

جامعة أم القرى

كلية الطب

الدبلوم العالي في طب الأمراض المدارية

4. Learning and Teaching

4/1 Learning Outcomes and Graduate Specifications

4/1/1 Main tracks or specializations covered by the program:

(a) Applied Medical Sciences

(b) Medicine and surgery

4/1/2 Curriculum Study Plan Table

Level	Course Code	Course Title	Required or Elective	Prerequisite Courses	Credit Hours
Level 1	0105501/A	Fundamentals of Lab Diagnostics	None	Bachelor degree in Medicine or Applied Medical Sciences	7
Level 2	0105501/B	Laboratory Diagnosis of Parasitic Tropical diseases	None	Bachelor degree in Medicine or Applied Medical Sciences	8
Level 3	0105501/C	Laboratory Diagnosis of Bacterial and viral Tropical diseases	None	Bachelor degree in Medicine or Applied Medical Sciences	8
Level 4		Research essay proposal	None	Bachelor degree in Medicine or Applied Medical Sciences	5

4/1/4. Course Specification:

COURSE SPECIFICATIONS Form

Course Title: Fundamentals of Lab Diagnostics

Course Code. **0105501/A**

Date: .2018	Institution:. Umm Al Qura University ..
College: .Faculty of Medicine.	Department: Medical Parasitology.

A. Course Identification and General Information

1. Course title and code: Fundamentals of Lab Diagnostics
2. Credit hours: 7
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Laboratory Diagnosis of Tropical Diseases
4. Name of faculty member responsible for the course Rowaida Bakri
5. Level/year at which this course is offered: Post-graduate
6. Pre-requisites for this course (if any): Bachelor in Medicine or Applied Medical Sciences
7. Co-requisites for this course (if any):
8. Location if not on main campus:
6. Mode of Instruction (mark all that apply):
a. Traditional classroom <input type="checkbox"/> percentage? <input type="checkbox"/>
b. Blended (traditional and online) <input type="checkbox"/> percentage? <input type="checkbox" value="100"/>
c. E-learning <input type="checkbox"/> percentage? <input type="checkbox"/>
d. Correspondence <input type="checkbox"/> percentage? <input type="checkbox"/>
f. Other <input type="checkbox"/> percentage? <input type="checkbox"/>
Comments:

B Objectives

1. The main objective of this course

Provide students with theoretical and practical skills for basics and fundamentals of laboratory diagnostic techniques.

2. Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field):

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description:

This **Fundamentals of Lab Diagnostics** course will provide students with understanding of tropical diseases of humans, especially those caused by parasites, bacteria and viruses. The course will include lectures and practical applications focused on the principles of routine and up to date classical, immunological, and molecular diagnostic approaches in the detection of different types of tropical diseases.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
1. Laboratory hazards and biosafety measures in in Laboratory	1	6
2. Quality assurance measures in diagnostic laboratories	2	12
3. Collection and preservation of biological specimens	2	12
4. Microscopic examination of samples	3	18
5. Concentration techniques of stool samples	1	6
6. Culture (Protozoa, Viruses and Bacteria)	3	18
7. Urine examination	1	6
8. Blood and CSF examination	4	24
9. Immuno-electrophoresis techniques	1	6
10. Immuno- florescence techniques	1	6
11. ELISA techniques	2	12
12. Indirect haemagglutination and other agglutination techniques	1	6
13. Rapid diagnostic immune-tests	2	12
14. Principals of genomic techniques	4	24
15. Nucleic acids structure and function	2	12
16. DNA amplification and applications in diagnosis	2	12
17. Principles and application of genotyping methods	2	12
18. How to write a full report after examination.	2	12

2. Course components (total contact and credit hours per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planned				6 X 36 W		216
	Actual						
Credit	Planned				3.6 X2 semesters		7.2
	Actual						

