



**Suez Canal University**  
**Faculty of Medicine**  
**Department of Anatomy and Embryology**

*Program Specifications for*  
*Master of Anatomy and Embryology*

*Code:*  
***AEAE***



## **Programme Specifications**

### **A- Basic Information**

1. Programme Title: Master of Anatomy and Embryology
2. 2- Programme Type: Single  Double  Multiple
3. Department (s): Anatomy and Embryology
4. Coordinator: Prof. Mona Hassan Mohammed Ali  
Dr.Ghada Salah El-Din
5. External Evaluator(s): Professor Dr. Mohamed Kamal Tawfik  
Professor of anatomy Ain Shams University
6. First date of program specifications approval: The bylaws of the Master program in Anatomy and Embryology in the Faculty of Medicine, Suez Canal University were approved by the Supreme Council of Universities in 2016
7. Program specifications revision approval: September 2019.
8. Number of credit points for this degree: 120 CP

### ***Professional Information***

#### **1- Program aims**

The main aims of the program are to help candidates to:

- Provide students with adequate knowledge and skills in research methodology that enable them to design experiments, analyze data, and review literature critically
- Identify and justify the basic components of the research framework, relevant to the tackled research problem.
- Provide students with adequate knowledge and skills in research ethics that enable them to design researches with high ethical consideration.
- Develop basic concepts and principles of human anatomy logically and clearly to correlate and analyze anatomical principles.
- Understand the general organization of the body systems, and how this organization harmonizes the various body functions in health and disease.
- Develop knowledge in the structural arrangement of body parts and understand how the functions are disturbed in cases of anomalies.



- Appraise published scientific research critically as well as developing their own researches.
- Develop practical skills in performing experiments on isolated organs, tissues, and whole animals.

## **2- Intended Learning Outcomes (ILOs)**

*By the end of the program, candidates will be able to:*

### **a- Knowledge and Understanding:**

- a1. Recognize basic knowledge of research ethics
- a2. Recognize basic knowledge of biostatistics
- a3. Recognize the relevant anatomical concepts.
- a4. Identify the relevant arrangement of body systems, and normal ranges of the anatomical parameters
- a5. Develop and maintain a knowledge base in the basic sciences necessary for effective consultation in anatomy.
- a6. Recognize basis and principles of quality assurance in Anatomy lab
- a7. Recognize the basics of ethics and medico legal aspects of health professional practice.

### **b- Intellectual Skills:**

- b.1 Apply the basic statistical and ethical requirements for the completion of research thesis
- b.2 Implement the appropriate research methodology
- b.3 Predict the consequences of failure of function at cellular, organ, system and whole-body levels.
- b.4 Evaluate evidence-based information by using relevant information resources.
- b.5 Appraise critically the scientific literature.
- b.6 Apply the principles of evidence-based medicine in practice.
- b.7 Promote and practice lifelong learning through the use of multiple sources, including information technology.



- b.8 Develop personally effective strategies for the identification and remediation of gaps in medical knowledge needed for effective practice.
- b.9 Use proficiency programs to improve anatomical laboratory practices.
- b.10 Gather, Analyze and evaluate knowledge and data to solve problems
- b.11 Think critically and solve problems.
- b.12 Demonstrate proficiency in evaluating and presenting findings from appropriate peer-reviewed journals.

### **c- Professional and Practical Skills:**

- c.1 Evaluate different methods and tools available in anatomy lab.
- c.2 Identify and draw sections in the human embryo.
- c.3 Perform dissection on different parts of the human body.
- c.4 Perform histological sections and stain them with different stains.
- c.5 Write and evaluate professional report

