained from such tests

a19. Build a model explaining the research methods and analysis of determinants of human diseases and health problems

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

b1. Apply research methods to different community health problems

b2. Identify and collect data variables impacting health and disease

b3. Apply appropriate research strategies for use

b4. Select and use appropriate research methods

b5. Advocate appropriately in the research design

b6. Activate and mobilize the community toward evidence based medicine

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

c1. Perform a research proposal for community diagnosis

c2. Design questionnaires

c3. Conduct researches

c4. Diagnose bias and confounding factors

c5. Detect association and causation

d)General and Transferable Skills:

By the end of the course, the student is expected to be able to:

d1. Use standard computer programs for statistical analysis effectively.

d2. Utilize computers in conducting researches.

d3. Manage a group of data entry

d4. Analyze and interpret data

4. Contents

Topic	No. of hours	Lecture	Practical
Methodology & statistics Introduction to research Terminology and rationale Data collection methods Types of Data Tabulation of data Graphical presentation of data Measures of central Tendency Measures of dispersion Normal distribution curves	60	30	30

Study design: Cross sectional study and the prevalence rate Cohort study, incidence rate, relative & attributable risk Case-control study, Odd's ratio Sampling Tests of significance: Proportion test Chi-square test Student T test Paired T test Correlation (simple and multiple) Regression ANOVA test Descrimination analysis Factor analysis	60	30	30
Total	120	60	50

4– Teaching and Learning Methods

4.1- Lectures

4.2- Practical sessions

5- Student Assessment Methods

5.1 Written exams :

-Short assay to assess knowledge.

-problem solving to assess general transferable and intellectual skills.

5.2 Oral exams to assess knowledge .

5.3 OSPE to assess

Weighting of Assessments: Methodology & Biostatestics has 2 separate papers:

2 Final-term written examinations	50%
2 Oral Examinations.	30%
2 Practical Examination	20%
Total	100%

6- List of References

6.1- Course Notes: Lecture notes prepared by the staff member in the department 6.2- Essential Books (Text Books)

1.Maxy-Rosenau Public health and preventive medicine, Prentice – Hall International Inc.

6.3- Recommended Books

1- Dimensions of Community Health, Boston Burr Ridge Dubuque.

2- Short Textbook of preventive and social Medicine. Prentice-Hall International Inc.

3- Epidemiology in medical practice, 5th edition. Churchill Livingstone. New York, London and Tokyo.

6.4- Periodicals, Web Sites, … etc

1- American Journal of Epidemiology

2- British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

7- Facilities Required for Teaching and Learning:

- Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory) comfortable desks, good sources of aeration, bathrooms, good illumination and safty & security tools.

- TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

- COMPUTER PROGRAM: for designing and evaluating MCQs.

Course Coordinator:

Head of Department:

Date:

Course Specifications of Medical Microbiology & Immunology in MD Medical Parasitology

South Valley University Faculty of Medicine

1. Program on which the course is given: MD Medical Parasitology
2. Major or minor element of program : Minor
3. Department offering the program : Medical Parasitology.
4. Department offering the course: Medical Microbiology & Immunology.
5. Academic year / Level: MD 1st part .

A. Basic Information

Title**:** Medical Microbiology & Immunology in MD Degree in Medical parasitology

Lecture: 4 hs/w.

B- Professional Information

1. Overall Aims of Course

By the end of the course the student should be efficiently able to:

Have the professional knowledge of the microorganisms affecting human beings all over the world and the relations between them and the parasites. The student also should recognize the pathology, clinical symptoms, complications and the perform the laboratory tests needed for diagnosis of each diseases. And should also gain the professional knowledge about the structure and function of the immune system so as to perform immunological studies needed in his/her main specialty.

2 – Intended Learning Outcomes of Course (ILOs):

a.Knowledge and Understanding:

by the end of the course the student is expected to:

A1- List the microorganisms affecting human beings allover the world particularly those related to parasites.

A2- Describe the metabolism and genetics of organisms.

A3- Describe the pathology, clinical symptoms and complications of each disease.

A4- Summarize the laboratory tests needed for diagnosis of each case.

A5- Name some of the drugs and instructions used for treatment of each case.

A6- Describe some infection control methods

A7- Describe the structure and function of immune system

b.Intellectual Skills:

By the end of the course the student is expected to:

b1- Differentiate between the different microorganisms (Bacteria, viruses and fungi)

b2- Differentiate between the different types of bacteria on the bases of staining and culturing methods.

b3- Differentiate between organisms affecting the same body parts

c.Professional and Practical Skills:

By the end of the course the student should have the ability to

c1 Recognize micro-organisms on morphological bases.

c2 Identify and perform the methods of staining, culturing and biochemical reactions

c3 Recognize and perform some serological tests used in diagnosis. c4 Handle of samples.

d.General and Transferable Skills:

by the end of the course the student should have the ability to:

d1-.Use the computer and internet to gather scientific informations.

d2- Practice group co-ordination.

3- Contents

Topic	Lecture	Practical	Course ILO,s
General bacteriology	14	20	a1,a2,b1,
Systemic bacteriology	45	50	a3,a4,a5,b1,b2,b3,c1,c2,c4
Mycology	10	10	a3,a4,a5,a6, b1,b2,b3, c1,c2,c4
Virology	20	5	a3,a4,a5,a6, b1,b2,b3
Nosocomiology	16	5	a3,a4,a5,a6, b1,b2,b3, c1,c2,c4
Immunology	30	30	A7,c3,c4,d1,d2
Total	135	120	a3,a4,a5,a6, b1,b2,b3

4– Teaching and Learning Methods 4.1-lectures.

4.2-practical lessons.

4.3- Practical assignments and sample collection.

5- Student Assessment Methods

5.1 final written exam

Short essay to assess knowledge.

- Problem solving to assess general transferable and intellectual skills.

- Commentary to assess intellectual skills.

MCQ to assess intellectual skills.

5.2 final oral exams to assess understanding and intellectual skills.

Weighting of Assessments

Periodic Examination 15%

Final-term Examination 50%

Oral Examination. 15%

Practical Examination20 %

Total 100 %

6- List of References

6.1- Course Notes: Lecture notes prepared by the staff member in the department

6.2- Essential Books (Text Books)

Medical Microbiology.

Essential Immunology.

6.3- Recommended Books

A coloured Atlas of Microbiology.

6.4- Periodicals, Web Sites, … etc Microbiology

Immunology http://mic.sgmjournals.org/ http://www.microbes.info/

http://mansvu.mans.edu.eg/moodle/course/category.php?id=64

7- Facilities Required for Teaching and Learning

- Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory) comfortable desks,good sources of aeration,bathrooms,good illuminationand safty&security tools.

- TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

- COMPUTER PROGRAM: for designing and evaluating MCQs. Facilities used for isolation, staining and culturing the different microbes.

Course Coordinator:

Head of Department : Prof.

Date:

Course Specification of Pathology in MD Degree in Medical Parasitology

South Valley University Faculty of Medicine

1. Program on which the course is given: MD Degree Medical Parasitology
2. Major or minor element of program: Minor
3. Department offering the program: Medical Parasitology
4. Department offering the course: Pathology
5. Academic year / Level: (1st part)

A- Basic Information

Title**: Pathology in MD Degree in Medical Parasitology**

Credit Hours: 4 Lecture: 4 hours/w

1. Overall Aims of Course:

By the end of this course the student should be able to Gain the professional knowledge and understanding of general pathology, special pathology and genetics as related to the main field of medical Parasitology. And can accurately and independently interpret the gross and microscopic pathology specimens.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

By the end of the program, the student is expected to gain the knowledge and understanding of:

a1- The deviation or change in the normal structure and function of the body on the macro- and micro levels; general pathology:

a2- Cellular injury reversible and irreversible, causes, effects e.g. degeneration, necrosis and apoptosis (programmed cell death).

a3- Inflammation; causes, classification, fate, complications, healing and repair.

a4- Infectious diseases; viral, bacterial, fungal and parasitic and tissue response to these invaders.

a5- Immunity, factors affecting immune response, disorders of the immune system

a6- Nutritional deficiencies and their effects on the body system

a7- Cellular growth disturbances e.g. atrophy, hypertrophy, hyperplasia, metaplasia, and dysplasia.

a8- Study of pathology of different body organs and systems:

Cardiovascular pathology

- Respiratory pathology

-Diseases of the kidney and lower urinary tract

-Diseases of the gastrointestinal tract, hepatobiliary system and pancreas

-Pathology of the male and female genital systems including the breast

-Hematopathology and pathology of the lymphoid system

-Skeletal, soft tissue and joint pathology

-Endocrine pathology

-Neuropathology

-Dermatopathology

-An introduction to immunohistopathology.