3. Individual study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Recall information concerning tropical diseases.	Laboratory and practical	Continuous assessment
1.2	Understanding the principles of laboratory techniques applied for tropical diseases	Laboratory and practical	Continuous assessment
2.0	Cognitive Skills		
2.1	Apply universal biosafety measures in medical diagnostic laboratories	Laboratory and practical	Continuous assessment
2.2	Apply adequate laboratory diagnostic tools for each tropical infection.	Laboratory and practical	Continuous assessment
2.3	Investigate appropriate method to solve unexpected laboratory complications.	Laboratory and practical	Continuous assessment
3.0	Interpersonal Skills & Responsibility		
3.1	Take responsibility for their own learning and continuing professional development	Laboratory and	Continuous assessment

		practical	
3.2	Work effectively in teams so that the task, results, and analysis can be shared.	Laboratory and practical	Task Based Assessment
3.2	Effectively manage time and tasks allowing concurrent and/or overlapping tasks to be done simultaneously, by individuals and/or within a group.	Laboratory and practical	Task Based Assessment
4.0	Communication, Information Technology, Numerical		
4.1	Discuss and present laboratory results and findings.	Laboratory and practical	Continuous assessment
4.2	Communicate efficiently in oral and written form.	Laboratory and practical	Continuous assessment
4.3	Make use of IT for statistical analysis and results communication	Laboratory and practical	Continuous assessment
5.0	Psychomotor(if any)		
5.1	Utilize safety protective equipment and devices.	Laboratory and practical	Practical exam
5.2	Perform laboratory tests.	Laboratory and practical	Practical exam

5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Formative practical exam	12	0%
3	Practical exam	15	20%
4	Practical exam	30	20%
5	Final practical exam	40	60%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Through office hours of each staff member

E Learning Resources

1. List Required Textbooks

Diagnostic Medical Parasitology by Lynne S. Garcia 2016

Clinical immunology and serology: A Laboratory perspective 2016

By Christine Dorresteyn Stevens and Linda E. Miller.

2. List Essential References Materials (Journals, Reports, etc.)

Journal of Immunological Techniques & Infectious Diseases. Experimental Parasitology

..... etc

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

The Saudi digital library

<https://www.sdl.edu.sa/SDLPortal/en/Publishers.aspx>

Saudi Digital Library - المكتبة الرقمية السعودية

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

2 Classrooms and 2 labs (for male and female candidates).

2. Technology resources (AV, data show, Smart Board, software, etc.)

2 Data shows, Smart Board and Software.

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

We already have a well-equipped lab in male section which can be used for both male and female candidates in alternate times.

G Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching

Student's Feedback on Effectiveness of Teaching via online Google questionnaires and write their own reflection on the course.

2. Other Strategies for Evaluation of Teaching by the Instructor or the Department

Peer evaluation

3. Procedures for Teaching Development

In accordance to the Student's Suggestions, we are going to analyze the collected data and an action plan for improvement will be designed consequently.

4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)

3 members of the course will evaluate each student independently and average will be calculated for each candidate.

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.

Reviewing students' feedback questionnaires and faculty members' self-assessment questionnaires and gathering this particular data intended for foreseeable future program improvement strategy.

Name of Course Instructor: Dr. Rowaida Bakri

Signature: *Rowaida Bakri*

Date Completed: 11.11.2018

Program Coordinator: Mohamed Mohamed Amin EL-Malky

Signature: *Mohamed EL-Malky*

Date Received: 11.11.2018

Course Title: Laboratory Diagnosis of Parasitic Tropical Diseases

Course Code. 0105501/B

Date: 2018.

Institution: UQU University.

College: .Faculty of Medicine.

Department: Medical Parasitology.

