Medical Doctorate (M.D.) Degree Program and Courses Specifications for Andrology, Sexology and Sexually transmitted diseases

(According to currently applied Credit point bylaws)

Department of Dermatology, Venereology & Andrology
Faculty of medicine
Assiut University
2022-2023

Contents

Assiut University
Faculty of Medicine
Quality Assurance Unit (QAU)

M. D. degree of Andrology, Sexology and Sexually transmitted diseases

A. Basic Information

- **Program Title: Andrology, Sexology and Sexually transmitted diseases**
- **Nature of the program: Single.**
- **Responsible Department: : Department of Dermatology, Venereology & Andrology**
- **Program Academic Director (Head of the Department):**
  Prof. Dr./ Prof. Dr. Eman Riyad

Coordinator (s):

- **-Principle coordinator: Dr/ Emad El Dien Kamal.**

-Assistant coordinator (s)

- **Dr /Ali Mahran**

- **Internal evaluators:** Prof Dr Hatem Zedan Mohammed, Asyut University
- **External evaluator:** Prof Dr Ahmad Attia Awad, Cairo University.
  Prof. Dr. Mohammad M Farid Rabea, Cairo University
- **Date of approval of program specification by the Faculty of Medicine Council of Assiut University:18-3-2019.**
- **Date of most recent approval of program specification by the Faculty of Medicine Council of Assiut University: 27-11-2022**

- **Total number of courses: 11 courses**
  First part : 7courses.

  Second part: one course.

  Elective courses :2 courses

B. Professional Information

1- Program aims

1/1. Enable the candidates to keep in depth with the professional international standards of Patient care concerned with andrology sexology and sexually transmitted diseases by achieving high levels of:

a- Professional Clinical skills including Patient care .

b- Sophisticated common and uncommon Surgical maneuvers related to andrology sexology and sexually transmitted. Skills; such as: Varicocelectomy, Epididymo-Vasostomy, penile prosthesis in different circumstances and clinical situations etc.

1/2. Provide a professional training framework in depth to attain professional skills and Attitudes needed to practice andrology and to fulfill the required Specifications of the academic scientific degrees offered by the department.

1/3. Enable them to start well qualified professional careers subspecialist as qualified consultant in Egypt.

1/4. Make them recognized as sophisticated and qualified consultant abroad.

1/5. Enable them to pursue and master higher skills of scientific studies and degrees.

1/6. To enable candidates to perform high standard qualified scientific medical research and how to proceed with publication in indexed medical journals.

1/7. Enabling them to master different research methodology and do their own.

2-Intended learning outcomes (ILOs) *for the whole program*:

2/1Knowledge and understanding:

A. Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio – behavioral science relevant to his Speciality as well as the evidence – based application of this knowledge to patient care.

B. Explain basics, methodology, tools and ethics of scientific medical, clinical research.

C. Mention ethical, medico logical principles and bylaws relevant to his practice in Andrology, sexology and Sexually transmitted diseases (STDs).

D. Mention principles and measurements of quality assurance and quality improvement in medical education and in clinical practice of Andrology, Sexology and Sexually transmitted diseases (STDs).

E. Mention health care system, public health and health policy, issues relevant to this Speciality and principles and methods of system – based improvement of patient care in common health problems of the field of Andrology, Sexology and Sexually transmitted diseases (STDs).

2/2 Intellectual outcomes

A. Apply the basic and clinically supportive sciences which are appropriate to the Andrology related conditions / problem / topics.

B. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to Andrology.

C. Plan research projects.

D. Write scientific papers.

E. Participate in clinical risk management as a part of clinical governance.

F. Plan for quality improvement in the field of medical education and clinical practice in his Speciality.

G. Create / innovate plans, systems, and other issues for improvement of performance in his practice.

H. Present and defend his / her data in front of a panel of experts.

I. Formulate management plans and alternative decisions in different situations in the field of the Andrology.

2/3 Skills

2/3/1 Practical skills (Patient Care)

A .Provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Extensive level means in-depth understanding from basic science to evidence based clinical application and possession of skills to manage independently all problems in andrology, sexology and STDs.

B. provides extensive level of patient care for patients with all common diagnoses and for uncomplicated procedures in andrology, sexology and STDs.

