ATTACHMENT 5.

T6. COURSE SPECIFICATIONS (CS)

هيئة تقويم التعليم
Education Evaluation Commission

Course Specifications

Institution: **University of Tabuk**	Date: **15/08/1440 H**
College/Department : **Science/Biology**	

A. Course Identification and General Information

1. Course title and code: **General Microbiology (BIO 231)**
2. Credit hours: **3**
3. Program(s) in which the course is offered.
(If general elective available in many programs indicate this rather than list programs)
Biology Program
4. Name of faculty member responsible for the course
5. Level/year at which this course is offered: **5**
6. Pre-requisites for this course (if any): **Biology (2) BIO 202**
7. Co-requisites for this course (if any): **None**
8. Location if not on main campus: **N.A.**
9. Mode of Instruction (mark all that apply):

a. traditional classroom	√	What percentage?	75%
b. blended (traditional and online)		What percentage?	
c. e-learning		What percentage?	
d. correspondence		What percentage?	
f. other (Lab work)	√	What percentage?	25%

Comments:

B Objectives

1. What is the main purpose for this course?

Have knowledge about the microbiology science
- Study the different systems of classification of microorganisms
- Study the mode of action of each group of microorganisms
- Describe the different types of pathogenic microorganisms
- Identify the different shapes of bacteria
- Identify the different groups of fungi
- Have knowledge about the se4xual and asexual reproduction of fungi

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
- Updating the course with latest curriculum developments in the field.
- Annual review of the laboratory sessions and re-developed with recent.
- Comparison of course topics with equivalent local and international courses.
- Annual review of course by departmental course planning committee.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

- The course includes the systems of classification of living organisms-Sources of microorganisms- Importance of microorganisms (in industry, in medicine and in agriculture)-Growth of microorganisms-Factors affecting growth- Viruses (Structure, classification, Bacteriophage, Cultivation, Purification, and reproduction)-Bacteria (Structure, Shape, Motility, Staining, Spores in bacteria,)- Fungi (general characters, structure of fungal cell, reproduction, sexual and asexual reproduction, classification, Oomycota, Zygomycota, Ascomycota, Basidiomycota).

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Systems of classification of living organisms	1	3
Sources of microorganisms	1	3
Importance of microorganisms	1	3
Growth of microorganisms	1	3
Viruses (structure, Classification, Cultivation and replication	1	3
Viruses (structure, Classification, Cultivation and replication	1	3
Bacteria (Structure, shape, motility and staining)	1	3

Revision and Pre Final Exam		
Mid Term Vacation		
Bacteria (Structure, shape, motility and staining)	1	3
Fungi (General characters, Structure of fungal cell, and reproduction)	1	3
Fungi (General characters, Structure of fungal cell, and reproduction)	1	3
Fungi (Different groups of fungi)	1	3
Fungi (Different groups of fungi)	1	3
Revision		
Final Exam		

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

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planed	26			26		52
	Actual	26			26		52
Credit	Planed	2			1		3
	Actual	2			1		3

3. Additional private study/learning hours expected for students per week. 8

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

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 intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	Differentiate between the different groups of microorganisms. identify bacteria under microscope	Class lecturing, and homework evaluations	Written or oral questioning to assess aspects of specialized knowledge
1.2	identify fungi under microscope, know the	Self-learning and	Activities and

	general characters of the different groups of microorganisms	cooperative learning	homework evaluations
2.0	**Cognitive Skills**		
2.1	Examine and describe the different groups of microorganisms.	Use of microscopic illustrations	Written theory and practical exam
2.2	Distinguish taxonomically between the different genera of each group.	- Laboratory training -Activities and homework	Oral presentation through the discussion of each item
3.0	**Interpersonal Skills & Responsibility**		
3.1	Show work in a team and independently to conduct a specific project	Conducting discussion skill tutorial sessions	Evaluating the trip team work
3.2	Evaluate student improve acceptance skill from other during discussion	Work as part of a team.	
4.0	**Communication, Information Technology, Numerical**		
4.1	Not Applicable	Not Applicable	Not Applicable
4.2			
5.0	**Psychomotor**		
5.1	Not Applicable	Not Applicable	Not Applicable
5.2			

5. Schedule of Assessment Tasks 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	Quiz	5	10%
2	Mid-term lab Exam	8	10%
3	Final lab Exam	15	15%
4	Midterm Theory Exam	8	25%
5	Final Theory Exam	16	40%
6			
7			
8			

D. Student Academic Counseling and Support

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

_ Direct supervision by staff member over lab. Sessions.
- Office hours 8hr / week.
- Academic advice (by 20 student / teaching staff member).

E Learning Resources

1. List Required Textbooks General Microbiology 7th edition Hans G. Schlegel
2. List Essential References Materials (Journals, Reports, etc.) - General microbiology journals - International Journal of general microbiology.
3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.
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.) – Lecture room with at least 50 seats
2. Technology resources (AV, data show, Smart Board, software, etc.) - Computing resources (AV, data show, Smart Board, software, etc.) - Data show - Smart board - Av - Networks
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching - Course evaluation by students - Students- teaching members meetings
2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department - Peer consultation on teaching - Departmental council discussions - Discussions within the group of faculty teaching the course
3. Processes for Improvement of Teaching - Conducting workshops given by experts on the teaching and learning methodologies - Using modern microscopes and digital labs. - Periodical departmental revisions of its methods of teaching - Monitoring of teaching activates by senior faculty members
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) − Providing samples of all kind of assessment in the departmental course portfolio of each course - Assigning group of faculty members teaching the same course to grade same questions for various students. Faculty from other institutions are invited to review the accuracy of the grading policy
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. - Comparison of course with equivalent courses. - Reviewing course topics annually by the departmental course committee. - Refreshment of teaching resources to ensure updating of knowledge. - Use of statistics of course evaluation by students to improve the course

Name of Course Instructor: Dr. Doaa Derwish

Signature: *Doaa Derwish* Date Specification Completed: 15/8/1440

Program Coordinator: **Dr. Omar Salem Obeid Bahattab**

Signature: *Omar Bahattab* Date Received:16/8/1440