A. Course Identification and General Information

1. Course title and code: **Laboratory Diagnosis of Parasitic Tropical Diseases**

2. Credit hours:

3. Program(s) in which the course is offered. **Laboratory Diagnosis of Tropical Diseases**

(If general elective available in many programs indicate this rather than list programs)

4. Name of faculty member responsible for the course: **Dr. Rowaida Bakri**

5. Level/year at which this course is offered: Post graduate

6. Pre-requisites for this course (if any): **Bachelor in Medicine or Applied Medical Sciences**

7. Co-requisites for this course (if any): Research project in the form of an essay.

8. Location if not on main campus:

9. Mode of Instruction (mark all that apply):

a. Traditional classroom	<input type="text"/>	percentage?	<input type="text"/>
b. Blended (traditional and online)	70	percentage?	<input type="text"/>
c. E-learning	<input type="text"/>	percentage?	<input type="text"/>
d. Correspondence	<input type="text"/>	percentage?	<input type="text"/>
f. Other	30	percentage?	<input type="text"/>

Comments:

B Objectives

1. The main objective of this course:

Provide the theoretical and practical skills in Tropical Parasitic Diseases Diagnostics required to work in medical laboratories or **wished to enter employment in disease surveillance programs.**

2. Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field)

C. Course Description Note: General description in the form used in the program's bulletin or handbook)

Course Description:

The course of Tropical Parasitic Diseases Diagnostics aimed at graduate of Medical schools and Applied Medical Science schools wishing to enrich their knowledge and experience. The course will include lectures and practical applications focused on the principles and applications of routine, immunological and molecular diagnostics in the detection of different types of Tropical Parasitic Diseases **and their vectors (if any).**

To keep up-to-date of the developments and to maintain the standards of medical laboratories in this country is to provide qualified and trained Saudi candidates

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Malaria	4	16
Trypanosomiasis	2	8
Leishmaniasis	3	12
Toxoplasmosis	2	8
Intestinal protozoa	4	16
Trichomonas	1	4
Schistosomiasis	3	12
Food borne trematodes	3	12
Filariasis	2	8
Soil transmitted helminthes	2	8
Cestode infections	4	16

Identification of mosquitoes of medical importance (Anopheles, Ades and Culex)	1	4
Identification of flies of medical importance (as a cause of Myasis)	1	4
Identification of fleas as a vector for disease transmission (Identification of order Hemiptera of medical importance) (Cimex and winged bug)	1	4
(Identification of order Anoplura of medical importance) (Pediculus and Phthirus pubis)	1	4
Sarcoptes scabiei and scabies	1	4

2. Course components (total contact and credit hours per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planned	2X 36 W			2 X 36 W		144
	Actual						
Credit	Planned	2X2 Semesters			2X2 Semesters		8
	Actual						

3. Individual study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

NQF Learning Domains	Course Teaching	Course Assessment
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	And Course Learning Outcomes	Strategies	Methods
1.0	Knowledge		
1.1	Define common human parasitic tropical disease	Interactive lectures and tutorial	Continuous assessment
1.2	Recognize clinical picture and diagnosis of common human parasites.	Interactive lectures and tutorial	Continuous assessment
2.0	Cognitive Skills		
2.1	Analyze, reorganize, reasoning and interpreting data collected from educational sources	Interactive lectures and tutorial	Oral discussion and questions during the Interactive lectures and laboratory
2.2	Justify, interpret and recognize the proper diagnosis with adequate tools	Interactive lectures and tutorial	Oral discussion and questions during the Interactive lectures and laboratory
3.0	Interpersonal Skills & Responsibility		
3.1	Illustrate the spirit to work harmoniously in a group with minimal or non-supervision during preparation of samples under analysis with the ability to analyze results with others	Team activity: group assignments requiring investigation using internet, library and lab resources as a means of developing self-study skills.	Oral discussion and questions during the laboratory hours
3.2	Appraise self-learning	self	written essay
4.0	Communication, Information Technology, Numerical		
4.1	Demonstrate written and oral response in essay preparations	Self and follow up by supervisors	written essay
4.2	Illustrate written reports that require language and writing abilities, formatting style, and promote a proper usage of ICT.	Self and follow up by supervisors	written essay
5.0	Psychomotor		
5.1	Construct and demonstrate proper seminar presentation.	self	Oral presentation