C. provides extensive level of patient care for non-routine, complicated patients and under increasingly difficult circumstances, while demonstrating compassionate, appropriate and effective care.

D. Perform diagnostic and therapeutic procedures considered essential in andrology, sexology and STDs.

E. Handles unexpected complications, while demonstrating compassion and sensitivity to patient needs and concerns.

F. Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families in andrology, sexology and STDs related situations**.**

G, Gather essential and accurate information about patients of andrology, sexology and STDs related conditions.

H. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment for andrology, sexology and STDs related conditions.

I. Develop and carry out patient management plans for andrology, sexology and STDs related conditions.

J. Counsel and educate patients and their families about specialty related conditions.

K. Use information technology to support patient care decisions and patient education in all andrology, sexology and STDs related clinical situations.

L. Perform competently all medical and invasive procedures considered essential for andrology, sexology and STDs related conditions / area of practices.

M. Provide health care services aimed at preventing andrology, sexology and STDs related health problems.

N. Lead health care professionals, including those from other disciplines, to provide patient-focused care in andrology, sexology and STDs related conditions**.**

O. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets. (Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records).

2/3/2 General skills

Including:

- Practice-based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-based Practice

Practice-Based Learning and Improvement

A. Demonstrate the competency of continuous evaluation of different types of care provision to patients in the different area of his field

B. Appraise scientific evidence.

C. Continuously improve patient care based on constant self-evaluation and life-long learning.

D. Participate in clinical audit and research projects.

E. Practice skills of evidence-based Medicine (EBM).

F. Educate and evaluate students, residents and other health professionals.

G. Design logbooks.

H. Design clinical guidelines and standard protocols of management.

I. Appraise evidence from scientific studies related to the patients' health problems.

J. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies.

K. Use information technology to manage information, access on-line medical information; for the important topics.

Interpersonal and Communication Skills

L. Master interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, including:-

- Present a case.
- Write a consultation note.
- Inform patients of a diagnosis and therapeutic plan completing and maintaining comprehensive.
- Timely and legible medical records.
- Teamwork skills.

M. Create and sustain a therapeutic and ethically sound relationship with patients.

N. Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.

O. Work effectively with others as a member or leader of a health care team or other professional group.

Professionalism

P. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.

Q. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.

R. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.

Systems-Based Practice

S. Work effectively in health care delivery settings and systems related to Andrology, sexology and STDs including good administrative and time management.

T. Practice cost-effective health care and resource allocation that does not compromise quality of care.

U. Advocate for quality patient care and assist patients in dealing with system complexities.

V. Design, monitor and evaluate specification of under and post graduate course and programs.

W. Act as a chair man for scientific meetings including time management.

3- Program Academic Reference Standards (ARS) (Annex 2)

Academic standards for Medical Doctorate (MD) degree in Andrology, Sexology and Sexually transmitted diseases (STDs)

Assiut Faculty of Medicine developed MD degree programs' academic standards for different clinical specialties.

In preparing these standards, the General Academic Reference Standards for post graduate programs (GARS) were adopted. These standards set out the graduate attributes and academic characteristics that are expected to be achieved by the end of the program.

These standards were approved by the faculty council on 20/ 3/2010. These standards were revised and approved without changes by the Faculty Council on 23-9-2014. These standards were recently revised and reapproved without changes by the Faculty Council on 27-11-2022.

4- Program External References(Benchmarks)

1. **ACGME (Accreditation Council for Graduate Medical Education).**

2-Area of andrology and reproductive medicine: (The curriculum offered by the European Academy of Andrology, EAA) . https://www.andrologyacademy.net/#:~:text=The%20European%20Academy%20of%20Andrology%20(EAA)%20is%20an%20association%20of,the%20area%20of%20male%20health.

3-Area of Sexual medicine: (The program offered by the International society of Sexual Medicine).
4-Area of STDs: (Specialty training curriculum For genito-urinary medicine, Joint Royal Colleges of Physicians Training Board UK).
5-The program also matches the degree of Andrology offered by German Federal Medical Board (Facharzt Andrologie).
6-Medical Doctorate Degree of Andrology offered by T Andrology Department, Faculty of Medicine,Suez canal university.
7-Medical Doctorate Degree of Andrology offered by Andrology Department, Faculty of Medicine, Cairo University.