-An introduction to medical genetics.

b) Intellectual Skills

By the end of this program, the student is expected to be able to:

b1- Interpret the data through reading the reports reaching to the pathology laboratory along with the biopsies and excised specimens, including history, clinical examination, radiological and laboratory investigations other than the histopathology.

c) Professional and Practical Skills

By the end of the program, the student is expected to be able to:

c1- Recognize the gross pathology specimens kept in the jars and pictures taken for unavailable gross pathology in the museum, put a diagnosis or differential diagnosis..

c2- Describe the gross picture of the specimens and deviation of normal regarding the size, site, shape, color localized abnormality

c3- Recognize how to deal with the specimens, fixation, trimming, processing, tissue sectioning, hematoxylin and eosin staining

c4- Preparing and examining the slides by the bright field microscope and putting a diagnosis or differential diagnosis

c5- Using the microscope monitor system in discussing the slides in groups to reach a result

d) General and Transferable Skills

By the end of the program, the student is expected to be able to:

d1- Use standard computer program effectively (windows and office)

d2- Utilize computers in conduction with other pathology departments via teleconferences

d3- Using the computers in searching about resent data in the libraries via the internet

3- Contents

Topic	No. of hours
1-General pathology:	
1.1. Introduction	1
1.2. Inflammation, Repair, Cell injury and cell death	3
1.3. Circulatory disturbances	3
1.4. Infectious diseases	3
1.5. Immunopathology	5
2- Systematic pathology:	45
2.1. Cardiovascular diseases	2
2.2. Respiratory diseases	2
2.3. Gastrointestinal diseases	2
2.4. Diseases of hepatobiliary system	2
2.5. Diseases of exocrine pancreas and peritoneum	2
2.6. Diseases of the urinary system and male and female genital systems	2
2.7. Diseases of the musculoskeletal system and nervous system	2
2.8. Blood diseases, the lymph node and spleen	2
2.9. Immunohistopathology	2
2.10. Medical genetics	9
2.11. Specimen preparation and examination	6
Total	60

4– Teaching and Learning Methods

4.1- Lectures

4.2- Practical sessions

4.3- Discussions.

5- Student Assessment Methods

5.1 Written examinations to assess Knowledge and Understanding.

5.2 Oral examinations to assess Knowledge, Understanding, Attitude Communication skills & Problem solving.

5.3 Appliance to assess attendance & Absenteeism.

Weighting of Assessments

Final-term Examination	50%
Oral Examination.	50%
Total	100%

6- List of References

6.1- Course Notes: Lecture notes prepared by the staff member in the department.

-Department practical & Museum notes. 6.2- Essential Books (Text Books):

-Principals of general pathology, Gamal Nada.

-Principals of special pathology, Gamal Nada.

6.3- Recommended Books:

Pathologic Basis of Disease, Kumar, Cotran, Robbins.

6.4- Periodicals, Web Sites: http://www.humpath.com/Websites-Pathology

http://peir2.path.uab.edu/reslinks/

Pathology_Education_Websites/index.html

http://library.med.utah.edu/WebPath/webpath.html

7- Facilities Required for Teaching and Learning

1- Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory) comfortable desks, good sources of aeration, bathrooms, good illumination and safty & security tools.

2- TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

3- COMPUTER PROGRAM: for designing and evaluating MCQs.

Course Coordinator:
Head of Department:
Date: 12/9/2009

Course Specifications of Clinical Pathology in MD Degree in Medical Parasitology

South Valley University Faculty of Medicine

1. Programs on which the course is given : MD Degree in Medical Parasitology.
2. Major or minor element of program : Minor
3. Department offering the program: Medical Parasitology.
1. Department offering the course: Clinical Pathology.
2. Academic year / Level: (1st part).

A. Basic Information

Title: **: Clinical Pathology in MD Degree in Medical Parasitology**

Credit Hours: 4 Lecture 4 hs/w

B. Professional Information

1. Overall Aims of Course

By the end of this course the student should have the professional knowledge and skills of haematology, immunology, clinical chemistry and microbiology to support his /her study of the main specialty.

2. Intended Learning Outcomes of Course (ILOs)

The curriculum consists of theoretical, practical and training courses.

a) Knowledge and understanding:

By the end of this course the student should be expected to

a.1- Review their informations about the physiology of blood cells (RBCs, WBCs and platelets) and homeostasis.

a.2- Review their informations about the anatomy of the lymphatic and hematopiotic organs.

a.3-Know the important causes, presentation and management of various types of anemias.

a.4- Know causes, manifestation and management of bleeding and coagulation disorders.

a.5- Recognize various parasitic diseases in different samples.

a.6- Recognize chemical and immunological changes associated with various diseases especially parasitic diseases.

a.7-To know recent advances in diagnosing various hematological disorders as bone marrow transplantation, immunological treatment.

b) Intellectual skills:

By the end of this course the student should be expected to

b.1-To interpret lab investigations as blood picture, bone marrow examination, results of lymph node, spleen biopsy,……and tests for coagulation disorders.

b.2- Examine lymph nodes, liver and spleen and to know causes and management of lymphadenopathy, hepatomegaly, and splenomegaly.

b.3- differentiate between samples of parasitic infection and other samples.

c) Practical skills:

By the end of this course the student should be able to:

c.1- Perform a complete haematological examination.

c.2- Perfect different staining methods.

c.3- Perform complete urinary, sputum and fecal examinations.

c.4- Perform serological tests for detection of parasitic antibodies or antigens

d) General and Transferable Skills

By the end of this course the student should be expected to d1- Work in a team

d2-Communicate well with his colleagues, top management and subordinates. d3- Use computers in conducting researches

Course titles:

A- lectures (60 hours):.

Topics	Hours of lectures	Course ILO's covered
Clinical haematology: - Indications for blood transfusion. - Hazards of blood transfusion. - Parasites in blood. -Anemias: -Iron deficiency anemia -Megaloplastic anemia -Hemolytic anemi -Aplastic anemia. - ERS. - WBCs production. - Pathological changes in the WBCs (lymphomas and leukemias	20	a1, a2, a3,a5, b1, b2, b3, c1
Normal haemostasis. Disorders of coagulation and thrombosis:. -Hemophilias -Thrombophilias -How to investigate a case of bleeding.	5	a4,a4
Anticoagulants	5	a4

Topics	lectures	Course ILO's covered
Clinical Chemistry: - Carbohydrates.	5	a6, a7, b3
- Body fluids - Plasma proteins and liver disorders.	2	a6,a7, b3
- Kidney function	3	a6, a7, b3,c2, c

Topics	lectures	Course ILO's covered
Clinical microbiology: - Methods of collecting samples and criteria of rejection. - Staining and culture media.	5	a5,a7,b3,c2,
- Parasites in urine and stools	5	a5,b3,c2
- Medically important cases: - a- fever b- diarrhea. c- UTLs. d- Meningitis.	5	a7,b2, d1,d2,d3

Topics	**Hs. (20) lectures**	**Course ILO's covered**
Clinical immunology: - Types of antigen and antibody reactions.	2	a6,a7
- Diagnosis of infectious diseases	2	a5,a6,a7,b1, b2
- Immunological aspects of parasitic diseases	1	a6,a7,c4, d1,d2,d3

4– Teaching and Learning Methods

4.1 - Lectures

4.2- practical lessons (in the University hospital lab.)

4.3-searches in the library for Text Books in case taking…

4.4-searches in computers

5- Student Assessment Methods

5.1 Written exams

-Short assay to assess knowledge.

-problem solving to assess general transferable and intellectual skills.

-commentary to assess intellectual skills.

3. Oral exams to assess intellectual skills

Weighting of Assements

Final written Examination	50 %
Oral Examination.	50%
Total	100%

6.1- Course Notes: Lecture notes prepared by the staff member in the department

Essential Books(Text Books): Cheesbrough, M. (1987): Medical laboratory manual for tropical countries.

6.3- Recommended Books:

6.4- Periodicals, Web Sites, … etc http://www.ncbi.nlm.govhttp://www.google.com http://Freemedicaljournals.com

7- Facilities Required for Teaching and Learning

- Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory) comfortable desks,good sources of aeration, bathrooms, good illumination and safty & security tools.
- TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.
- COMPUTER PROGRAM: for designing and evaluating MCQs.

Head of the department:

Course Coordenator:

Date:12/9/2009

Course Specifications of Biochemistry in MD Degree in Medical parasitology

South Valley University **Faculty of Medicine.**

1. Program on which the course is given: MD degree in Medical parasitology
2. Major or minor element of program : Minor
3. Department offering the program : Medical parasitology
4. Department offering the course (Medical Biochemistry Department)
5. Academic year / Level: (first part)

A. Basic Information

Title: Medical Biochemistry **in MD Degree in Medical parasitology**

Credit Hours: 4 hours Lecture: 2 hour/w 15weeks

B- Professional Information 1 – Overall Aims of Course

By the end of the course the post graduate students should be able to have the professional knowledge of the biochemistry of the metabolic parasitology diseases, and able to diagnose any vitamin and calcium regulating hormones deficiency.

2 – Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

By the end of the course, the student is expected to practice the following:

a1- To know the biochemical importance of intermediary metabolism (Anabolic and catabolic)

a2- The importance of clinical biochemistry

a3- Explain the role of vitamin, Minerals

a4- To know and explain hormonal action

b) Intellectual Skills

By the end of the course, the student is expected to practice the following:

b1-Diagnosis the affected biochemical deficiency

b2- Integrate basic biochemical and physiological facts with clinical data

b3- How to diagnose and treat as early as possible

c) Professional and Practical Skills

By the end of the course, the student is expected to practice the following:

c1- To identify the biochemical defect

c2- To perform some laboratory tests for early diagnosis.

d) General and Transferable Skills

By the end of the course, the student is expected to practice the following:

d1- Acquiring skills to use computer to enter biochemistry web sites and self learning.

d2- Team working for accurate diagnosing of diseases using internet.

d3- Ability to listen and understand any biochemical lecture.

d4- Utilize computers in conducting research and to Collect scientific data.

d5- Use standard computer programs effectively (window, office programs).