5.2	Distinguish different samples provided to him	Practical classes	Practical exams
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5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Formative quiz	16	0 %
2	Quiz 1	20	20 %
3	Quiz 2	34	20 %
4	Final exam	40	60 %

Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Through office hours of each staff member

E Learning Resources

1. List Required Textbooks

Manson s Tropical Diseases

Peters and Pasvol Atlas of Tropical Medicine and Parasitology

2. List Essential References Materials (Journals, Reports, etc.)

All tropical journals

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

Online, PubMed, science direct, research gate, ect

The Saudi digital library

<https://www.sdl.edu.sa/SDLPortal/en/Publishers.aspx>

Saudi Digital Library - المكتبة الرقمية السعودية

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

2 classrooms and 2 labs (for male and female candidates)

2. Technology resources (AV, data show, Smart Board, software, etc.)

2 data show, smart board

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

We already have a well-equipped lab in male section which can be used for both male and female candidates in alternate times.

G Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching

Student's Feedback on Effectiveness of Teaching via online Google questionnaires

2. Other Strategies for Evaluation of Teaching by the Instructor or the Department

Peer evaluation

3. Procedures for Teaching Development.

According to the Student's Feedback, we will analyze the collected data and an action plan for improvement will be constructed accordingly.

4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)

3 members of the course will evaluate each student independently and average will be calculated for each candidate.

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.

- **Reviewing students' feedback questionnaires and faculty members' self-assessment questionnaires.**

Name of Course Instructor: Dr. Rowaida Bakri

Signature: *Rowaida Bakri*

Date Completed: 6.10.2018

Program Coordinator: Mohamed Mohamed Amin EL-Malky

Signature: *Mohamed EL-Malky*

Date Received: 6.10.2018

COURSE SPECIFICATIONS

Form

Course Title: **Laboratory Diagnosis of Tropical Viral and Bacterial Diseases**

Course Code: **0105501/C.**

Date: 2018.

Institution: UQU University.

College: .Faculty of Medicine.

Department: Medical Microbiology.

A. Course Identification and General Information

1. Course title and code: **Laboratory Diagnosis of Tropical Viral and Bacterial Diseases**

2. Credit hours:

3. Program(s) in which the course is offered. **Laboratory Diagnosis of Tropical Diseases**

(If general elective available in many programs indicate this rather than list programs)

4. Name of faculty member responsible for the course: **Dr Sami Ashgar**

5. Level/year at which this course is offered: Post graduate

6. Pre-requisites for this course (if any): **Bachelor in Medicine or Applied Medical Sciences**

7. Co-requisites for this course (if any): Research project in the form of an essay.

8. Location if not on main campus:

9. Mode of Instruction (mark all that apply):

a. Traditional classroom	<input type="checkbox"/>	percentage?	<input type="checkbox"/>
b. Blended (traditional and online)	<input checked="" type="checkbox"/>	percentage?	70
c. E-learning	<input checked="" type="checkbox"/>	percentage?	20
d. Correspondence	<input checked="" type="checkbox"/>	percentage?	10
f. Other	<input type="checkbox"/>	percentage?	<input type="checkbox"/>

Comments:

B Objectives

1. Provide the theoretical and practical skills in Tropical Viral and Bacterial Diseases Diagnostics required to work in medical laboratories. (Main objective).
2. Discuss medical and molecular aspects of viruses and Bacteria.
3. Know about the emerging tropical viral and Bacterial infections.
4. Recognize methods for laboratory culture and staining for detection of viruses and bacteria and to describe the morphologies and growth forms of bacterial pathogens in clinical specimens.
5. Know the physical and chemical methods of sterilization and disinfection, methods for identification and isolation of pure cultures.
6. Acquire academic and practical skills necessary to make independent, informed judgments.
7. Recognize the essential properties of clinical specimens that are important for pathogen identification and hazards associated with handling infected clinical specimens.

2. Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field)

The course contents are derived from the knowledge of established material available in textbooks, online reference material and availability of new research data as to date. This course will continue to evolve in the outcome of its objectives with changes made with its contents and presentation methods to provide the students with a comprehensive knowledge of viruses and bacteria and its diagnosis.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description:

The Laboratory Diagnosis of Tropical Viral and Bacterial Diseases course aimed at graduate of Medical schools and Applied Medical Science schools wishing to enrich their knowledge and experience. The course will include lectures and practical applications focused on the principles and applications of routine, immunological and molecular diagnostics in the detection of different types of Tropical Bacterial Diseases. Moreover, the course provides learning opportunities in tropical viral and bacterial diseases. As a base It covers basic principles of aseptic practice, physical and chemical methods of sterilization and disinfection, methods for identification and isolation of pure cultures and the role of the human body's normal microflora. This course extends its scope to understand the involvement of viruses and bacteria in tropical human diseases with respect to infections such as Viral hepatitis, HIV, Dengue, cholera, tuberculosis, leprosy, gastroenteritis caused by salmonella and shigella. and explain the methods of diagnosis and keep up-to-date of the developments and to maintain the standards of medical laboratories in this country is to provide qualified and trained Saudi candidates.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Introduction to virology	2	8
Viral replication, epidemiology and pathogenesis	2	8
Immune response to viral infections	1	4
Common tropical viral diseases (I)	2	8
Common tropical viral diseases (II)	2	8
Common tropical viral diseases (III)	2	8
Diagnosis of viral infection: viral isolation and microscopy	2	8
Serological diagnosis of viral infections	2	8
Molecular diagnosis of viral infections	2	8
Control, Treatment and Prevention of viral infections	2	8
Basic principles of microbiology	2	8
Sterilization and disinfection	1	4
cholera	2	8
Salmonella and shigella infections	2	8
Tuberculosis	2	8
Leprosy	1	4
tetanus	1	4
leptospirosis	1	4
plague	1	4
Brucellosis	1	4
Meningococcal disease	1	4
MERS	1	4
Prevention of tropical bacterial disease	1	4

2. Course components (total contact and credit hours per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planned	2X 36 W			2 X 36 W		144
	Actual						
Credit	Planned	2X2 Semesters			2X2 Semesters		8
	Actual						

3. Individual study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Identify the common viruses and bacteria that cause tropical infections and approaches used to study its pathogenesis. Describe how these viruses and bacteria can evoke immune response.	Interactive Lecture Participated Discussion	Midterm quizzes and Comprehensive written exam
1.2	Recognize clinical picture and diagnosis of common human tropical diseases caused by viruses and bacteria.	Interactive lectures and tutorial	Continuous assessment
1.3	Prevention of the common tropical viral infections such as hepatitis, Dengue, HIV,	Interactive lectures and tutorial	Continuous assessment

	cholera , salmonella and shigella etc		
2.0	Cognitive Skills		
2.1	Analyze, reorganize, reasoning and interpreting data collected from educational sources	Interactive lectures and tutorial	Oral discussion and questions during the Interactive lectures and laboratory
2.2	Justify, interpret and recognize the proper diagnosis with adequate tools	Interactive lectures and tutorial	Oral discussion and questions during the Interactive lectures and laboratory
3.0	Interpersonal Skills & Responsibility		
3.1	Illustrate the spirit to work harmoniously in a group with minimal or non-supervision during preparation of samples under analysis with the ability to analyze results with others	Team activity: group assignments requiring investigation using internet, library and lab resources as a means of developing self-study skills.	Oral discussion and questions during the laboratory hours
3.2	Appraise self-learning	self	written essay
4.0	Communication, Information Technology, Numerical		
4.1	Demonstrate written and oral response in essay preparations	Self and follow up by supervisors	written essay
4.2	Illustrate written reports that require language and writing abilities, formatting style, and promote a proper usage of ICT.	Self and follow up by supervisors	written essay
5.0	Psychomotor		
5.1	Construct and demonstrate proper seminar presentation.	self	Oral presentation