5- Program Structure

A. Duration of program: 4-6 years
B. Structure of the program:
Total number of credit points: = 420 CP
Master degree: 180 credit point
Didactic #: 37 (23.1%), practical 123 (76.9%), total 160 CP
Thesis and researches: 80 CP (33.3%)

First part
Didactic 10 (100%), practical 0 (0 %), total 10 CP
Second part
Didactic 24, (16.3 %), practical 123 (83.7 %), total 147 CP
Elective courses: 3 credit points
#Didactic (lectures, seminars, tutorial)

According the currently applied bylaws:
Total courses: 160 credit point
Compulsory courses: 157 credit point (98.1%)
Elective courses: 3 credit point (1.9%)

	Credit point	% from total
Basic science courses	10	4.1%
Humanity and social courses	3	1.2%
Speciality courses	147	61.3%
Others (Computer, …)	-	0
Field training	123	51.3%
Thesis	40	16.7%
2 published researches	40	16.7%
Master degree	180	

C- Program Time Table

Duration of program 4 years (could be extended at maximum to 6 years) divided into :

- Part 1:
  Program-related basic science courses
  Students are allowed to sit the exams of these courses after 6 months from applying to the M D degree.
  Students are allowed to sit the exams of the remaining basic science courses after 12 months from applying to the MD degree.

- Thesis and 2 published researches
  For the M D thesis;

MD thesis subject should be officially registered within 1 year from application to the MD degree,
Discussion and acceptance of the thesis should not be set before 24 months from registering the M D subject;
It could be discussed and accepted either before or after passing the second part of examination

- Part 2

  Program –related speciality courses and ILOs

Students are not allowed to sit the exams of these courses before 4 years from applying to the MD degree.

Two elective courses can be set during either the 1st or 2nd parts.

The students pass if they get 50% from the written exams and 60% from oral exams, 60% from clinical /practical exams of each course and 60% of summation of the written exams, oral and clinical/practical exams of each course
Total degrees 1700 marks.
500 marks for first part
1200 for second part
Written exam 40% - 70%.
Clinical/practical and oral exams 30% - 60%.

D- Curriculum Structure: (Courses):

Levels and courses of the program:

Courses	Course Code	Core Credit points		
		Lectures(Didactics)	training	Total CP
First Part				
Essential Courses (10 CP)				
Course 1: Medical statistics	FAC309A	1	-	1
Course 2:Research methodology	FAC309B	1	-	1
Course 3: Medico-legal Aspects and Ethics in Medical Practice and Scientific Research	FAC310C	1	-	1
Course 4:Surgical Anatomy	AVS321A	1	-	1
Course 5:General Surgery Advanced	AVS311	1	1	2
Course 6:Clinical Pathology Advanced &Medical Microbiology and Immunology advanced	AVS321B#	1+1	-	1+1
Course 7:Psychiatry and Psychosexual Disorders advanced	AVS320	0.75	0.25	1
Course 8:Internal medicine advanced	AVS318	0.5	0.5	1
Total CP				10
Elective courses*				
Elective course 1		1.5		1.5
Elective course 2		1.5		1.5
				3
Thesis				40
Published researches**				40
Second Part:				
Specialized courses				

Specialized Courses: **Course 9:Advanced andrology ,sexology and sexually transmitted diseases**	**VSA321C**	**24**	**123**	**147**
- **Unit 1: Male reproductive Medicine and Surgery (Advanced)** - **Unit 2: Assisted Reproduction (Advanced)** - **Unit 3: Sexual Medicine and Surgery (Advanced)** - **Unit 4: Sexually transmitted diseases (STDs)(Advanced)** - **Unit 5 : Andrology Related Disorders(Advanced)**		**5** **4** **5** **5** **5**	**30** **10** **29** **29** **25**	**35** **14** **34** **34** **30**
Total				**240**

#Didactic (lectures, seminars, tutorial)

* Elective courses can be taken during either the 1st or 2nd parts.

