

# **PROGRAM SPECIFICATIONS**

# Program Title:

# Medical Doctorate Andrology & Reproductive Medicine

**Program Code: SVAV51** 

# <u>Program Specification for Medical Doctorate Degree</u> (MD) 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, STDs and Andrology

Program Code: SVAV51
Total credit points: 180 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 MD Degree program of 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 aims at qualifying a cadre of proficient consultants to contribute to the advancement 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 and to cope with the era of academic accreditation. The candidates should be proficient in clinical and surgical skills in all aspects of

andrology practice, interact with community problems, and respect ethical values according to community culture.

#### The overall aims of the course are that the student:

- 1- Actively acquires the essential up-to-date knowledge and skills in 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 equivalent to what is required from a Professions consultant.
- 2-Becomes able to use Andrologists Professions knowledge and skills in practice, prevent and solve the relevant institution and workplace problems.
- 3-Adopts positive attitudes towards humans, the community, and science.
- 4-Becomes a continuous self-learner.

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

- a. Knowledge and Understanding: By the end of the program the candidate should be able to:
- a1. Discuss human reproduction including male fertility.
- a2. Discuss human sexuality (male and female).
- a3. Discuss sexually transmitted infections.
- a4. Describe advanced concepts of andrological laboratory procedures related to assisted conception.
- a5. Describe advanced concepts of andrological laboratory procedures related to male infertility.
- a6. Describe advanced concepts of andrological laboratory procedures related to STIs.
- a7. Recognize the advanced research regarding pathophysiology of different andrological problems related to male fertility, human sexuality and sexually transmitted infections.
- a8. Discuss the development of current and future management modalities for different andrological problems including male fertility, human sexuality and sexually transmitted infections.
- a9. Explain the psychological basis of human sexuality and sexual disorders.
- a10. Recognize all principles of surgical procedures that enable the candidate to perform surgeries related to male infertility and sexual dysfunctions.

- all. Identify interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams.
- a12. Explain methods of clinical practice, integrate evidence-based medicine into patient care, recognize research methods, and improve patient care practices.
- a13. Recognize health care delivery systems, provide effective and qualitative patient care within the system, and practice cost-effective medicine.
- a14. Describe comprehensive basic and clinical knowledge, skills and experience in the diagnosis and management of patients of all ages with different diseases concerning male infertility and human reproduction.
- a15. Recognize the ability to function as a consultant to other physicians in use.

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

- b1. Analyze symptoms & signs, correlate them to the knowledge he had acquired and construct a differential diagnosis for andrological complaints.
- b2.Design an appropriate diagnostic plan for evaluation of 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 andrological problems taking into account the cultural and individual needs.
- b4. Acquire the ability to develop new and innovative solutions to different andrological problems.
- b5.Use experience in one of the basics fields related to andrology (chosen by the candidate).
- 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 Andrology.
- b11. Adopt Best -evidence- approach to practice.
- b12. Apply critical thinking and judgment skills.
- b13. Adopt innovative techniques in research, learning, teaching & management of patients.
- b14. Integrate evidence-based medicine into patient care to improve patient care practices.

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

- c1. Collect clinical data for rare andrological disorders.
- c2. Perform new clinical procedures related to male infertility, assisted reproduction and erectile dysfunction.
- c3.Offer proper medical treatment for rare and uncommon STIS, male andrological problems including male infertility and sexual dysfunctions.
- c4. Perform advanced surgical skills and manage uncommon surgical complications related to the external male reproductive organs.
- c5.Perform extra specific skills in one of the advanced fields related to andrology (chosen by the candidate).
- c6. Write and evaluate of medical reports.
- c7. Perform advanced diagnostic and therapeutic procedures in this practice with perfection of basic procedures such as (Trans-rectal ultrasonography, vasography, Computerized assisted semen analysis, assessment of sperm morphology, IMSI, TESE, MICRO TESE.....etc).
- c8. Evaluate different methods and tools available related to andrology & reproductive medicine.
- c9.Offer proper medical treatment for rare and uncommon STIS, male andrological problems including male infertility and sexual dysfunctions.
- c10. Perform advanced surgical skills and manage uncommon surgical complications related to the external male reproductive organs such as microsurgical sperm retrieval techniques, IMSI and sperm processing techniques.
- c11. Offer all surgical interventions whenever indicated to infertile males and male with sexual dysfunctions.
- c12. Manage all andrological emergencies properly.
- c13. Train junior staff through continuous medical education programs.
- c14. Design new methods, tools and ways of professional practice.
- c15. Master the modern professional skills in conducting researches in the field of Andrology.
- c16. Perform recent advanced technological methods in collection, analysis and interpretation of data and in management of prevalent problems in the field of Dermatology, Venereology and Andrology.
- c17. Adopts positive attitudes towards humans, the community, and science.
- c18. Adopts new strategies of learning and assessment on their work place.

