

#### **PROGRAM SPECIFICATIONS**

Program Title:

# Master Degree of Andrology & Reproductive Medicine

**Program Code: SVAV01** 

# **Program Specification for Master Degree in Andrology, Sexology and STDs:**

**University:** Suez Canal University.

**Faculty:** Faculty of Medicine.

#### **Program Specifications:**

**A- Basic Information** 

- **Program type:** Single

- Department offering the program: Dermatology and Andrology

Department.

Program Code: SVAV01
Total credit points: 120 CP
Academic year: 2018/2019

- Program Coordinator: Professor / Rashad Mahmoud Mostafa

- Internal evaluators:

1- Professor /Osama Anter, Suez Canal University.

- External evaluators:

- **1- Professor** / Ahmad Mahmoud, Professor of Andrology, Scientific Coordinator, University Hospital Belgium.
- **2- Professor** / Sebastien Beley. Professor of Urology, Head of Andrology Unit, Institute of Urology –Paris France.
- **3- Professor** /Kamal Mahmoud Zaki Shaeer, Professor of Andrology, Sexology and Cairo University.
- 4- Professor / Ahmad Attia, Professor of

Andrology, Sexology and Cairo University.

**Date of specification approval:** The bylaws of the Master program in Andrology, Sexology and STDs in the Faculty of Medicine, Suez Canal University were approved by the Supreme Council of Universities in 2016.

#### I- Aim of the Program:

The program is academic degree that enables candidates to specialize in the area of reproductive health including male fertility and infertility, Human Sexuality and sexual medicine, sexually transmitted infections (STIs), Assisted Reproductive Technologies (ARTs) and Future relevant updates. The candidates should achieve satisfactory levels of basic knowledge, clinical, surgical skills, attitudes, research skills and competence in all aspects of andrology practice, interact with community problems, respect ethical values according to community culture, and promote their medical standards through engaging in continuing medical education.

The overall aims of the Program are that the student: Actively acquires the essential core of up-to-date basic knowledge and skills in Andrology

domains, Becomes able to use Andrology knowledge and skills in practice, prevent and solve the relevant institution and workplace problems, Adopts positive attitudes towards humans, the community, and science, Becomes a continuous self-learner and Adopts new strategies of learning and assessment on their work place.

## **II-** Intended Learning Outcomes of Program (ILOs):

# A- Knowledge and Understanding: By the end of the program the candidate should be able to:

- a1. Describe the anatomy of male genital system.
- a2. Identify the basic scientific knowledge related to human reproduction including male fertility.
- a3. Identify the basic scientific knowledge related to human sexuality.
- a4. Identify the basic scientific knowledge related to sexually transmitted infections.
- a5. Identify concepts of andrological laboratory procedures related to assisted conception.
- a6. Identify concepts of andrological laboratory procedures related to male infertility.
- a7. Identify concepts of andrological laboratory procedures related to STIs.
- a8. Recognize the basic research regarding pathophysiology of different andrological problems related to male fertility, human sexuality and sexually transmitted infections.
- a9. Describe in depth and detail the development of current management modalities for different andrological problems including male fertility, human sexuality and sexually transmitted infections.
- a10. Mention the psychological basis of human sexuality and sexual disorders.
- all. Recognize the basic as well as the up-to-date principles of surgical procedures that enable the candidate to perform surgeries related to male infertility and sexual dysfunctions.
- a12. Describe interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams.
- a13. Recognize health care delivery systems, provide effective and qualitative patient care within the system, and practice cost-effective medicine

# B- Intellectual Skills: By the end of the program the candidate should be able to:

- b1. Analyze symptoms & signs, correlate them to the basic knowledge he had acquired and construct a differential diagnosis for common andrological complaints.
- b2.Design an appropriate diagnostic plan for evaluation of common andrological complaints taking into consideration the nature of the clinical situation and the risks, benefits and costs to the patient.
- b3.Set up treatment plans for common andrological problems taking into account the cultural and individual needs.
- b4. Set different solutions to different andrological problems.
- b5.Demonstrate professional decision making in all fields related to andrology.
- b6. Conduct research studies that add to knowledge.
- b7. Formulate scientific papers in Andrology.
- b8. Assess risk in professional practices in Andrology.
- b9.Plan to improve performance in the field of Andrology.
- b10. Criticize researches related to basic andrology.
- b11. Criticize the methods of clinical practice, integrate evidence-based medicine into patient care, analyze research methods, and improve patient care practices.