5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Formative quiz	18	0 %
2	Quiz 1	22	20 %
3	Quiz 2	36	20 %
4	Final exam	40	60 %

Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Through office hours of each staff member

E Learning Resources

4. List Required Textbooks

- Medical microbiology, 6th eds. (2009), by P.R. Murray, K.S. Rosenthal & M. A. Pfaller. MOSBY-ELSEVIER.
- David Greenwood, Medical Microbiology, 2012, 18th Edition, Churchill Livingstone.
- Human Virology, 5th eds. (2017), by J. Oxford, P. Kellam, and L. Collier.

5. List Essential References Materials (Journals, Reports, etc.)

All microbiology journals

6. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

Online, PubMed, science direct, research gate, ect

The Saudi digital library

<https://www.sdl.edu.sa/SDLPortal/en/Publishers.aspx>

Saudi Digital Library - المكتبة الرقمية السعودية

7. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

2 classrooms and 2 labs (for male and female candidates)

2. Technology resources (AV, data show, Smart Board, software, etc.)

2 data show

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

We already have a well-equipped lab in male section which can be used for both male and female candidates in alternate times.

G Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching

Student's Feedback on Effectiveness of Teaching via online Google questionnaires

1. Other Strategies for Evaluation of Teaching by the Instructor or the Department

Peer evaluation

2. Procedures for Teaching Development.

According to the Student's Feedback, we will analyze the collected data and an action plan for improvement will be constructed accordingly.

4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)

3 members of the course will evaluate each student independently and average will be calculated for each candidate.

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.

- **Reviewing students' feedback questionnaires and faculty members' self-assessment questionnaires.**

Name of Course Instructor: Dr Sami Ashgar

Signature: *Sami Ashgar*

Date Completed: 15.11.2018

Program Coordinator: Mohamed Mohamed Amin EL-Malky

Signature: *Mohamed EL-Malky*

Date Received: 15.11.2018

4/1/5 Learning Outcomes in Domains of Learning, Assessment Methods and Teaching Strategy:

4/1/5/1 Matrix of Learning Outcomes, Teaching Strategies and Assessment Methods

	NQF Learning Domains and Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Understanding the principles of laboratory techniques applied for tropical diseases	Laboratory and practical	Continuous assessment
1.2	Define common human tropical disease	Interactive lectures and tutorial	Continuous assessment
1.3	Recognize clinical picture and diagnosis of common human tropical disease.	Interactive lectures and tutorial	Continuous assessment
1.4	Identify the approaches used to study the pathogenesis of tropical diseases. Describe how these pathogens can evoke immune response.	Interactive Lecture Participated Discussion	Midterm quizzes and Comprehensive written exam
2.0	Cognitive Skills		
2.1	Apply universal biosafety measures in medical diagnostic laboratories	Laboratory and practical	Oral small group Discussion
2.2	Apply adequate laboratory diagnostic tools for each tropical infection.	Laboratory and practical	Oral small group Discussion
2.3	Investigate appropriate method to solve unexpected laboratory complications.	Laboratory and practical	
2.4	Analyze, reorganize, reasoning and interpreting data collected from educational sources	Interactive lectures and tutorial	Oral discussion and questions during the Interactive lectures and laboratory
2.5	Justify, interpret and recognize the proper diagnosis with adequate tools	Interactive lectures and tutorial	Oral discussion and questions during the Interactive lectures and laboratory
3.0	Interpersonal Skills & Responsibility		
3.1	Take responsibility for their own learning and continuing professional development	Laboratory and practical	
3.2	Work effectively in teams so that the task, results, and analysis can be shared.	Laboratory and practical	Task Based Assessment