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

- d1. Communicate effectively with peers and group facilitators.
- d2. Show respect to other team members' points of view.
- d3. Accept constructive criticism and feedback on their work.
- d4.Use information technology to serve in the professional practice development.
- d5.Demonstrate efficient computer skills.
- d6. Function effectively in a team.
- d7. Manage change and conflicts during group work.
- d8.Apply ethical considerations during conduction of program evaluation.
- d9. Use different resources to collect relevant information.
- d10. Educate & evaluate performance of peers
- d11. Develop a plan for self-development & life-long learning.
- d12. Manage time effectively.
- d13. Acquire basic administrative skills in management and leadership.
  - d14. Demonstrate self-learning skills.

#### b. Academic standards:

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 Master degree or equivalent accredit degree in the same specialty (Medical and / or Medical and Surgical Andrology, Sexology and STDs). Post graduate who have masters in Dermatology, STDs and Andrology or medical andrology or those having medical doctorate degree in STDs, Infertility and Andrology (medical MD degree) can also apply for the current medical doctorate degree in andrology provided that vacancies are available. Admission to the program is open during August and March. The training

prior to registration may be accredited according to departmental and hospital evaluation.

## V. Program Structure and Contents:

**Program duration:** the program lasts for a minimum of 3 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:** Total Credit points 180 (Table 1):

Master Program Credit points (CP) structure:

- -Total needed credit points for getting master degree 180 CP.
- -The program consists of First part 30 CP, Thesis 50 CP, and Second part 100 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 180 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**: 15 weeks **Total credit points 30 - (Table-1)**

a- Compulsory courses; One academic year (30 weeks):

	- General surgery course.	4 credit points.
	- Anatomy and embryology	4 credit points.
	- Psychiatry.	3 credit points.
	- Microbiology.	2 credit points.
	- Clinical pathology.	3 credit points.
	- General medicine.	2 credit points.
	- Medical statistics.	8 credit points.
b- <u>F</u>	Elective courses: (two courses)	4 credit points.

# 2- Second part: five semesters (15 weeks each)-Total credit points: 100 - (Table 2)

- **a-Compulsory courses; two academic year (30 weeks).**Andrology Course 5 modules. **30** credit points
- **b-** Scientific activities 10 credit points
- c- Residency Training program: (three years) 60 credit points
- 1- The first 2 months in andrology department.
- 2- The second 10 months in General surgery department and its relevant surgeries (Pediatric Surgery, Urology and Plastic surgery)
- 3- The last 24 months in andrology department "Special Andrology.

# 3-Medical Doctorate Thesis: 50 credit points

- Completed during second part 50 credit points.

Student should select one course of the following as an elective course: Two elective courses each one has 2 CP. The students should select two elective which has not been selected before in the Master Degree.