4- Contents

Topics	Lectures	Course ILO,s covered
(1)Biological oxidations include: -General consideration. -Electron transport. -ATP-synthesis. -Translocations. -Superoxide dismutase.	5	a1,a2
(2) Glycolysis and citric acid cycle: - General consideration. -Enzyme structure and reaction mechanisms. -Regulation mechanisms and biomedical importance.	10	a1,a2

3) Other Pathways Carbohydrate Metabolism: a- Pentose –phosphate pathway and Gluconeogenesis. -General considerations -Enzyme reaction mechanisms. -Regulation mechanisms -Genetic diseases. B-Glycogen Metabolism: - General considerations - Glycogen Synthetase and phosphorylase: structure and catalytic activities. -Regulation -Genetic diseases C-Metabolism of other hexoses and biosynthesis of mucopolysaccharides	25	a1,a2,d2
(4) Fat metabolism) General considerations. -Fatty acid oxidation and fatty acid biosynthesis. - Enzymes and reaction mechanisms for biosynthesis of cholesterol and related derivatives,	5	a1,a2

phospholipids, glycolipids and related compounds. -Eicosanoids metabolism. -Adipose tissue metabolism. -Lipid transport in plasma: Lipoproteins: assembly and degradation, biomedical importance. -Genetic diseases.		
(5)Protein metabolism: -General consideration -Amino acids degradation: General reaction, nitrogen disposal and ammonia disposal. -Nitrogen fixation. -One carbon metabolism. -Individual amino acids metabolism.	10	a1,a2,b1,b2,b3,c1,c2, d2
6) Integration of metabolism: - Mechanisms and regulation	10	a1,a2, b1, b2,b3, c1,c2
7) Metabolism of nucleotides: -General considerations	15	a1,a2, b1, b2,b3, c1,c2

-Purin and pyrimidine biosynthesis. -Ribonucleotide reductase – thioredoxin and Glutaredoxin, Thymidylate synthase and dihydrofolate reductase -Uric acid -Genetic diseases.		
8) Porphyrin metabolism and heam biosynthesis and catabolism (9) Mineral metabolism Tissue chemistry	15	a3, b1, b2,b3, c1,c2
A- Eukaryotic chromosomes Gene E xpression -Nucleosome and chromatin. -Mitochondrial DNA. -DNA structure :replication and repair: -Structure. -Nucleases and ligases. -DNA topology and topoisomerases. -DNA polymerases. -Origin and direction of replication. Biochemistry of osteoarthritis	15	a1,a2, b1, b2,b3, c1,c2

(11_)Hormones -Classification, mechanisms of actions. -Pituitary and hypothalamic hormones. -Thyroid and parathyroid hormones. -Hormones of the adrenal cortex and medulla. -Hormones of the Gonads. -Hormones of the pancreas and G.I.T tract. Biochemistry of osteoporosis	10	a1,a2,a4. b1, b2, c1
Total	60	

4– Teaching and Learning Methods

4.1- Lectures

4.2- Searches in computers (assignments)

5- Student Assessment Methods

5.1- Final Oral exam to assess intellectual skills.

5.2- Final written exam to assess understanding(50%), knowledge, intellectual professional skills (20%).

Weighting of Assessments: Methodology & Biostatestics has 2 separate papers:

Final-term written examinations 50%

Oral Examinations. 50%

6- List of References

6.1- Course Notes: Lecture notes prepared by the staff member in the department

6.2- Essential Books (Text Books)

Text book of medical biochemistry with clinical Devlin, JM 1994

Harper's biochemistry, Murray, RK 2005

6.3- Recommended Books

Lectures notes on clinical biochemistry, Whitby et al 1993

Lippincott's illustrated reviews biochemistry, Champe, PC, Harvey, RA, 2005

6.4- Periodicals, Web Sites, … etc

http://www.ncbi.nlm.gov/ http://www.vlib.org/ www.genome.ad.jp/kegg/regulation. Findarticle.com Freemedicaljournals.com

7- Facilities Required for Teaching and Learning

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory) comfortable desks,good sources of aeration, bathrooms, good illumination and safty & security tools.

2. TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

3. COMPUTER PROGRAM: for designing and evaluating MCQs.

Course Coordinator:

Head of Department:

Date:

Course Specifications of Medical Genitics in MD Degree in Medical Parasitology

South Valley University Faculty of Medicine

1. Programs on which the course is given: MD Degree in Medical Parasitology.
2. Major or minor element of program : Minor
3. Department offering the program: Medical Parasitology.

4.Department offering the course: Microbiology &immunology.

5.Academic year / Level: (1st part).

A. Basic Information

Title: **Molecular biology in MD Degree in Medical Parasitology.**

Lecture: 4 hour/week

B. Professional Information

1– Overall Aims of Course:

By the end of this course the student should be able to:

Have the basic knowledge about genes morphology, structure and function, concepts of genetics and inheritance, genetic disorders and classification of genetic diseases and to prepare him/her for further studies later in the course of Modern Genetics.

2 – Intended Learning Outcomes of Course (ILOs)

a. Knowledge and understanding:

By the end of the course, the student is expected to be able to:

a1: List and identify the stages of mitosis and meiosis, as well as the cell cycle, and explain the significance of each

a.2: Know the chemical nature of genetic material (DNA & RNA)

a.3: Know how the DNA is organized to serve as genetic materials (gene and genome)

a.4: Know the normal chromosome (structure & number).

a.5: Understand how the genetic information transferred to RNA during the process of transcription.

a.6: Identify the genetic code

a.7: Know the translation of genetic information on mRNA into polypeptide chains

a.8: Understand gene mutation and DNA repair on the molecular levels.

a.9: Identify chromosomal numerical and structural aberrations.

a.10: know the basic concepts of Mendelian and non Mendelian inheritance.

a.11: Identify the various types of chromosomal disorders and biochemical genetics.

a.12: Understand the new concepts of DNA technology.

A13: Gain the knowledge of the use of this technology in the advances disease diagnosis.

b. Intellectual Skills

By the end of the course, the student is expected to be able to:

b1-Integrate and evaluate genetic information and data from a variety of sources in order to gain a coherent understanding of theory and practice.

b2- Find and evaluate new solutions to many kinds of Genetic problems.

c.General and Transferable Skills:

By the end of the course, the student is expected to acquire:

C1- Self-confidence.

C2. Think scientifically.

C3. Create the tendency to apply the knowledge in the clinical fields.

3- Course Contents

Topic	No. of hours (60h)
Introduction (from gene to genome)	2
Patterns of inheritance Mendelian, non Mendelian, multifactorial	3
Update in medical genetics	3
Chemistry of nitrogenous bases	3
DNA replication	3
RNA synthesis	3
Genetic code	3
Protein synthesis	3
Regulation of gene expression	3
DNA alteration	3
Molecular biology and parasitology	3
Nuclear contents	3
Cell divisions (miosis and mitosis)	3
Chromosome structure and	3

function	
Mutations	3
Mendalian disorders	3
Transmission pattern of single gene disorders	3
Disorders associated with defects in structural proteins	3
Disorders associated with defects in receptor protein	3
Disorders associated with enzyme defects	3
Disorders associated with defects in proteins that regulate cell growth	3
Disorders of multi-factorial inheretence	3
Cytogentic disorders	3
Single gene disorder with non classic inheritance	3
Genetics and cancer	3
Immunogenetics	4
Genetic engineering	4

4– Teaching and Learning Methods

4.1-lecture (data show, video-clip)

4.2-class discussion

4.3-student's group-project

4.4-CDs/ slide projector

4.4- field oriented labs collect samples for lab. work (practical) (whenever the lab is available).

5- Student Assessment Methods

5.1 -Written exam

Short essay to asses knowledge

MCQs to asses knowledge & intellectual skills

5.2 -Oral exam to assess the presentation and the analytical and problem solving skills

Weighing of Assessments:

Final written-	50%
Oral Examination.	50%
Total	100%

6- List of References

6.1- Course Notes: Lecture notes prepared by the staff member in the department.

6.2- Essential Books (Text Books)

1. Genetics: from Genes to Genomes, Hartwell L, Hood L, Goldberg ML et al. (2000) Boston: McGraw Hill

2. Molecular biology of the gene, Waston J.D.2004.. Pearson education, Inc., publishing as Benjamin Cummings, 1301 Sansome street, San Francisco, CA 94111

6.3- Recommended Books

1) Discovering Genomics, Proteomics and Bioinformatics 2nd edition - by A. Malcolm Campbell and Laurie J. Heyer. (ISBN 0-8053-4722-4; published by Cold Spring Harbor Laboratory Press and Benjamin Cummings: 28 February, 2006)

2) Essentials of Medical Genetics 13th edition-by AlanE.H.Emery. Churchill Livingstone, 2007.

6.4- Periodicals, Web Sites

BMC Genetics Current genetics Journal of Genetics

7- Facilities Required for Teaching and Learning

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory) comfortable desks,good sources of aeration,bathrooms,good illuminationand safty&security tools.
2. TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.
3. COMPUTER PROGRAM: for designing and evaluating MCQs.

Course Coordinator:

Head of Department:

Date:

Course Specifications of Community Medicine for MD. degree in Medical parasitology South Valley University South Valley Faculty Of Medicine..