# C. Professional and Practical Skills (psychomotor skill): By the end of the program the candidate should be able to:

- c1. Perform physical examination of patients for andrological and reproductive systems.
- c2. Perform basic clinical procedures related to male infertility, assisted reproduction and erectile dysfunction.
- c3. Write and evaluate medical reports.
- c4. Perform basic diagnostic and therapeutic procedures in this practice with perfection of basic procedures such as (Colour duplex US, Semen analysis, cavernosometry, cavernosography, intracorporeal injections, semen analysis, scoring of testicular biopsy).
- c5.Offer proper medical treatment for common STIs, male andrological problems including male infertility and sexual dysfunctions.
- c6. Perform basic surgical skills and manage uncommon surgical complications related to the external male reproductive organs.
- c7. Demonstrate extra specific skills in one of the basics fields related to andrology (chosen by the candidate).
- c8.Offer surgical interventions whenever indicated to infertile

- males and male with sexual dysfunctions.
- c9. Manage all andrological emergencies properly.
- c10. Design new methods, tools and ways of professional practice.
- c11. Evaluate the basic and modern professional skills in conducting researches in the field of Andrology.
- c12. Use basic technological methods in collection, analysis and interpretation of data and in management of prevalent problems in the field of Andrology.

# D. General and Transferable Skills: By the end of the program the candidate should be able to:

- d1.Communicate with other colleagues, researchers and health care providers.
- d2. Promote special interest in one of the areas related to andrology.
- d3. Communicate with the patients to gain their confidence.
- d4.Respond effectively to a patient's emotional and psychosocial concerns.
- d5. Work in team.
- d6. Achieve Computer skills necessary to make use of medical data bases and use the internet for communication.
- d7. Aquire administrative skills that enables him to fulfill the paper work needed
- d8. Show administrative and leadership skills that enables him to organize work and lead the junior staff.
- d9. Acquire abilities to train and teach students and junior staff members.
- d10. Use different resources to write scientific article according to the basics of scientific research.
- d11. Recognize the ability to function as a consultant to other physicians in use.
- d12. Perform self-evaluation & identify own learning needs.
- d13. Train junior staff through continuous medical education programs.
- d14. Manage time effectively.
- d15. Adopt the principles of life-long learning.

#### **III-** Academic standards:

## **External References for Standards: (Benchmarks):**

Generic Academic Reference Standards (ARS) for post graduate programs

The standards of the National Authority of Quality Assurance and Accreditation in Education (NAQAAE). Website: www.naqaae.org

#### **IV. Program Admission Requirements:**

According the Faculty of Medicine, Suez Canal University Bylaws for Post Graduate Programs (July 2016), applicants should have MBBCh or equivalent degree. According to Suez Canal University requirements, all applicants for postgraduate studies should fulfill preliminary courses on the following subjects; Medical statistics I – English language (Toefl or equivalent degree) - Computer skills (ICDL) or equivalent computer course offered by the medical education center (MEDC). Admission to the program is open during August and March. Training prior to registration may be accredited according to departmental and hospital evaluation. Post graduate who have masters in gynecology, urology, Dermatology, STDs and Andrology, Family medicine or general surgery or its equivalent degrees can also apply for the master degree in andrology provided that vacancies are available. In such case candidates will be exempted from the first part courses and the first phase of the residency training except the psychiatry course including the psychiatry examination and the endocrinology rotation (1 month) to collect the required credit points for the first part. The second phase of the residency-training program will be tailored to fit their previous training. They will spend 15 months in the department during which they will attend the andrology course.

#### **IV-** Program Structure and Contents:

**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.

#### **Program structure: (Table 1)**

Master Program Credit points (CP) structure:

- -Total needed credit points for getting master degree 120 CP.
- -The program consists of First part 30 CP, Thesis 30 CP, and Second part 60 CP.
- -No. of hours per week: 2 CP / week which equivalent 50 hours/ week, including lectures, tutorials, self-learning and hands-on training .
- -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).