E01

Evide	ence Based medicine (Cor	nmunity 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)

<sup>\*\*</sup>every credit point equal 20 marks

# **Table (1):**

Courses	Credit Points		
First part:	CPs	TOTAL	ILOs
Compulsory courses ( One academic year)		26	
BR Medical statistics and advanced methodology of research	8		
SVAV51 Anatomy and Embryology	4		A <sub>1</sub> , B <sub>1</sub>

SVAV52 General Surgery	4		A1, A5, B1
	4	_	A1, A5, B1 A1, A4,B1
SVAV53 Clinical Pathology	3		D <sub>1</sub> , D <sub>2</sub> ,D <sub>3</sub> ,
SVAV54 Medical Microbiology and Immunology	2	26	A <sub>1</sub> , A <sub>5</sub> , B <sub>1</sub>
SVAV55 Psychiatry & Psychosexual Disorders	3		A7, B1
SVAV56 General medicine	2	1	D <sub>1</sub> , D <sub>2</sub> ,D <sub>3</sub>
E Elective courses choose 2 courses :	4	4	
E 01 Evidence Based Medicine	2		D <sub>5</sub> , D <sub>6</sub> , D <sub>8</sub> , D <sub>9</sub>
E 02 Scientific Writing	1		
E 03 Quality in Medical Education	1	1	
E O4 Infection Control	1		
E 05 Critical Appraisal	1		
E 06 Communication Skill	1		
Second part	CPs	TOTAL	ILOs
•			
COMPULSORY COURSES (Two academic years)			
SVAV57 Basic Andrology			
svav57 a Sexually Transmitted Diseases II	6		A2, A6,
SVAV57 B Sexual Medicine and Surgery II	6		B1, B2, B3, B4,
SVAV57 C Male reproductive Medicine and Surgery II	6	30	D1, D2, D3, D4
svav57 D Assistance Reproduction II	6		A2, A6,
svav57 E Andrology Related Disorders II	6	1	
SVAV57F Scientific activities: 2nd Part Scientific activities	10	10	D3, D4, D5, D8, D9
svav57 R Residency training program	60	60	B1, B2, B3, B4, C1, C2, C3, C4, C5, C7, C8 D1, D2, D3, D4, D5, D6, D7
Master Thesis	50	50	D8, D9
TOTAL		180	

# Residency Training Program Third Phase:

According the Faculty of Medicine, Suez Canal University Bylaws for Post Graduate Programs (July 2016), the duration of the advanced training is 36 months. All the students should spend at least **24** months in the andrology department. They may spend electively 10 months in other departments or centers either at Suez Canal hospitals or elsewhere depending on their elective

course or their thesis. During this period the students will attend the andrology course, attend the outpatient clinics, inpatient section, the andrology Lab, and the operating room to share in patients care, share in the academic activities and prepare his thesis and participate in the scientific activities of the department. **Specialized training (60 points) 18 months**:

Principally, the resident will accomplish his activities in the andrology department including the outpatient clinic, inpatient section, andrology laboratory, vascular lab, and operating theater. **Daily working hours:** Residents (trainee) are expected to attend daily (Tuesday - Thursday) from 8 am till 2 pm except operative day (Monday) from 8 till 5 pm.

**On-call:** residents are expected to be on-call full day 1-3 times per week according to the number of available residents in the department at a given time.

**Leaves:** According to the by law & regulation of the Suez canal hospitals, the duration of the annual leave is two weeks in the first year and three weeks afterwards. Seven days are accepted as emergency leaves per year. Postgraduate students have an extra exam leave for 2-4 weeks. The program coordinator should approve and sign all leaves.

NB: Extra leaves and exemptions including military service, marriage, child birth and other family obligations, are possible according to the general Labor Law.

# Program content is fulfilled through attending the following activities:

# 1. Theoretical background:

Trainee should attend the andrology course for the medical doctorate degree in Andrology that include four lectures (tutorial classes) per week from 1 to 3 (p.m.) for 30 weeks starting from first week of October. Credit points will be given after attending at least 75% of these lectures and tutorials. The timetable and topics are provided in the andrology course specification for master degree. Master degree candidates will acquire the credit points passing the final exam'.

#### 2. Clinical activities:

**a.** Daily outpatient clinic and/or inpatient section from 8 am to 2 pm. Resident must sign in daily. A monthly timetable will be arranged for rotations. In the outpatient clinic residents will perform clinical examination as well as management of cases including in-office therapeutic procedures. The outpatient activities also include the outpatient laboratory procedure. In the inpatient section.

Resident will be responsible for the pre and post-operative management of cases as well as the vascular lab.