1. Program on which the course is given: MD. in Medical Parasitology
2. Optional element of program
3. Department offering the program (Medical Parasitology Department)
4. Department offering the course (Community Medicine Department)
5. Academic year / Level: Post graduate, Doctorate degree in Medical parasitology (first part)

A- Basic Information

Title: Community health

Lectures 4h/w

B- Professional Information

1. Overall Aims of Course

By the end of the course the post graduate students should be able to:

a- Have the professional knowledge of the a community-oriented physician capable of –skillfully- anticipating and responding to community health needs within the MOHP setting according to the policies, regulations, and guidelines of the MOHP.

b- Apply the knowledge and skills learned, and to take leadership in motivating the community served as regards the preventive aspects concerning parasites and its relation to Medicine.

c- Adopt a healthy lifestyle and sound behaviors to become role models for the individuals, families, and the communities they will serve in the future.

2. Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

By the end of this course the student should be able to:

a1- Describe the spectrum of parasitic diseases.

a.2- Explain the three interacting ecological factors—agent, host, and environment—affecting the occurrence of disease

a.3- Describe the determinants of health on the individual, the family, and the community levels

a.4- Describe the epidemiology and public health importance of human parasitic infections on the individual, the family and community levels.

a.5- Define patterns of care as preventive and curative, and describe the levels of preventive care. a.6- List at least four uses for health indicators in Parasitology.

a.7- Describe the public health surveillance system and its use in the community setting

a.8- Define data sources for vital statistics.

a.9- Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests.

a.10- List at least four types of study designs.

a.11- Describe the study design, uses, and limitations

a12- Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values

b-Intellectual Skills:

By the end of this course the student should be able to:

b1- Evaluate indicators of health and disease

b.2- Identify prevalent health problems in a community, using various epidemiological strategies

b.3- Anticipate and participate in investigation of an epidemic/outbreak as part of a health team

b.4- Identify trends in health and disease

b.5- Apply appropriate health promotion, disease prevention, and control measures

b.6- Apply disease prevention and control measures to identified priority communicable and non- communicable diseases

b.7- Apply health behavior theories to different community health problems

b.8- Identify behavioral and social variables impacting health and disease

b9- Apply appropriate communication strategies for use with clients, the health care team, and the community

b10- Select and use appropriate health education methods and materials

b11- Counsel effectively in the health care environment and prevention of parasitic diseases.

c- Professional and Practical Skills

By the end of this course the Student should be practice the following:

c1- Perform community diagnosis for health problems (of parasitic origen) in the locality.

c.2- Participate in conducting public health surveillance.

c3- Advocate appropriately in the health care setting

d- General and Transferable Skills

By the end of this course the Student should be practice the following:

d1- Communicate well with his colleges, top management and subordinates.

d2- Team working for accurate diagnosing of diseases using internet.

d3- Use standard computer programs effectively (window, office programs).

d4- Utilize computers in conducting research and to Collect scientific data.

3- Contents:

Topic	lectures	Course ILO's
Epidemiology of selected parasitic diseases: Situations in Egypt and globally	2 2	a1,a2,a3, a4,a5,a6, b1,b2,b3,b4,
Importance and methods of prevention. Parasitic infections; types, cycles of life. Risk factors Schistosomiasis Fascioliasis Amowbiasis, Giardiasis. Malaria, Filaria. etc Parasitic zoonotic and occupational diseases Arthropode born parasitic diseases	1 1 1 1 1 1	b5,b6,b7, c1,c2,c3
Emerging and remerging parasites	2	a4,a5,a6, b2, c2
Investigations of a parasitic epidemic, the attack rates	2	a4,a5,a6, a7, b8,b9, d1,d2, d3, d4,
Methodology	2	a10,a11, a12, b10,d2,d3, d4
Statestics	2	a8, a9,
Terminology and rationale	2	a9
Data collection Types of data Tabulation of data Graphical presentation of data Measures of dispersion Normal distribution curves	2	a7,a8,a9, b3, b9, b10, b11, c1, c2, d1, d2, d3, d4
International classification of diseases. International death certificate.	2	a3,a4,b1

Study design Cross sectional study and the prevalence rate cohort study, incidence rate, Odd ratio.	2 2	a10,a11, a12, b9, c1, d1,d2, d3, d4
Sampling	2	a7, b9,c2
Total		

4– Teaching and Learning Methods

4.1 - Lectures

4.2 - Computers searches (assignments) (d2, d3, d4)

4.3 practical

5- Student Assessment Methods

5.1.Oral exam to assess intellectual skills.

5.2. Final written exam to assess understanding knowledge, intellectual professional skills

6- List of References

6.1- Course Notes

Department notes, lectures and handouts

6.2- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, Prentice – Hall International Inc.

6.3- Recommended Books

1- Dimensions of Community Health, Boston Burr Ridge Dubuque.

2- Short Textbook of preventive and social Medicine. Prentice-Hall International Inc.

3- Epidemiology in medical practice, 5th edition. Churchill Livingstone. New York, London and Tokyo.

6.4 - Periodicals, Web Sites, … etc

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health 3- WWW. CDC and WHO sites

7- Facilities Required for Teaching and Learning:

1 Adequate conditioned space for staff and assistants.

2 Adequate conditioned teaching facilities.

3 Audiovisual Aids: Data show, overhead and slide projectors and their requirements

4 Transport and full board facilities for students during the community campaigns

Course Coordinator:

Head of Department:

Date:12/9/2009

Course Specifications of Tropical Medicine and gastroenterology in

MD Degree of Medical Parasitology

South Valley University **Faculty of Medicine**

1. Program on which the course is given: MD degree in Medical Parasitology
2. Major or minor element of program : Minor
3. Department offering the program: Department of Medical Parasitology
4. Department offering the course: Tropical Medicine and Gastroenterolog
5. Academic year / Level: (1st part).

A. Basic Information

Title: Tropical Medicine and gastroenterology in MD Degree in Medical parasitology.

Credit Hours: 4 hs /w

B. Professional Information:

1. Course aims

Overall Aims of Course: by the end of this course, the student should be able to have basic knowledge about fevers and its common causes. Also, the eatiology, pathogenesis, clinical picture, complications and management of the most common infectious diseases. And to understand the most common gastrointestinal and hepatic diseases especially those prevalent in our country and be able to diagnose and manage them in an efficient degree to help him/her as a future medical parasitologist.

2. Intended Learning Outcomes of Course (ILOs) a)Knowledge and Understanding:

By the end of the course, the student is expected to practice the following:

a1- To know the common infectious, hepatic and gastrointestinal diseases worldwide and the most common diseases and public health problems in our country.

a2- To understand the causation of diseases and new concepts in their pathogenesis.

a3-To study the clinical picture, complications and differential diagnosis of common infections

a4- To know the importance of good history taking as a first step to solve a medical problem.

a5- To know how to be a good observer

a6-To learn how to look for physical signs and how to interpret them.

a7- To know the common diagnostic, laboratory, radiological and other techniques

a8- To know the various therapeutic methods/ alternatives used for common diseases (supportive therapy, nutrition, pharmacotherapy, surgical treatment etc…)

a9- To know general methods for health promotion and disease prevention.

b)Intellectual Skills

By the end of the course, the student is expected to practice the following:

b1- To make a good doctor-patient relationship

b2- To take a thorough medical history

b3- To interpret data acquired through history taking to reach a provisional diagnosis

b4- To interpret physical findings and correlate them with patient's symptoms.

b5- Identify problems and find solutions

b6- Select from different diagnostic techniques the ones that help to reach a final diagnosis.

b7- Select the most helpful laboratory investigation to confirm the diagnosis

b8- To have the ability to innovate nontraditional solutions to problems.

c)Professional and Practical Skills

By the end of the course, the student is expected to practice the following:

c1- Perform general and abdominal examination of patients .

c2- Interpret, conclude and discuss data collected from history and examination

c3 Diagnose common infectious diseases(parasitic, bacterial and viral) and be able to differentiate them clinically and laboratory.

c4- Perform basic diagnostic and therapeutic techniques and measures (pulse, temperature, giving injections and intravenous fluids, taking aspirations from pathological body fluids….)….

c5- Recognize patients with life threatening conditions and initiate the proper management and change it according to patient's needs.

d)General and Transferable Skills

By the end of the course, the student is expected to practice the following:

d1- Work in a team

d2-Communicate well with his colleagues, top management and subordinates

d3- Establish a good patient-physician relationship.

d4- Use computers in conducting researches.

Contents

- Leshmaniasis
- Balantidiasis
- Arthropod borne infections
- Infectious and non-infectious diarrhea
- Salmonella infections
- Brucellosis Shigellosis
- Tuberculosis of the GIT Cholera
- Cholestasis Zoonoses
- Tropical Liver Diseases
- Cardiovascular Diseases in the Tropics
- Neurological Manifestations of Tropical Diseases
- Haematological Disorders in the Tropics Emergencies in Fevers
- Infections in the immunocompromized host Immunizations
- Precautions taken by travelers to tropical areas.

4– Teaching and Learning Methods

4.1 - Lectures

4.2-practical lessons (ward and class rounds)

4.3-searches in the library for Text Books in case taking.

4.4-searches in computers.

5- Student Assessment Methods

5.1 Written exams :

Short assay to assess knowledge.

- problem solving to assess general transferable and intellectual skills.
- commentary to assess intellectual skills.

5.2 Clinical exams to assess his intellectual, professional and practical skills.

5. 3 Oral exams to assess intellectual skills .

Weighting of Assessments

Final Exam	50%
Oral Exam	50 %
Total	100%

6- List of References

6.1- Lecture notes prepared by the staff member in the department

6.2- Essential Books (Text Books)

1. Davidson text Book of Medicine.
2. 2.Hutchison Book for case taking

6.3- Recommended Books

1. Hunter's Tropical Medicine
2. Current diagnosis & Treatment in Gastroenterology..
3. Sheilla Sherlock (Text Book) of Hepatology.