## **1-First part**: Total credit points 30 - (Table-1)

a- Compulsory courses; (15 weeks):

-	General surgery course.	4 credit points.
-	Anatomy and embryology	4 credit points.
-	Psychiatry.	4 credit points.
-	Microbiology.	4 credit points.
-	Clinical pathology.	3 credit points.
-	General medicine.	3 credit points.
-	Medical statistics.	4 credit points.
-	Medical ethics.	2 credit points.

#### 2 credit points. b- **Elective courses:**

- 2- Second part: 1.5 academic years = 45 week-Total credit points: 60 - (Table 2)
  - a-Compulsory courses; one academic year (30 weeks).

Basic Andrology Course - 5 modules. 15 credit points

**b-** Scientific activities

5 credit points c- Training program: (15 month) 40 credit points

- 1- The first month in andrology department.
- 2- The second 4 months in General surgery department and its relevant surgeries (Pediatric Surgery, Urology and Plastic surgery)
- 3- The last 10 months in andrology department "Special Andrology.

#### **3- Master Thesis:**

30 credit points

- Completed during second part 30 credit points.

**Table 1: Master Degree:** 

Courses	Credit Points		
First part:	CPs	TOTAL	ILOs
Compulsory courses ( One academic year)		30	
RB Medical statistics	4		
RE Medical ethics	2		
SVAV01 Anatomy and Embryology	4		A <sub>1</sub> , B <sub>1</sub>
.SVAV02 General Surgery	4	28	A <sub>1</sub> , A <sub>5</sub> , B <sub>1</sub>
SVAV03 Basic Psychiatry & Psychosexual Disorders	4		A1, A4,B1
SVAV04 Medical Microbiology and Immunology	4		D1, D2,D3, A1, A5, B1
SVAV05 CLINICAL Pathology	3		A <sub>7</sub> , B <sub>1</sub>
SVAV06 General medicine	3		D <sub>1</sub> , D <sub>2</sub> ,D <sub>3</sub>
E Elective courses choose 2 courses :	2	2	
E 01 Evidence Based Medicine	0.5		D5, D6, D8, D9
E 02 Scientific Writing	0.5		
E 03 Quality in Medical Education	0.5		
E O4 Infection Control	0.5		

E 05 Critical Appraisal	0.5		
E 06 Communication Skill	0.5		
Second part	CPs	TOTAL	ILOs
COMPULSORY COURSES (Two academic years)			
SVAV07 Basic Andrology			
svavor a Sexually Transmitted Diseases I	3		A2, A6,
svavor B Sexual Medicine and Surgery I	3		B1, B2, B3, B4,
SVAV07 C Male reproductive Medicine and Surgery I	3	15	D1, D2, D3, D4
svavor D Assistance Reproduction I	1.5		A2, A6,
svavor E Andrology Related Disorders I	1.5		
Scientific activities: 2nd Part Scientific activities	5	5	D3, D4, D5, D8, D9
RESIDENCY TRAINING PROGRAM(Special Andrology)	40	40	
svavor R Residency training program	40	40	B1, B2, B3, B4, C1, C2, C3, C4, C5, C7, C8 D1, D2, D3, D4, D5, D6, D7
Master Thesis	30	30	D8, D9
TOTAL		120	

# **Residency Training Program**

For master it is 15 weeks for first part and 45 weeks for 2nd part **Phase A: Basic surgical training,** (15 week) 10 credit points (2 points in Andrology unit, one point in psychiatry unit, one point in endocrinology unit and 6 points in surgery units).

## The resident (trainee) should pass the following rotations:

- **One** month in Andrology department (1 CP).
- **One** month in general surgery department (2 CP).
- **One** months in Plastic surgery department (2 CP).
- **2 weeks** in Psychiatry department (1 CP).
- **2 weeks** months in endocrinology unit (1 CP).

## **Phase B: Specialized training, (45 weeks) = (30 credit points):**

The resident (trainee) will spend the whole period in the Andrology department, to attain the credit points during this phase the resident will acquire all the knowledge and professional skills needed to practice andrology. For master degree students,

the thesis will be performed during this phase. Master degree candidates will be eligible for the final exam by the end of this phase.