- **b.** Weekly clinical staff-round every Tuesday for revision of the admitted cases and evaluation of operative decision with the head professor of the operative list.
- c. Weekly operative theater every Tuesday from 8 pm to 5 pm.

#### **Medical Doctorate Thesis:**

All MD students should prepare a thesis in one of the five main domains of Andrology (Male Infertility, Sexology, Assisted conception, STIs or andrology related topics). The department and the ethical committees must approve the protocol of the research. The thesis should include a review part and a research part. The Thesis is supervised by one or more senior staff members from the Andrology department and may include other specialties according to the nature of the research. The thesis should be evaluated and approved by a committee of three professors including one of the supervisors and an external professor. Approving the thesis is mandatory to allow the student to set for the final exam.

#### **Scientific Activities:**

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

- MD discussion group.
- 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.

#### ANDROLOGY MD DEGREE PROGRAM MATRIX

	Courses /		Kna	A owle	ada	Δ		Inte	В	tua	1		D <sub>1</sub>	ofes	C	nal				3en	D	an	4	
	items			and	k				Skill		•		11		ills	ıaı				ran				
		_		ersta			4	_	_		-	4	_	_	4	-	_	4		_		-	_	7
		1 X	2	3 X	4 X	5	1 X	2 X	3 X	4	5	1	2	3	4	5	6	1	2	3	4	5	6	7
SVAV57 A	Sexually Transmitted Diseases	^	X	^	^		^	^	^															
SVAV57 b	Sexual Medicine and Surgery	Х	X	X	Х		X	X	X															
SVAV57 c	Male reproductive Medicine/Surg ery	Х	Х	Х	Х		Х	Х	Х															
SVAV57 d	Assistance Reproduction	X	Х	Х	Х		X	X	Х															
SVAV57 f	Andrology Related Disorders	Х	Х	Х	Х		Х	Х	Х															
SVAV57 g	Genetics of Male reproduction					Х					Х						Х		Х					
SVAV57 h	Molecular Biology of Male Reproduction					X					Х						Х		X					
SVAV57 i	Male Reproductive Endocrinology					X					Х						X		Х					
SVAV57 j	Clinical Pathology of Male Reproduction					Х					Х						Х		Х					
	Scientific Activities																					X	X	X
SVAV57 k	Advanced Training Program						X	X	Х	X	Х	Х	Х	Х	Х	Х	Х	X		Х	Х	Х	X	X
	MD Thesis					X					X						X	X		X			Х	X

## VI. Regulations for Progression and Program Completion:

After collecting the required credit points for the respective courses, the advanced residency training, the scientific activities, and the thesis the student will be eligible to sit for the final examination. In case the student fails to pass the examination, he/she may resubmit for the next examination. The candidate will receive his/her degree after passing this final examination. MD degree should be obtained within a maximum of 5 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- Formal 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:** 3 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

# C- Weighing Of Assessment (Marks allocated to courses):

ses Marks					
E TITLE		Written	Oral	Clinic	Total
	FIRST F	PART			1
O1 Anatomy and Em		60	20		80
O2 General Surgery	, <u> </u>	35	10	35	9
Psychiatry/Psycho	osexual Dis.	45	15		60
Medical Microbio	ology/Immunology	30	10		80
Clinical Patholog		45	15		
					60
General Medicine	<u> </u>	20	5	15	40
E elective		40			
Medical statistic	S	160			16
Medical ethics		40 +40			80 First Pa
57 a Sexually Transm	SECOND nitted Diseases	PART		<u> </u>	
57 b Sexual Medicine	and Surgery ye Medicine/ Surgery roduction	225	180	540	110
57 b Sexual Medicine Male reproductiv Assistance Repr	and Surgery ye Medicine/ Surgery roduction	225	180		110 second
57 b Sexual Medicine Male reproductiv Assistance Repr	and Surgery ye Medicine/ Surgery oduction ed Disorders	225	180		

## 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 medical doctorate 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 MD 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	

Date of approval by department:

Program coordinator: Prof. Rashad Mahmoud Mostafa

# **Signatures:**

Date of approval by department:

Program Coordinator: Professor / Rashad Mahmoud Mostafa

Head of Department / Professor/ Mona Atwa