### **d- General and Transferable Skills**

- d.1 Demonstrate skills in educating colleagues (peer to peer teaching)
  - Demonstrate the ability to help other colleagues obtain proficiency in anatomy.
  - Demonstrate the ability to work well with medical technologists and to present anatomy concepts to them effectively in continuing education settings.
  - Demonstrate an understanding of the principles one must follow when educating other practicing anatomists through publications or seminars on new research discoveries, and other cutting-edge professional knowledge.
- d.2 Choose effective communication channels with superiors, peers, and subordinates.
- d.3 Conduct both individual consultations and presentations at multidisciplinary conferences that should be focused, clear, and concise.
- d.4 Demonstrate effective managerial, presentation, and computer skills.
- d.5 Work effectively in team.
- d.6 Manage time.
- d.7 Adopt Lifelong learning



### **3- Academic Standards**

#### **3a External References for Standards (Benchmarks)**

- The generic Academic Reference Standards (ARS) of NAQAAE for Postgraduate

#### **3b Comparison of Provision to External References (Attached)**

### **4- Curriculum Structure and Contents**

#### **4a- Program duration:**

the program lasts for a minimum of 2 academic years and maximum 5 years, as specified in the internal bylaws for postgraduate studies based on credit points system in the Faculty of Medicine, Suez Canal University approved on February 7<sup>th</sup> 2016.

#### **4b - Program structure**

Master Program Credit points (CP) structure:

Total needed credit points for getting master's degree 120 CP

The program consists of First part 30 CP, Thesis 30 CP, and Second part 60 CP

1. The first part of the program: 30 CP, its duration (15 weeks) for one academic semester. It includes
  - a. A course in Research Methodology planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes 4 CP.
  - b. A courses in Research ethics planned and held in the Forensic and Toxicology Department of the Faculty of Medicine, Suez Canal University. This part includes 2 CP.
  - c. One elective course, the students should select one elective among six courses. This part includes 2 CP.
  - d. The specialized courses in general embryology (6 CP), special embryology (10 CP) and general anatomy (6 CP) planned and held in the Human anatomy and embryology Department. With total 22 CP.
2. Master thesis: 30 CP, not included in the total marks for master degree, the



candidate has the right to register the thesis protocol after 6 months from the degree registration. The thesis defense is allowed after 6 months from the date of the faculty council approval on the thesis protocol and passing the first part exam.

- The second part of the program: 60 CP, its duration (45 weeks) for 3 consecutive academic semesters. The second part comprises the specialized courses in regional anatomy (22 CP), neuroanatomy (25 CP) and practical anatomical training (5 CP) planned and held in the human anatomy and embryology Department. This part lasts for 1.5 years ending by written and practical exams.

4bi- No. of hours per week: 2 CP / week which equivalent 50 hours/ week, including lectures, tutorials, self-learning and hands-on training.

4bii- No. of credit Points: the Master program is 120 Credit Points

Every credit point include 25 working hour (30% = 7 hours for face to face learning activities, and 70% =18 hours for self-learning activities).

## **5- Program Courses**

5.1- Level/Year of Program: 1st part MSc

a. Compulsory

Courses			Assessment				
Code No.	Course Title	No. of Credit hours	Written Exam			Oral exam	Practical or clinical Exam
			No of Papers	Duration	Marks		
RB	Research methodology and Biostatistics	4	1	2 hours	80		
RE	Research Ethics	2	1	1 hour	40		
AEAE01	General Embryology	6	1	3 hours	60	10	50
AEAE 02	Special Embryology	10	1	3 hours	95	20	85
AEAE 03	General Anatomy	6	1	3 hours	60	10	50
E	Elective course*	2	1	1 hour	40		
<b>Total</b>		<b>30 credit points</b>			<b>600 marks**</b>		

\*\*Every credit point equal 20 marks

**\* Student should select one course of the following as an elective course:**



One elective course has 2 CP. The students should select one elective in first part of the Master degree

- E01 Evidence Based medicine (Community Department)**
- E02 Scientific Writing (Medical Education Department)**
- E03 Quality in Medical Education (Medical Education Department)**
  
- E04 Infection Control (Microbiology Department)**
- E05 Critical Appraisal (Community Department)**
- E06 Communication Skills (Medical Education Department)**