**NB:** The details of the training program are provided in separate document. The third phase of residency training (advanced training) is part of the MD degree

ANDROLOGY MASTER DEGREE PROGRAM MATRIX

	Courses / items	ems A B C Knowledge and Intellectual Professional Understanding Skills Skills									T																		
		1	2	3	4	5		7	1	2		4	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	9
SVAV01	Anatomy and Embryology	Х							х																				
SVAV01	Medical Biochemistry Molecular Bio.	x				x			х																				
SVAV03	Basic Psychiatry/ Psychosexual Dis.	x			X				X												X	X	X						
SVAV04	Medical Microbiology /Immunology	х				x			х																				
SVAV05	Clinical Pathology	x		х					X																				
SVAV02	General Surgery							x	X												X	X	X						
SVAV07 A	Sexually Transmitted Diseases			х			X		Х	х	х	х									Х	X	X	X					
SVAV07 B	Sexual Medicine and Surgery			X			X		X	X	X	Х									X	х	х	X					
SVAV07 C	Male reproductive Medicine/Surgery			Х			X		X	х	х	х									х	X	X	X					
SVAV07 D	Assistance Reproduction			X			X		X	X	X	х									X	X	X	X					
SVAV07	Andrology Related Disorders			x			X		X	X	x	x									Х	X	X	X					
MEDC 1	Critical Reading																								Х	Х		Х	Х
MEDC 2	Scientific writing																								Х	X		X	Х
MEDC 3	Evidence-Based Medicine																								X	X		X	Х
RB	Medical statistics																								X	X		X	Х
RE	Medical ethics																								х	х		х	Х
MEDC 6	Communication Skills																						X	X		X			
1st Part	Scientific Activities First part																							X				X	Х
2nd Part	Scientific Activities Second part																							X				X	Х
SVAV07 R	Basic Training Program																	X				X			X				
SVAV07 R	Special Training Program								Х	X	X	Х	X	X	X	X	X	X	X	Х	Х	X	X	x	X	X	х		
	Master Thesis																											X	Х

# **Master Thesis:**

A faculty senior & junior supervisor from the staff members are nominated by the department council to prepare a proposal of the thesis protocol after the selection of a subject (in the area of reproductive health including male fertility and infertility, Human Sexuality and sexual medicine, sexually transmitted infections (STIs), Assisted Reproductive Technologies (ARTs) and Future relevant updates) 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 stuff 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 a 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- Program Admission Requirements

- The program accepts candidates with Bachelor degree in Medicine and Surgery with minimum good grade & very good.
- 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.

#### **Scientific Activities:**

The students should participate in the scientific activities of the departments such as:

- Journal club.
- Seminars (including recent topics and controversial issues). Students are expected to participate in the discussions.
- Scientific meetings arranged by the department.

Each activity is monitored and given credit points registered in a special section in the residency-training logbook. The student should collect the required points before allowed to sit for final exam.

### VI. Regulations for Progression and Program Completion:

After collecting the required credit points for the respective courses, the first phase of the residency training, and the scientific activities, the student will be eligible to sit for the first part examination. In case the student fails to pass the examination, he/she may proceed in the clinical training and can resubmit for the next examination. After passing the first part, the student submits a protocol for Master Thesis at the beginning of the second part. Before submitting to the final examination he/she should finish the thesis and get approval, complete phase 2 of special training program, and collect the required credit points. The candidate will receive his/her degree after passing this final examination. Master degree should be obtained within a maximum of 6 years after registration date.

#### VII. Assessment:

#### **A:** Assessment Tools:

# 1- Supervision and Monitoring of Training Program:

According the Faculty of Medicine, Suez Canal University Bylaws for Residency Training Programs, coordinators carry continuous assessment during the program. A residency training logbook including scientific activities will be kept for each student to document all his/her clinical, laboratory and/or operative activities as well as his/her participation in different scientific activities. The head of the department should allow the students to undergo the final examination when they complete their training program and collect the credit points needed.

#### 2- Summative Assessment:

According the Faculty of Medicine, Suez Canal University Bylaws for Post Graduate Programs (2016). Students should be assessed at the end of first part and of the second part.