6.4- Periodicals, Web Sites, … etc

http://www.ncbi.nlm.gov http://www.google.com http://Freemedicaljournals.com

7- Facilities Required for Teaching and Learning

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory) comfortable desks,good sources of aeration, bathrooms, good illuminationand safty&security tools.

2. TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

3. COMPUTER PROGRAM: for designing and evaluating MCQs.

Head of the Department:

Date:12/9/2009

Course Specification of Histology in MD Degree in Medical Parasitology

University : South Valley Faculty :Medicine

1. Program on which the course is given: M.D. Medical Parasitology.
2. Major or minor element of program : Minor
3. Department offering the program: Medical Parasitology
4. Department offering the course: Histology
5. Academic year / Level: (1st part).

A- Basic Information

Title: Medical parasitology in MD Degree in Medical parasitology .

Credit Hours : 4 **Lecture: 4 hours/w**

B- Professional Information

1. Overall Aims of Course

By the end of this course the student should be able to have the professional knowledge about:

The Structure of different types of the normal human tissues and cells, the basic concepts in Molecular biology and medical genetics. Also, the practical skills of handling, staining and examining different types of specimens for the benefit of the main field of specialty: Medical Parasitology.

2. Intended Learning Outcomes of Course (ILOs) a)Knowledge and Understanding:

By the end of the program, the student is expected to

a1. Understand different types and structure of normal human cells and tissues.

a2- Gain the knowledge of arrangements of cells.

a3- Understand the bases of medical genetics.

a4- Understand the bases of molecular biology.

b) Intellectual Skills

By the end of the program, the student is expected to be able to:

b1-Correlate the structure with the functicin of different cells in tissues and organs.

b2-Describe normal structure of any given histological slide.

c) Professional and Practical Skills

By the end of the program, the student is expected to be able to:

c.1- Obtain informations from histological slides.

c.2- Identify the structural components of cells at the light and electron microscopic levels.

c.3- Identify and draw tissues and organs by examining stained sections with the light microscope and by examining electron- micrographs.

c.4- Properly handle a specimen and prepare a stained slide from it

d) General and Transferable Skills

By the end of the program, the student is expected to be able to:

d.1- Perform further in depth study in human histology.

d.2- Apply the histology and specific techniques in his/her field of study.

3- Contents

Topics actually taught	**lecture hours**
The cell	1
Epithelium	1
Connective tissue	1
Muscular tissue	2
Nervous tissue	2
Vascular system	2
Lymphatic system	2
Skin	2
Respiratory system	3
Gut	3
Urinary system	3
Male reproductive system	3
Female reproductive system	3
Endocrine system	3
Molecular biology and its significance in histology	2
Principles of medical genetics	2
Microtechnique	10
Staining	15
TotaL	50

4– Teaching and Learning Methods

4.1-Lectures

4.2 Practical sessions, supported by academic staff.

5- Student Assessment Methods·

5.1 Written exam

-Short essay to assess knowledge.

-MCQ to assess intellectual skills.

5.2 Structured oral exams. To assess the degree of understanding of the different knowledges provided in both the lectures and the practical sessions.

Weighting of Assessments

Final-term Examination	50 %
Oral Examination.	50 %
Total	100 %

6- List of References

6.1- Course Notes :Lecture notes prepared by the staff member in the department.

-Laboratory manual authorized by the department

6.2- Essential Books (Text Books)

-Junqueira, Carneino and Kelly (1995): Basic Histology, 7th ed.Librairrie du liban and lang buruit,London,New York.

-Marinos (1977):Atlas of Human Histology,4th ed.Lea&Febiger,Philadelphia.

6.3- Recommended Books

-Fawcett(1994):A Text Book of Histology,12th ed.Chapman and Hall,New York,London.

-Johannes Rodin(1975):An Atlas of Histology.Oxford university press,New York,London,Toronto.

6.4- Periodicals, Web Sites, … etcwww.yahoo.com www.pubmed.com

7- Facilities Required for Teaching and Learning

1. Adequate infrastructure: including teaching places (teaching class,teaching halls, teaching laboratory) comfortable desks, good sources of aeration, bathrooms, good illumination and safty & security tools.

2. TEACHING TOOLS: including screens, computers including cd (rw), data shows,

projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

3. COMPUTER PROGRAM: for designing and evaluating MCQs.

Course Coordinator:

Head of Department:

Date:

Course Specification of Medical Parasitology in MD Degree in Medical Parasitology

University : South Valley **Faculty :Medicine**

1.Program on which the course is given: M.D. Medical Parasitology .

2.Major or minor element of program : Major

3.Department offering the program: Medical Parasitology

4.Department offering the course: Medical Parasitology

5.Academic year / Level: (2^{nd} part).

A- Basic Information

Title: Medical parasitology in MD Degree in Medical parasitology .

Credit Hours: 53 hs. (in 24month) **Lecture: 375 hs.**

Tutorial: 150 **-Practical:270 hs.** **Total:795**

B- Professional Information 1.Overall Aims of Course

By the end of the course the student should be able to have the perfect- creative knowledge of the parasites affecting human beings all over the world and, so to be able to efficiently diagnose and teach medical Parasitology to undergraduates and ready to develop her/his level by self learning to add knowledge in the specialty.

2.Intended Learning Outcomes of Course (ILOs):

The student is to be armed with perfect-creative knowledge about the human parasites allover the world. Each student should be able to recognize the morphological characteristics of each parasite to perform some laboratory tests needed for diagnosis and learn how to fix and examine properly parasitic slides.

a) Knowledge and Understanding:

By the end of the course the student should be able to:

a1.Gain sufficient knowledge of the parasites affecting human beings all over the world and zoonoses.

a2.Understand the geographical distribution and life cycle of each, inside and outside the body.

a3.Differentiate between parasites on morphological bases.

a4.Have the knowledge to recognize the pathology, clinical symptoms and complications of each parasite.

a5.Have the knowledge of the recommended laboratory tests needed for diagnosis of each case.

a6.Have the knowledge of some of the drugs and instructions used for treating each case.

a7.Have the knowledge about control methods used against parasites.

a8.Have sufficient knowledge about snails and their medical importance, especially of Egypt.

a9.Have the knowledge of parasitic immunity basis.

b) Intellectual Skills:

By the end of the course the student should have the ability to:

b1.Differentiate between parasites affecting the same organ.

b2.Differentiate between parasites present in the same sample.

b3.Differentiate between parasites inhabiting the same geographical location.

b4.Criticize in a scientific pattern at least 15 published papers in the different branches of Medical Parasitology (parasite distribution and public health or statistics, lab. Animals and pathology of parasites or drugs, parasites and immunology, snails….etc.

c) Professional and Practical Skills:

By the end of the course the student should have the ability to:

c1.Identify the infective and the diagnostic stages of the parasites

c2.Identify different stages of the parasites.

c3.Identify some of the medically important intermediate host especially those present in Egypt.

Perform one or more of the following skills:

c4.Perform some laboratory tests available in the department lab.

c5.Perform available immunological tests.

c6.Deal with lab animals: infecting, sacrifice, dissecting and examining.

c7.collecting and rearing of snails or medically important arthropods.

c8.A box of at least 75 prepared slides of different entities are required.

c9.Attending and participating in scientific conferences, meetings, workshops and thesis discussion that update relevant recent topics in molecular biology, relevant biochemical and geno-typing of parasites, and emerging parasitic problems.

d) General and Transferable Skills:

By the end of the course the student should have the ability to:

d1.Use the computer to enter parasitological web sites.

d2.Collect scientific data from the computer.

d3. Work in groups, as a leader or as a college.

d4.Collect data from medical canters and patients.

d5.Compile a review article about a specific subject. (90 hs.)

3- Contents

Topic	No. of hours	Lecture	Practical
Introduction	4	4	-
Helminthes Introduction+Trematoda introduction.	4	4	- -
Zoonoses+ Fasciola	10	4	6
Genus: Dicrocoelium Dicrocoelium dendriticum Dicrocoelium hospes	4	2	2
Genus: Echinostoma Echinostoma ilocanum (= Euparyphium ilocanum) Echinostoma malayanum Echinostoma revoltum	2	2	-
Genus Schistosoma Schistosoma haematobium **complex** Schistosoma haematobium Schistosoma bovis Schistsoma mattheei Schistosoma intercalatum Schistosoma spindale Schistosoma incognitum Schistosoma mansoni **complex** Schistosoma mansoni Schistosoma rodhaini	14	4	10

Schistosoma japonicum **complex** Schistosoma japonicum Schistosoma mekongi Schistosoma margrebowiei			
Genus: Opisthorchis Opisthorchis felineus Opisthorchis viverrini	2	2	-
Genus: Clonorchis Clonorchis sinensis **Genus:** Heterophyes Heterophyes heterophyes	8	2	6
Genus: Metagonimus Metagonimus yokogawai	2	2	-
Genus: Paragonimus Paragonimus westermani Paragonimus compactus Paragonimus kellicotti (= P. miyazaki) Paragonimus ohirai Paragonimus philippinensis	2	2	-
Genus: Fasciolopsis Fasciolopsis buski	2	2	
Cestoda	4	4	
Genus: Diphyllobothrium Diphyllobothrium latum **Genus:** Spirometra	10	4	6