## 5.2- Level/Year of Program: 2<sup>nd</sup> part MSc

### a. Compulsory

Courses			Assessment					
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam	Continues assessment *(Portfolio)
			No of papers	Duratio n	Marks			
AEAE04	Regional anatomy	22	2	3 hours For each paper	165 for each paper	110	330	330
	Practical training in Advances of Medical Education	8						
	Neuroanatomy	25						
	***Scientific activities	5 (not included in the total)						



		marks)							
<b>Total</b>		<b>60 credit points</b>			<b>**1100 score</b>				

**\*Portfolio scores distributed in the different parts of the portfolio and its total score included among the total mark of the second part**

**\*\*Every credit point equal 20 marks**

**\*\*\*Scientific activities are not included in the total marks**

### 5. Thesis:

One senior and one junior academic staff members are nominated by the department council to prepare a proposal of the thesis protocol after the selection of a subject that is complementary to the research plans of the department. Data collection, methodologies, study question, time table, ethical considerations and budget are formulated by the candidate under guidance of his supervisors into a research project. The research protocol is then peer-reviewed by two different staff members nominated by the Head of the department who share their ideas and comments with the supervisors to reach to the final form. The research protocol is discussed then openly in one of the department councils to be approved and diverted to the Faculty research committee where it is subjected to critical appraisal to meet the research basic standards set by the committee. The final approvals of the research protocol are then issued by the committee of post graduate studies, the Faculty and University Council to be registered. The candidate has the right to register his/her thesis protocol after 6 months from the degree registration. The first time for thesis defense after 6 months from the date of the faculty council approval on the thesis protocol and passing the first part exam.

**N.B. Thesis represents 30 credit points not included in the total mark for master degree.**

### **6- Programme Admission Requirements**

- Bachelor of Medicine & surgery with minimum good grade & very good in anatomy





- Registration for the program opens 2 times/year, according to the internal bylaws for postgraduate studies of the Faculty of Medicine, Suez Canal University.

## **7- Student Assessment Methods**

- 7.1 Written (MEQ)** to assess the cognitive domain.
- 7.2 MCQs** to assess the cognitive domain
- 7.3 Oral Viva Cards** to assess higher cognitive and attitude domains.
- 7.3 Observations** to assess practical and presentation skills.
- 7.4 Portfolio** to assess the cognitive, psychomotor and the affective domains.

## **8- Weighting of Assessments**

**Total marks for master degree 1700**

### **Type of exam**

#### **First part (30 credit points= 600 mark)**

- Written exam 375
- Oral and practical exam 225
- **Total** 600

#### **Second part (60 credit points including 5 credit points not included in the total marks =1100 mark)**

- Oral exam 110
- Practical exam 330
- Written exam 330
- Portfolio 330
- **Total** 1100

**Total of the Master degree 1700**



## **9- Regulations for Progression and Programme Completion**

The regulations for program completion follow the regulations of Master degree of medical education in the Faculty of Medicine, Suez Canal University approved by the Supreme Council of Universities.

### **First part (40%)**

Passing level 60% of total marks of the exam

At least 50% passing level of the total written exam marks

### **Second part (60%)**

Passing level 60% of total marks of the exam

Passing level 60% is prerequisite for MSC degree

### **Thesis/Assay**

Passing thesis defense is prerequisite for getting MSc. Degree

## **10- Evaluation of Program Intended Learning Outcomes**

Evaluator	Tool	Sample
1- Postgraduate students	Needs assessment questionnaires	Random sample of participants
2- Alumni	Self-administered questionnaires	Comprehensive sample
3- Stakeholders	Self-administered questionnaires	Random sample
4-External Evaluator(s) (External Examiner(s))	External audit of the program specifications	
5- Other		

*Head of human anatomy and embryology Department*

*Prof. Mona Hassan*

*Date: September 2019*