



المركز الوطني للتقويم والاعتماد الأكاديمي  
National Center for Academic Accreditation and Evaluation

## **ATTACHMENT 5.**

# **T6. COURSE SPECIFICATIONS (CS)**

## Course Specifications

Institution: <b>University of Tabuk</b>	Date: 15/8/1440
College/Department: Science/Biology	

### A. Course Identification and General Information

1. Course title and code: <b>General Biology BIO 101</b>			
2. Credit hours: <b>3</b>			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>This course is required for many programs and many colleges.</b>			
4. Name of faculty member responsible for the course			
5. Level/year at which this course is offered: <b>1</b>			
6. Pre-requisites for this course (if any): <b>None</b>			
7. Co-requisites for this course (if any): <b>None</b>			
8. Location if not on main campus: <b>N.A</b>			
9. Mode of Instruction (mark all that apply):			
a. traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:			

## B Objectives

1. What is the main purpose for this course?

- To provide scientific fundamentals knowledge of biological science to expand the perceptions of students on Biology.
- To develop necessary skills for the study of other scientific courses in subsequent program levels.
- To develop capabilities in students for scientific way of thinking and illustrate the positive impact of the general biology science in daily life.
- To stimulate interest in Biology and Biology-related careers.
- To encourage students understanding the fundamentals of Biology.

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)

- Annual review of the course by the departmental course planning committee.
- Rely on some of the references available on the Internet.
- The use of several education web sites to obtain data about intended general biological terms and definitions.
- Comparison of course curriculum with equivalent national and international courses.

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

Course Description:

- This is an introductory course that includes the study of the chemical composition of organic molecules in the living organisms; structure and the cell cycle as well as the cell proliferation; meiosis and sexual reproduction, then the circulatory system and the cardiovascular system. The digestive system and nutrition, in addition the respiratory and nervous systems. Also, study an overview of the flowering plants and photosynthesis (Photochemical reactions and Calvin cycle).

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Introduction to Biology and plan of the course	1	3
Chemistry of organic molecules	1	3
Cell structure and function , animal and plant cells + Quiz	1	3
The cell cycle and cellular reproduction	1	3

Meiosis and sexual reproduction + Quiz	1	3
Circulation and cardiovascular system	1	3
1 <sup>st</sup> periodical exam		
Mid-term vacation		
Digestive system and nutrition	1	3
Respiratory system + Quiz	1	3
Nervous system	1	3
Flowering plants (structure and organization)	1	3
Photosynthesis (light reactions) + Quiz	1	3
2 <sup>nd</sup> periodical exam		
Photosynthesis (Calvin cycle reactions)	1	3
Revision	1	3
Final exam		

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

	Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	39					39
Credit	3					3

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

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A brief summary of the knowledge or skill the course is intended to develop.

- A description of the teaching strategies to be used in the course to develop that knowledge or skill.
- The methods of student assessment to be used in the course to evaluate learning outcomes in the domain concerned.

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

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching. The National Qualification Framework provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

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. Fourth, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it. Every course is not required to include learning outcomes from each domain.

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.1	Describe plant and animal cells and cell reproduction.	lectures	Direct questions
1.2	State the cell cycle	Group discussion and dialogue	Assignments for collecting photos and diagrams.
1.3	Identify nature and chemistry of organic molecules.	Assigning students to collect information on selected topics	Periodic tests.
1.4	Recognize the main differences between animal and plant cells.		
1.5	Outline cell structure and function.		
1.6	Point out the structure and function of the		
1.7	Recognize the importance of photosynthesis		
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1	Differentiate animal and plant cell.	lectures	In class short MCQs quizzes
2.2	Summarize structure and functions of circulatory, digestive, respiratory, and nervous systems.	Group discussion and dialogue	Oral quiz in each lecture.
2.3	Evaluating performance of the functional efficiency of the organs.	Assigning students to collect information on selected topics.	
2.4	Explain photosynthesis and Calvin reactions.		
2.5	Analyze the physiology of two different functions at cellular level.		
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	Work in groups	Work in groups	Assessment of cooperative ability.

3.2	Respect the views of other students	Using scientific method of thinking in solving problems.	Collective evaluation of student's own performance (collective projects).
3.3	Accept others	Preparing reports collectively	
3.4	Communicating results and data with others		
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1	Demonstration and use of internet and specifically MS office/ presenting small reports on various topics.	Incorporating the use and utilization of computer in the course requirements	Evaluating in class short MCQs quizzes (orally and written)
4.2	e-learning/Report writing/preparing research review etc.	Demonstrating more diagrams on various topics	Major and final exams/Evaluating reports written by students
<b>5.0</b>	<b>Psychomotor</b>		
5.1	Draw sketches and diagrams	lectures	Direct questions
5.2	Labeling blank diagrams	Group discussion and dialogue	Assignments for collecting photos and diagrams.
5.3	Detecting missing labels.		Periodic tests.

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	Short quiz	3	10%
2	1 <sup>st</sup> periodic exam	6	20%
3	2 <sup>nd</sup> periodic exam	12	20%
4	Final exam.	15	50%

#### **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)

- Office hours 8hours/week.
- Academic Guidance: about 35 students per each faculty member.

#### **E Learning Resources**

1. List Required Text books  
Sylvia Mader, (2013) Biology (11th Ed.) ISBN13: 978-0073525501, ISBN10: 0073525502, McGraw-Hill Publishing Company.

2. Biology Compiled by University of Tabuk for first year students.

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

N.A

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.

N.A

## 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. Technology resources (AV, data show, Smart Board, software, etc.) -Wireless connection in the building for students and staff members.-PC in each room -Data show projector for each room
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
N.A

## G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> <li>• Course evaluation by student</li> <li>• Students- faculty meetings</li> </ul>
2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none"> <li>• Peer consultation on teaching</li> <li>• Departmental council discussions</li> <li>• Discussions within the group of faculty teaching the course</li> </ul>
3. Processes for Improvement of Teaching <ul style="list-style-type: none"> <li>• Conducting workshops given by experts on the teaching and learning Methodologies.</li> <li>• Periodical departmental revisions of its methods of teaching</li> <li>• Monitoring of teaching activates by senior faculty members.</li> </ul>
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) <ul style="list-style-type: none"> <li>• Providing samples of all kind of assessment in the departmental course portfolio of each course</li> <li>• Assigning group of faculty members teaching the same course to grade same questions for various students. Staff members from other institutions are invited to review the accuracy of the grading policy.</li> </ul>
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none"> <li>• Comparing course content with other courses of similar institutions.</li> </ul>



- Review the topics scheduled annually by the Committee for the development of courses the department.
- Revision of the learning resources to ensure updated knowledge.
- Using the statistics of student's course evaluation to improve the quality of course content.

Name of Course Instructor: Dr. Abdelrahim Adam Elbalola

Signature: *Abdelrahim A. Elbalola* Date Specification Completed: 15/8/1440

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

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