Spirometra mansonoides Spirometra proliferum			
Genus: Taenia Taenia saginata Taenia solium Taenia taeniaeformis Taenia crassiceps Taenia glomeratus Taenia serialis	10	4	6
Genus: Multiceps Multiceps multiceps Multiceps brauni	2	2	
Genus: Echinococcus Echinococcus granulosus Echinococcus multilocularis Echinococcus vogeli Echinococcus oligoarthus	16	8	8
Genus: Dipylidium Dipylidium caninum **Genus:** Hymenolepis Hymenolepis nana Hymenolepis diminuta	6	4	2
Nematoda	4	4	
Genus: Trichocephalus	6	4	2

Trichocephalus trichura **Genus**: Capillaria Capillaria hepatica . Capillaria philippinensis.			
Genus: Trichinella Trichinella spiralis	4	2	2
Genus: Dioctophyma Dioctophyma renale.	4	2	2
Genus: Strongyloides Strongyloides stercoralis	4	2	2
Genus: Ancylostoma Ancylostoma duodenale Ancylostoma braziliense Ancylostoma caninum Ancylostoma ceylanicum **Genus**: Nectaor Necator americanus **Genus:** Trichstrongylus Trichostrotigylus colubriformis Trichostrotigylus orientalis **Genus:** Angiostrongylus Angiostrongylus cantonensis	6	4	2
Genus: Ascaris Ascaris lumbricoides Ascaris suum **Genus**: Toxocara	6	4	2

Toxocara canis Toxocara cati			
Genus: Enterobius Enterobius vermicularis Enterobius gregori	6	4	2
Genus: Dracunculus Dracunculus medinensis	4	2	2
Genus: Gnathostoma Gnathostoma spinigerum **Genus:** Anisakis Anisakis simplex **Genus**: Physaloptera Physaloptera cucasica	4	2	2
Genus: Thelazia Thelazia callipaeda Thelazia coliforiensis **Genus**: Wucheraria Wuchereria bancrofti Wuchereria var pacifica	6	2	4
Genus: Brugia Brugia malayi **Genus:** Loa Loa loa **Genus**: Mansonella Mansonella ozzardi Mansonella perstans	2	2	

Mansonella streptocerca Mansonella bolivarensis **Genus**: Dirofilaria Dirofilaria repens Dirofilaria immitis.			
Genus: Onchocerca Onchocerca volvulus	2	2	
MEDICAL MALACOLOGY			
Genus: Vivipara Vivipara unicolour **Genus:** Lanistes Lanistes bolteni **Genus:** Melanoides **(**= Melania**)** Melanoides tuberculata **Genus:** Cleopatra Cleopatra bulimoides Cleopatra cyclostomoides **Genus:** Valvatia Valvatia nilotica **Genus:** Pirenella Pirenella conica	6	4	2
Genus: Oncomelania Oncomelania **spp.** **Genus:** Lymnaea Lymnaea cailliaudi Lymnaea truncatula	6	4	2

Genus: Physa Physa acuta **Genus:** Segmentina Segmentina **spp.** **Genus:** Bulinus Bulinus (Bulinus) **spp.** **Genus:** Biomphalaria Biomphalaria alexandrina **group**			
Infecting and examining snails	18	2	16
Slide preparation	40	10	30
Introduction of Arthropoda	2	2	-
Dieptera	2	2	
Genus: Anopheles Anopheles gambiae Anophles sergenti Anopheles spp **Subfamily: Culicinae** **Genus:** Culex Culex pipiens **Genus:** Aedes Aedes aegypti	10	4	5
Genus: Phlebotumus Phlebotomus papatasi	4	2	2
Genus: Simulium	6	4	2

Simulium damnosum Simulium neavi **Genus:** Culicoides Culicoides spp. **Genus:** Tabanus (Horse-flies) Tabanus spp. **Genus:** Chrysops (Deer-flies) Chrysops silaceus Chrysops dimidaitus			
Genus: Erystalis Erystalis tenax **Genus:** Piophila Piophila casie **Genus**: Hypoderma (Gad flies) Hypoderma bovis	4	4	-
Genus: Glossina Glossina morsitan Glossina palpalis	4	2	2
Genus: Musca Musca domestica Musca sorbens **Genus**: Stomoxys Stomoxys calcitrans **Family: Fanniidae Genus**: Fannia Fannia canicularis	8	4	2

Fannia scalaris **Genus:** Oestrus Oestrus ovis			
Genus: Calliphora Calliphora vomitoria Calliphora vicina **Genus**: Lucilia Lucilia cuprina **Genus**: Phaenicia Phaenicia sericata **Genus:** Phormia Phormia regina **Genus: Chrysomyia** Chrysomyia megacephala Chrysomyia bezziana **Genus:** Cochliomyia Cochliomyia hominivorax Cochlomyia macellaria **Genus**: Cordylobia Cordylobia anthropophaga Cordylobia rodhaini **Family:** Sarcophagidae **Genus:** Sarcophaga Sarcophaga hemorrhoidalis **Genus**: Wohlfartia Wohlfartia magnifica	10	6	2

Wholfartia vigil vigil **Genus**: Hypoderma Hypoderma bovis **Genus**: Gastrophilus Gastrophilus intestinalis Gastrophilus nasalis **Genus**: Dermatobia Dermatobia hominis			
Siphonaptera **Genus**: Pulex Pulex irritans **Genus:** Ctenocephaledes Ctenocephaledes canis Ctenocephaledes felis **Genus:** Xenopsylla Xenopsylla cheopis **Genus**: Tunga Tunga penetrans **Genus:** Echidnophaga Echidnophaga gallinacea **Genus**: Nosopsyllus Nosopsyllus fasciatus **Genus**: Leptopsylla Leptopsylla segnis	6	2	4
SUBORDER: ANOPLURA **Genus:** Pediculus	4	2	2

Pediculus humanus capitis Pediculus humanus corporis **Genus**: Pthirus Phthirus pubis			
ORDER: HEMIPTERA **Genus:** Cimex Cimex lectularius Cimex hemipterus **Genus:** Leptocimex Leptocimex boueti **Genus:** Triatoma Triatoma megista Triatoma rubrofasciata	4	2	2
Arachnida introduction	2	2	
Family: Ixodidae (Hard Ticks) **Genus:** Ixodes Ixodes spinipalpis Ixodes nipponensis Ixodes ricinus Ixodes japanensis Ixodes persulcatus Ixodes scapularis Ixodes marxi Ixodes redikorzevi Ixodes holocyclus Ixodes cookei Ixodes dammini Ixodes pacificus **Genus:** Hyalomma Hyalomma marginatum marginatum	4	2	10

Genus: Dermacentor Dermacentor variabilis Dermacentor pictus Dermacentor andersoni Dermacentor albipictus Dermacentor nutalli **Genus:** Amblyomma Amblyomma americanum Amblyomma variegatum **Genus:** Rhipicephalus Rhipicephalus evertsi Rhipicephalus rossia Rhipicephalus simus **Genus:** Haemaphysalis Haemaphysalis flavis (Soft Ticks) **Genus:** Argas Argas persicus Argas arboreus Argas reflexus **Genus:** Otobius Otobius megnini Otobius lagophilus **Genus**: Ornithodoros Ornithodoros moubata moubata			
Mites	6	4	2

Genus: Dermanyssus Dermanyssus gallinae **Genus:** Ornithonyssus Ornithonyssus bacoti Ornithonyssus bursa Ornithonyssus nagayoi **Genus**: Dermatophagoides Dermatophagoides pternyssinus Dermatophagoides farinae **Genus:** Glyophagus Glycophagus spp. **Genus:** Tyrophagus Tyrophagus spp.			
Genus: Sarcoptes Sarcoptes scabiei	2	2	-
Genus: Demodex Demodex folliculorum **Genus**: Trombucula Trombicula akamuchi	2	2	-
SUBCLASS ARANAE (SPIDERS) Latrodectus mactans (Widow spider)	2	2	
CLASS CRUSTACEA **Genus:** Diaptomus **Genus:** Cyclops	4	2	2
CLASS PENTASTOMIDA Lingatula serrata (Tongue worm)	4	4	-

Armillifer armillatus Armillifer moniliformis			
Slide preparation	19	4	15
Arthropods total	90	60	30
Introduction to protozoa	2	2	-
Genus: Entamoeba Entamoeba histolytica Entamoeba hartmani Entamoeba dispar	6	4	2
Entamoeba coli Entamoeba polecki Entamtoeba gingivali **Genus**:Endolimax Endolimax nana **Genus**: Iodamoeba Iodamoeba butschlii	6	4	2
Genus: Acanthamoeba Acanthamoeba hatchetti Acanthamoeba palestinensis Acanthamoeba astronyxis **Genus**: Hartmannella Hartmannella	5	4	1
Genus: Naegleria Naegleria fowleri Naegleria gruberi	3	2	1
Genus: Retortamonas	4	2	2

Retortamonas intestinalis. **Genus**: Chilomastix Chilomastix mesnili **Genus**: Enteromonas Enteromonas hominis **Genus**: Giardia Giardia lamblia **Genus**: Dientamoeba Dientamoeba fragilis			
Family: Trichomonadidae **Genus**: Trichomonas Trichomonas hominis Trichomonas tenax Trichomonas vaginalis	6	4	2
Genus: Leishmania **Subgenus:** Leishmania **Complexes :** Leishmania donovani L. donovani donovani L .donovani infantum Leishmania tropica L. tropica minor L. tropica major L. aethiopica aethiopica Leishmania mexicana L. mexicana mexicana	12	10	2