#### 1. First Part Final Exam:

- **a- Medical statistics:** one paper-Two-hour written exam (including short assay and multiple choice questions).
- **b- Medical ethics:** One paper-one -hour written exam (including short assay and multiple choice questions).
- c- Anatomy and Embryology: One paper, Two-hour written exam (including short assay and multiple choice questions) + oral exam.
- **d- General Surgery:** One paper, Two -hour written exam (including short assay and multiple choice questions) + oral exam + clinical exam.
- **e- Psychiatry**: One paper-Two-hour written exam (including short assay and multiple choice questions) + oral exam.
- **f- Clinical Pathology:** One paper-one-hour written exam (including short assay and multiple choice questions) + oral exam.
- g- General Medicine: One paper-one-hour written exam (including short assay and multiple choice questions) + oral exam.
- **h-** Microbiology / Immunology: one-hour written exam (including short assay and multiple choice questions) + oral exam.
- **i-** Elective exam: one paper-one-hour written exam (including short assay and multiple choice questions).

## 2. Second Part Final Exam Part 2:

**Andrology:** Four written exams (Three-hours each) including short assay questions, and MCQ (including problem solving) + oral exam + clinical exam

#### **B:** Assessment Schedule:

#### 1. First Part Final Exam:

The written exam will be held in April/October (six days):

This will be followed by the clinical and oral exams in separate days.

#### 2. Second Part Final Exam:

The written exam will be held in May/ November (2 days):

This will be followed by the clinical and oral exams in separate days

Weighing of Assessment (Marks allocated to courses):

#### The total marks of the exam = 1700 mark

(20 marks for each credit point)

Courses		Marks									
COD	TITLE	Wri	Oral	Clinical							
E		tten									
<b>FIRST</b>	PART										
SVAV01	Anatomy and yology	60	20								
SVAV02	General Surgery	35	10	35							
SVSV03	Psychiatry/Psychose Dis.	60	20								
SVSV04	Medical pbiology/Immunology	35	10	35							
SVSV05	Clinical Pathology	45	15								
SVAV06	General Medicine	25	10	25							
E	elective	40									
RB	Medical statistics	80									
RE	Medical ethics	40									
Total F	irst Part 600										
SVAV0	Sexual Medicine										
7BCDE	and Surgery Male reproductive Medicine/ Surgery Assistance Reproduction Andrology Related										
	Disorders										
Total s Portfoli	econd Part 1100 os	)									
Portfoli	os										

#### Remarks

- It is mandatory to pass all the papers of written exams separately.
- The passing mark in any written exam is  $\geq 50\%$ .

# **Regulations for Progression and Program Completion**

The regulations for program completion follow the regulations of Master Degree in Andrology, Sexology and STDs in the Faculty

of Medicine, Suez Canal University approved by the Supreme Council of Universities .

#### First part (40%)

Passing level 50% of total marks of the exam

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

#### Second part (60%)

Passing level 50% of total marks of the exam

Passing level 50% is prerequisite for MSC degree

#### Thesis/Assay

Passing thesis defense is perquisite for getting MSc. Degree

#### **VIII. Evaluation of Program Intended Learning Outcomes:**

Evaluator	Tool	Sample
1. Senior Students	Questionnaire at the end of the program	All the PG students
2. Alumni	The faculty is currently developing an Alumni office for postgraduates	Not yet determined
3. Stakeholders	A meeting will be arranged during annual conference of the department	Available representatives from: - Army hospitals - National medical insurance - Medical syndicate - Ministry of health
4. External Evaluators	Review program and courses Attending the final exam	Once before implementation Bi-annual report
5. College Quality Assurance committee	Annual program reviewer	

#### **b- Scientific Activities:**

The students should participate in the scientific activities of the departments such as:

- Journal club.
- Seminars (including recent topics and controversial issues). Students are expected to participate in the discussions.
- Scientific meetings arranged by the department.

Each activity is monitored and given credit points registered in a special section in the residency-training logbook. The student should collect the required points before allowed to sit for final exam.

# c- Training program: (15 month) 40 credit points

# **Signatures:**

Date of approval by department:

Program Coordinator: Professor / Rashad Mahmoud Mostafa

Head of Department / Professor/ Mona Atwa