

Course Specification

(Bachelor)

Course Title **Anatomy and embryology**

Course Code **MID26241**

Program: **Bachelor of Midwifery Sciences**

Department: **Nursing**

College: **Applied Medical Science**

Institution: **University of Bisha**

Version: **1**

Last Revision Date: **30 July 2023**





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A. General information about the course:

1. Course Identification

1. Credit hours: 2(2+0)

2. Course type

A. ☐ University ☐ College ☒ Department ☐ Track ☐ Others
B. ☒ Required ☐ Elective

3. Level/year at which this course is offered: (4th level / 2nd year)

4. Course general Description:

This course will enable students to explore early development in human with emphasize on embryonic and fetal development from fertilization to birth. This course focuses on the morphological changes that take place during development and it is medical implications. Underlying molecular mechanisms and relevant congenital anomalies may be briefly considered.

5. Pre-requirements for this course (if any):

NA

6. Pre-requirements for this course (if any):

NA

7. Course Main Objective(s):

This course addresses the developmental events during all stages of prenatal development and emphasize human development. Students will study the normal cellular and molecular events associated with development. In addition, examine abnormal development and teratological defects to understand how and why things go wrong during development. Through consideration of birth defects and teratology, the fundamental relationship between structure (anatomy) and function (physiology) will be considered.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	24	79%
2	E-learning	2	7%
3	Hybrid - Traditional classroom - E-learning		
4	Others: Interactive learning	4	14%
5	Total	30	100



3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Study lectures	24
2.	Laboratory/Studio	-
3.	Tutorial	-
4.	E-learning	2
5.	Assignments	4
6.	Others: self-learning	45
Total		75

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Define key structural and molecular elements involved in each stage of human development.	K1	- Interactive Lectures	MCQs and Short note
1.2	Explain normal embryological anatomy.	K2	- Interactive Lectures - Discussion	MCQs and Short note
1.3	Identify anomalies in development of various tissues through a comparison of normal and abnormal development.	K3	- Interactive Lectures - Discussion	MCQs and Short note
2.0	Skills			
2.1	Demonstration of Embryonic Models and Microscopic Specimens.	S1	Interactive lecture	Assignments & quizzes
2.2	Apply knowledge to predict how evolution may influence embryo development	S2	Interactive lecture	Assignments & quizzes



Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.3	Accurately advise patients on many issues in future	S3	Interactive lecture - Discussion	OSPE
3.0	Values, autonomy, and responsibility			
3.1	Use information technology using language appropriate to client in management of the medical data	V1	Group project	Assignment & seminars
3.2	Appraise current embryology educational resources and formulate a better/novel resource or presentation.	V2	- case-studies	Seminars
3.3	Work and communicate effectively with team	V3	- Group discussion	Assignment

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction of Embryology, Terms and concepts.	2
2.	Male Reproductive anatomy	2
3.	Female Reproductive anatomy Microscopic Specimens	2
4.	Development of Human Organ Systems	2
5.	Embryonic Models	2
6.	Primordial Germ cells. Gonads early formation.	2
7.	Gametogenesis. Spermatogenesis, spermiogenesis and Oogenesis	2
8.	Mechanisms of Sex Determination	2
9.	Fertilization and Embryo development – from the first cleavage to implantation	2
10.	Normal and abnormal organs Formed by The Ectoderm Layer	2
11.	Normal and abnormal organs Formed by The Mesoderm Layer	2
12.	Normal and abnormal organs Formed by The Endoderm Layer	2
13.	Embryonic Stem Cells-Technology and ethics	2
14.	Primordial Germ cells.	2
15.	Revision	2
Total		30



D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Continuous assessment	All through	30%
2.	Mid exam: theory	8 th	20%
3.	Final exam: theory	16 th	50%
4.	Total		100%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	The Developing Human: Clinically Oriented Embryology, Keith L. Moore; 11th edition, March 2019.
Supportive References	Concise Clinical Embryology: an Integrated, Case-Based Approach; Mark G. Torchia; 1st edition, March 2021
Electronic Materials	Blackboard learning management system and DIGITAL Library
Other Learning Materials	Skill lab, PHC Centers, Clinics and hospitals

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, exhibition rooms, simulation rooms, etc.)	- Classrooms - simulation rooms - laboratories - Clinical setting (Hospital)
Technology equipment (projector, smart board, software)	- Data show projector - Blackboard - smart board - Laptop computer - Computer based simulator
Other equipment (depending on the nature of the specialty)	NA

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students Course coordinator Program Leaders	Direct /indirect
Effectiveness of	Students	Direct /indirect





Assessment Areas/Issues	Assessor	Assessment Methods
Students assessment	Course coordinator Program Leaders Examination revision committee	
Quality of learning resources	Course coordinator Peer reviewer Examination revision committee	Direct /indirect
The extent to which CLOs have been achieved	Program Leader Course coordinator	Direct /indirect
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	