Student work load calculation:

Work load hours are scheduled depending on the type of activities and targeted competences and skills in different courses

Elective Courses#:

-Evidence based medicine.
- Advanced infection control.
- Quality assurance of medical education.
-Hospital management
- Scientific Writing
- Communication Skill

Two of the above mentioned courses are prerequisites for fulfillment of the degree.

3. Thesis / Researches:

40 CP are appointed to the completion and acceptance of the thesis.

**Another 40 points are appointed to acceptance or publication of one research from the thesis in international indexed medical journals or publication of 2 researches from the thesis in local specialized medical journals.

6. Courses Contents (Annex 1)

The competency based objectives for each course/module/rotation are specified in conjunction with teaching/training methods, requirements for achieving these objectives and assessment methods.

See Annex 1 for detailed specifications for each course/ module
Annex 6 II: Program Matrix

7-Admission requirements

- **Admission Requirements (prerequisites) if any :**
  - **I. General Requirements:**
    - **Master degree in Andrology, Sexology and STDs.**
  - **II. Specific Requirements:**
    - **Fluent in English (study language)**

VACATIONS AND STUDY LEAVE

The current departmental policy is to give working residents 2-4 week leave prior to first/ second part exams.

FEES:

As regulated by the postgraduate studies rules and approved by the faculty vice dean of post graduate studies and the faculty and university councils.

8-Progression and completion requirements

- Examinations of the first part (Medical statistic, Research methodology and Medicolegal Aspects and Ethics in Medical Practice and Scientific Research) could be set at 6 months from registering to the MD degree.
- Students are allowed to sit the exams of the remaining essential courses of the first part after 12 months from applying to the MD degree.
- Examination of the second part cannot be set before 4 years from registering to the degree.
- Discussion of the MD thesis could be set after 2 years from officially registering the MD subject, either before or after setting the second part exams.
- The minimum duration of the program is 4 years.

The students are offered the degree when:

1. Passing the exams of all basic science, elective and speciality courses of this program as regulated by the post graduates approved rules by the faculty council.
2. Completing all scheduled CP and log book (minimum 80%).
3. Discussion and acceptance of the MD thesis.
4. Acceptance or publication of one research from the thesis in international indexed medical journals or publication of 2 researches from the thesis in local specialized medical journals.

9-Program assessment methods and rules (Annex IV)

Method	ILOs measured
Written examinations: Structured essay questions Objective questions: MCQ Problem solving	K & I
Clinical: Long/short cases OSCE	K ,I, P &G skills
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

Weighting of assessments:

Courses		Degrees			
First Part	Course Code	Written Exam	Oral *	Practical/ clinical Exam	Total
Basic science Courses:					
Course 1&2:Medical Statistics& Research methodology(time:2h)	FAC309A + FAC309B	70(35+35)	30(15+15)	- -	100 (50+ 50)
Course 3 Medicolegal Aspects and Ethics in Medical Practice and Scientific Research(time:1h)	FAC310	35	15	-	50
Course4: Surgical Anatomy(time:1h)	VSA321A	25	25	-	50
Course5: General Surgery Advanced(time:2h)	VSA311	50	50	-	100
Course6: Clinical Pathology Advanced &Medical Microbiology and Immunology advanced(time:2h;1h+1h)	VSA321B #	40 + 40	20 (10+10)		100 (50+50)
Course 7&8: Psychiatry and Psychosexual Disorders advanced & Internal medicine advanced(time:1h+1h)	**VSA320 + VSA318**	**30 20**	**20 15**	**- 15**	**50 50**
Total					500
Second Part					
Specialized Courses	Course code	written	Oral	clinical	Total
Course 9: Advanced andrology ,sexology and sexually transmitted diseases (STDs)	VSA321C	500	400	300	1200
Unit1; Male		150			

reproductive Medicine and Surgery**(Advanced)** &Unit 2: Assisted Reproduction**(Advanced)** (time 3h)					
Unit3: Sexual Medicine and Surgery**(Advanced)** time 3h)		125			
Unit4: Sexually transmitted diseases STDs**(Advanced)** time 3h)		125			
Unit5: Andrology related disorders**(Advanced)** time 3h)		100			
Elective courses(2courses)		100	100		200
Total					1700

* 25% of the oral exam for assessment of logbook

Total degree 1900

500 marks for first part

1200 for second part

Written exam 46.8%

Clinical/practical and oral exams 53.1%

Examination system:

First part:

- Written exam 2 hours in Medical Statistics and Research Methodology + oral examination
- Written exam 1 hours in Medicolegal Aspects and Ethics in Medical Practice and Scientific Research + oral examination
- Written exam (1 hour in time) in Surgical Anatomy + Oral exam
- Written exam (2 hours in time) in General Surgery Advanced + clinical exam +Oral exam.