L. mexicana amazonensis L. mexicana pifanoi L. mexicana venzuelensis L. mexicana enreitii **Subgenus:** Viannia **Complexes:** Leishmania braziliensis L. braziliensis braziliensis L. braziliensis colombiensis			
Genus: Trypanosoma **Subgenus**: Trypanozoon Trypanosoma brucei Trypanosoma brucei gambiens Trypanosoma brucei rhodesiense Trypanosoma cruzi **Subgenus:** Tejararia Trypanosoma rangeli Non-human Trypanosomes of different animals: - Trypanosoma lewisi - Trypanosoma congolense - Trypanosotma evansi - Trypanosoma vivax - Trypanosoma brucei	12	10	2
PHYLUM APICOMPLEXA **Genus**: Plasmodium Plasmodium vivax		10	4

Plasmodium ovale Plasmodium malariae Plasmodium falciparum			
Genus: Babesia Babesia divergens Babesia microti Babesia bigemina		2	2
Genus: Cryptosporidium Cryptosporidium parvum Cryptosporidium bovis Cryptosporidium muris **Genus:** Cyclospora Cyclospora cayetanensis **Genus**: Eimeria Eimeria perforans Eimeria stidae Eimeria clupearum Eimeria tenella Eimeria bovis Eimeria suis **Genus**: Isospora Isospora belli Isospora felis Isospora canis Isospora suis **Genus**: Sarcocystis		2	2

Sarcocystis lendemanni Sarcocystis bovihominis Sarcocystis suihomonis Sarcocystis muris			
Genus: Toxoplasma Toxoplasma gondii	3	2	1
PHYLUM MICROSPORA **Genus**: Nosema Nosema bombycis Nosema connori **Genus** : Encephalitozoon Encephalitozoon hellem Encephalitozoon cuniculi Encephalitozoon **Genus**: Enterocytozoon Enterocytozoon bienusi	3	2	1
PHYLUM CILIOPHORA **Genus**: Balantidium Balantidium coli	2	2	-
Slide preparation	11	5	6
Protozoa	95	65	30
Immunology and helminthes	20	10	25
Immunology and protozoa	20	10	25
Immunology	40	20	50

4– Teaching and Learning Methods

4.1- lectures.

4.2- practical lessons.

4.3- Assignments.

4.4- attending and participating in scientific conferences, workshops and thesis discussion to acquire the general and transferable skills needed.

5- Student Assessment Methods

5.1 final written exam to assess Knowledge, understanding and intellectual skills.

5.2 final practical exam to assess practical skills.

5.3- Log book to assess practical, general and transferable skills (14 C.Hs).

5.4 final oral exam to assess understanding and intellectual skills.

Weighting of Assessments:

- Final written exam separate exam

Passing in the written exam is a condition to attend the following exams:

- Oral exam
- Practical exam
- Formative only assessments: simple research assignment, log book, attendance and absenteeism.

6- List of References

6.1- Lecture notes: Lecture notes prepared by the staff member in the department.

6.2- Essential Books (Text Books)

Medical Parasitology.

Essential Parasitology.

Worms and human diseases. Clinical Parasitology.

Foundations of Parasitology.

6.3- Recommended Books

A coloured Atlas of tropical Medicine and Parasitology.

6.4- Periodicals, Web Sites:

Parasitology Research Division of Biology, Kansas State University

mri.sari.ac.uk/parasitology.asp British Society of Parasitology And others

7- Facilities Required for Teaching and Learning:

1- Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory) comfortable desks,good sources of aeration,bathrooms, good illumination and safty & security tools.

2- TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

3- COMPUTER PROGRAM: for designing and evaluating MCQs

Course Coordinator: Dr . Asmaa Elkady.

Head of Department: Osama Hussein Abdella

Date:12/9/2009

مصفوفه توافق المعايير القوميه القياسيه العامه لبرامج الدكتوراه مع المعايير الاكاديميه المعتمده من كليه الطب جامعه جنوب الوادي لدرجه الدكتوراه في الطفيليات الطبيه

1- Graduate attributes

General Academic reference standards (GARS) versus program ARS

Faculty ARS	NAQAAE General ARS for Postgraduate Programs
1-Mastering the basics and principles of scientific research	**1-اتقان اساسيات ومبادىء البحث العلمى**
2-Work to add knowledge constantly in medical parasitology field	**2- العمل علي زياده المعرفه العلميه في مجال الطفيليات الطبيه**
3-Analysis and critique of knowledge to continuously update and related basic sciences in the medical parasitology field	**3- التحليل والنقد للمعارف والمجالات ذاتن العلاقه في مجال التخصص**
4- Mixing the specialized knowledge with the knowledge of the underlying relationship in the basic biomedical clinical and behavioral and clinical and medical ethics and medical jurisprudence and developing the inter-relationship between them	**4-المزج بين المعارف المتخصصه مع المعارف ذات العلاقه المستبطه وتطوير العلاقات البينيه بينهم**
5- appropriate and effective dealing with health problems and health promotion Show deep awareness of all current problems and modern theoretical solutions in the field of specialization	**5- اظهار الوعي العميق بكافه المشكلات الجاريه وطرق الحل الحديثه النظريه في مجال التخصص**
6-Identify occupational problems and find innovative solutions to them	**6- تحديد المشكلات المهنيه وايجاد حلول مبتكره لها**

8-Improvement and development of update diagnostic methods for the field	8- **التوجه نحو تطوير طرق وادوات واساليب جديده لمزاوله المهنه**
9-Use of recent technology to improve the field practice and application	**استخدام التكنولوجيا الحديثه المناسبه بما يخدم ممارسه** 9-**المهنه**
10-Showing leadership competencies including interpersonal and communication skills that ensure effective information exchange in different professions fields	10-**القياده والتواصل بفاعليه لفريق العمل في مختلف السياقات المهنيه المختلفه**
11-Master decision making capabilities in different solutions related to medical parasitology	**11-استخدام المتوفر من المعلومات في اتخاذ القرار**
12-Effective use and updating of already available information and make use of it effectively	**12- تنميه وتوظيف المعلومات المتاحه بكفاءه والبحث عن الجديد**
13-Demonstration of its role in community development and health policy issues for proper environmental maintenance	**13- الوعي بدوره في تنميه المجتمع والحفاظ علي البيئه**
14-Show model attitude and professionalism	**14- التصرف بالنزاهه والمصداقيه مع مراعاه اداب المهنه**
15-Share in updating and transfer knowledge and experience to others	15- **الالتزام بالتنميه المستمره مع نقل العلم والخبرات للاخرين**

II- Program ILOs Vs NAQAEE general standard references

2-Program ILOs	NAQAEE general standard references
A- Knowledge and understanding المعرفة والفهم خريج برنامج الدكتوراه في أي تخصص يجب أن يكون قادرا على:	
2-1- Knowledge and understanding **2-1-A-** Demonstrate in-depth knowledge and awareness of hypotheses, basics and updated biomedical, clinical epidemiological and socio-behavioral sciences appropriate to his field of study as well as the proof – based implementation of this awareness to patient care.	1.1.2- النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة
2-1-B- Explain fundamentals of scientific medicine, clinical research, methods, tools and ethics.	2.1.2- أساسيات ومنهجيات وأخلاقيات البحث العلمي وأدواته المختلفة
2-1-C- Mention of ethical, medical, logical concepts and regulations appropriate to his medical parasitology practice	3.1.2- المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص.
2-1-D- Mention of concepts and measures of quality control and enhancement in quality in medical education and medical parasitology practice.	4.1.2- مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص.
2-1-E- Mention of system of healthcare, global health and health policy, topics related to his field, and program values and practices – focused on enhancing patient care in specific medical parasitology health problems.	5.1.2- المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها.
B- ***Intellectual skills***	٢. ٢ المهارات الذهنية
2-2-A- Apply the fundamental and clinically effective sciences relevant for conditions / problem / themes related to medical parasitology	**1.2.2-** تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها.
2-2-B- Reveal a "question" of critical and logical thought-solving "clinical situation approaches related to medical parasitology	**2.2.2-** حل المشاكل المتخصصة استنادا على المعطيات المتاحة
2-2-C- Conduct research studies that add to knowledge.	**3.2.2-** إجراء دراسات بحثية تضيف إلى المعارف.
2-2-D- Drafting of scientific papers.	**4.2.2-** صياغة أوراق علمية.
2-2-E- Risk assessment of professional practices	**5.2.2-** تقييم المخاطر في الممارسات المهنية.

2-2-F- Plan for quality improvement in the field of medical education and clinical practice in his specialty.	**6.2.2-** التخطيط لتطوير الأداء في مجال التخصص.
2-2-G-- Develop / develop plans, systems and other performance enhancement concerns in his practice.	**7.2.2** اتخاذ القرارات المهنية في سياقات مهنية مختلفة .
2-2-H- Creativity / innovation in the field of specialty.	**8.2.2-** .الإبداع/ الابتكار.
2-2-I- -- Revise management strategies and solutions in medical parasitology field	**9.2.2-** الحوار والنقاش المبني على البراهين والأدلة.
C- Professional and practical skills	٢. ٣ المهارات المهنية
2-3-1-A- Provide a caring, reasonable and efficient standard of patient care for the treatment of health problems and for health promotion. P.s. Extensive level means an in-depth understanding of basic science to evidence-clinical implementation and skills-based management of all practical problems independently. **2-3-1-B-** Offer good comprehensive care for patients with all specific conditions and for uncomplicated field procedures **2-3-1-C-** Include an extensive level of patient safety for non-routine, complex and difficult patients and in extremely difficult conditions, while showing compassion, adequacy and effectiveness. **2-3-1-D-** Run diagnostic and therapeutic procedures that are considered important in medical parasitology **2-3-1-E-** Control unforeseen problems, thereby showing concern and attention to the needs and concerns of patients. **2-3-1-F-** Communicate effectively and display compassionate and supportive attitudes in circumstances related to medical parasitology	**1.3.2-** إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.

when communicating with patients.	
2-3-1-G- Acquire important and reliable knowledge about the conditions applicable to medical parasitology field	**2.3.2-** كتابة وتقييم التقارير المهنية.
2-3-1-H Make better decisions on diagnostic and therapeutic measures based on patient information and inclinations, up-to-date scientific proof and clinical decision on conditions associated with medical parasitology **2-3-1-I-** Design and implement patient care plans for conditions specific to medical parasitology	**3.3.2-** تقييم وتطوير الطرق والأدوات القائمة في مجال التخصص.
2-3-1-J-.Use information technology to support patient care decisions and patient education in all medical parasitology related clinical situations. **2-3-1-k-** Supply health care services to avoid health problems related to medical parasitology.	**4.3.2-** استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية.
2-3-1-l- Lead health care professionals to provide patient-focused care in situations related to medical parasitology including those from other disciplines.	**5.3.2-** التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين.
D- ***General and transferable skills***	٢. ٤ المهارات العامة والمنتقلة
2-3-2-A- Demonstrate the competency of continuous evaluation of different types of care provision to patients in the different area of medical parasitology **2-3-2-B-** Appraise scientific evidence. **2-3-2-C--** A continual enhancement in patient care focused on constant self-assessment and lifelong learning. **2-3-2-D**. -- Participate in research and clinical assessment projects	**1.4.2-** التواصل الفعال بأنواعه المختلفة.

2-3-2-E- Practice Evidence-based Medicine (EBM) skills. **2-3-2-G-** Design logbooks.	
2-3-2-H- Development of medical guidelines and standard management protocols. **2-3-2-I-** Appraise facts specific to the physicians from scientific health problems studies .	**2.4.2-** استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسة المهنية.
2-3-2-J- Connect experience of styles of research and statistical methods to the evaluation of clinical trials and Educate and evaluate all members related to the field.	**3.4.2-** تعليم الآخرين وتقييم أداءهم.
2-3-2-K- Use information technology to manage information, access on- line medical information; for the important topics.	**4.4.2-** التقييم الذاتي والتعلم المستمر
2-3-2-L Use different sources to obtain information and knowledge	**5.4.2-** استخدام المصادر المختلفة للحصول على المعلومات والمعارف.
2-3-2-M Lead health care professionals to provide patient-focused care in situations related to medical parasitology including those from other disciplines.	**6.4.2-** العمل في فريق وقيادة فرق العمل.
2-3-2-N- Interpersonal and communication skills mastering resulting in successful communication and cooperation with patients, their friends, and medical professionals **2-3-2-O-** Establish and maintain a therapeutically and ethically sound relationship with patients. **2-3-2-P**- Using powerful nonverbal, informative, questioning and writing skills to request and provide information. **2-3-2-Q-** Work effectively with others as a health care team member or representative, or other professional group. **2-3-2-R-** Prove respect, compassion and integrity; respond to patient and social needs.	**7.4.2-** ادارة اللقاءات العلمية والقدرة علي إدارة الوقت..

III- Program ILOs Versus Courses ILOs

	Courses	Program ILOs			
		A-Knowledge and understanding	**B-** Intellectual skills	**C-** Professional and Practical skills	**D-** General and Transferable skills
1	**Applied Biostatistics and Computer use**	-A1- Mention sufficient knowledge of the parasites affecting human beings all over the world and zoonosis. A2- Define the geographical distribution and life cycle of each, inside and outside the body..	b3- Differentiate between parasites inhabiting the same geographical location B6- Select from the different diagnostic tools the ones that help help reaching a final diagnosis in the field of medical parasitology.	c1- Identify the infective and the diagnostic stages of the parasites	d1 Use appropriate computer program packages. D3 Present reports in seminars effectively. d7- Collect data from medical centers and patients.
2	**Research methods for health services**	a1. Define terms of research methodology a2. Describe the spectrum of research methodology a3. Explain the strategies and design of researches a4. Describe the sampling methods a5. List at least four types of study design a6. Describe the study design, uses, and limitations a7. Define causation and association a8. Describe bias and confounding a9. Explain evidence	b1. Apply research methods to different community health problems b2. Identify and collect data variables impacting health and disease b3. Apply appropriate research strategies for use b4. Select and use appropriate research methods b5. Advocate	c1. Perform a research proposal for community diagnosis c2. Design questionnaires c3. Conduct researches c4. Diagnose bias and confounding factors c5. Detect association and causation	d1. Use standard computer programs for statistical analysis effectively. d2. Utilize computers in conducting researches. d3. Manage a group of data entry d4. Analyze and interpret data

		based Medicine a10. Calculate different samples sizes a11. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests a12. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values a13. Define the sources of data and methods of collection a14. Describe five sampling techniques and list at least three advantages of sampling a15. Summarize data, construct tables and graphs a16. Calculate measures of central tendency and measures of dispersion a17. Describe the normal curves and its uses a18. Interpret selected tests of significance and the inferences obtained from such tests a19. Build a model explaining the research methods and analysis of determinants of human diseases and health problems	appropriately in the research design b6. Activate and mobilize the community toward evidence based medicine		
3	**Microbiology and immunology**	A1- List the microorganisms affecting human beings all over the world particularly those related to parasites. A2- Describe the metabolism and genetics of organisms.	b1- Differentiate between the different microorganisms (Bacteria, viruses and fungi) B2- Differentiate between the	c1 Recognize micro-organisms on morphological bases. c2 Identify and perform the methods of staining,	D1-.Use the computer and internet to gather scientific informations. D2- Practice group co-ordination.

		A3- Describe the pathology, clinical symptoms and complications of each disease. A4- Summarize the laboratory tests needed for diagnosis of each case. A5- Name some of the drugs and instructions used for treatment of each case. A6- Describe some infection control methods A7- Describe the structure and function of immune system	different types of bacteria on the bases of staining and culturing methods. b3- Differentiate between organisms affecting the same body parts	culturing and biochemical reactions c3 Recognize and perform some serological tests used in diagnosis. c4 Handle of samples. demonstrating compassionate, appropriate and effective care.	
5	**Genetics**	a1: List and identify the stages of mitosis and meiosis, as well as the cell cycle, and explain the significance of each a.2: Know the chemical nature of genetic material (DNA & RNA) a.3: Know how the DNA is organized to serve as genetic materials (gene and genome) a.4: Know the normal chromosome (structure & number). a.5: Understand how the genetic information	b1-Integrate and evaluate genetic information and data from a variety of sources in order to gain a coherent understanding of theory and practice. b2- Find and evaluate new solutions to many kinds of Genetic problems	C1- Self-confidence. C2. Think scientifically. C3. Create the tendency to apply the knowledge in the clinical fields..	d- Plain research projects.

		transferred to RNA during the process of transcription. a.6: Identify the genetic code a.7: Know the translation of genetic information on mRNA into polypeptide chains .. 8: Understand gene mutation and DNA repair on the molecular levels. a.9: Identify chromosomal numerical and structural aberrations. a.10: know the basic concepts of Mendelian and non Mendelian inheritance. a.11: Identify the various types of chromosomal disorders and biochemical genetics. a.12: Understand the new concepts of DNA technology. A13: Gain the knowledge of the use of this technology in the advances disease diagnosis.			
6	**Medical Parasitology**	A1.Gain sufficient knowledge of the parasites affecting human beings all over the world and zoonosis. A2.Understand the geographical distribution and life cycle of each, inside and outside the body. A3.Differentiate between parasites on morphological bases. A4.Have the knowledge to recognize the pathology, clinical	B1.Differentiate between parasites affecting the same organ. B2.Differentiate between parasites present in the same sample. B3.Differentiate between parasites inhabiting the same geographical	c1.Identify the infective and the diagnostic stages of the parasites C2.Identify different stages of the parasites. C3.Identify some of the medically important intermediate host especially those present in Egypt.	D1.Use the computer to enter parasitological web sites. d2.Collect scientific data from the computer. d3. Work in groups, as a leader or as a college. D4.Collect data from medical canters and

		symptoms and complications of each parasite. A5.Have the knowledge of the recommended laboratory tests needed for diagnosis of each case. . A6.Have the knowledge of some of the drugs and instructions used for treating each case. A7.Have the knowledge about control methods used against parasites. A8.Have sufficient knowledge about snails and their medical importance, especially of Egypt. a9.Have the knowledge of parasitic immunity basis	location. B4.Criticize in a scientific pattern at least 15 published papers in the different branches of Medical Parasitology (parasite distribution and public health or statistics, lab. Animals and pathology of parasites or drugs, parasites and immunology, snails….etc	C4.Perform some laboratory tests available in the department lab. C5.Perform available immunological tests. C6.Deal with lab animals: infecting, sacrifice, dissecting and examining. C7.collecting and rearing of snails or medically important arthropods. c8.A box of at least 75 prepared slides of different entities are required. c9.Attending and participating in scientific conferences, meetings, workshops and thesis discussion that update relevant recent topics in molecular biology, relevant biochemical and geno-typing of parasites, and emerging parasitic problems	patients. D5.Compile a review article about a specific subject. (90 hs.)

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