- Written exam (2 hours in time) in Clinical Pathology Advanced & Medical Microbiology and Immunology advanced + Oral exam.
- Written exam (2 hours in time) in Psychiatry and Psychosexual Disorders advanced & Internal medicine advanced+ clinical exam +Oral exam

➢ **Second part:**

- Written exam four papers as one paper (3 hours in time) for each in 5units; in Male reproductive Medicine and Surgery& Assisted Reproduction (1 paper), Sexual Medicine and Surgery (1paper), STDs (1paper) and Andrology Related Disorders (1 paper) + Oral exam+ Clinical exam.

➢ **Elective courses**

- Written exam one paper 1 hour in Elective course 1 + Oral & Practical exam
- Written exam one paper 1 hour in Elective course 2 + Oral & Practical exam

10-Program evaluation

By whom	Method	Sample
Quality Assurance Unit	Reports Field visits	#
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
Stakeholders	Reports Field visits Questionnaires	#
Senior students	Questionnaires	#
Alumni	Questionnaires	#

#Annex 5 contains evaluation templates and reports (Joined in the departmental folder).

11-Declaration

We certify that all of the information required to deliver this program is contained in the above specification and will be implemented.
All course specifications for this program are in place.

Contributor	Name	Signature	Date
▪ **Program Principle Coordinator:**	Dr Emad El Dien Kamal. Dr Ali Mahran		
▪ **Head of the Responsible**	**Prof Dr/Eman Riad**		

Department (Program Academic Director):			

Annex 1, Specifications for Courses / Modules

Annex 1: specifications for courses/ modules

Course 1: Medical statistics and Research Methodology
Unit 1: Medical statistics

- ***Name of department: Public Health and Community Medicine***
- ***Faculty of medicine***
- ***Assiut University***
- **2022-2023**

I. Course data

- **Course Title: Medical statistics**
- **Course code: FAC309A**
- **Specialty: offered to all clinical and academic specialties**
- **Number of points: 1 CP**
- **Department (s) delivering the course:** Pubic Health and Community Medicine
- **Coordinator (s):**
  - Course coordinator: According to Departmental councils
- **Date last reviewed: 2022**
- **Requirements (prerequisites) if any :**
- Completed Master degree in any of the academic or clinical departments of Medicine.

- **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Course Aims

2/1-Enable graduate students to use statistical principles to improve their professional work and develop the concept of critical interpretation of data

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

A- Knowledge and understanding

ILOS	Methods of teaching/ learning	Methods of Evaluation
A. List the types of variables	Lecture and discussion	Written examination
B. Identify the methods of data collection	Lecture and discussion	Written examination
C. Describe the different sampling strategies	Lecture and discussion	Written examination
D. Identify types of tabular and graphic presentation of data	Lecture and discussion	Written examination
E. Identify measures of central tendency and dispersion	Lecture and discussion	Written examination
F. Identify the characters of normal	Lecture and discussion	Written examination

distribution curve.		

B. intellectual Skills

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Describe the normal curves.	Lecture& Discussions	Written examination
B. Describe and summarize data	Lecture& Discussions	Written examination
C. Select the proper test of significance	Lecture& Discussions	Written examination
D. Interpret the proper test of significance	Lecture& Discussions	Written examination

C. Practical skills

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Design data entry files.	Tutorial on SPSS	Assignments SPSS exam
B. Validate data entry.	Tutorial on SPSS	Assignments SPSS exam
C. Manage data files.	Tutorial on SPSS	Assignments SPSS exam
D. Construct tables and graphs.	Tutorial on SPSS	Assignments SPSS exam
E. Calculate measures of central tendency and dispersion.	Tutorial on SPSS	Assignments SPSS exam

F. Select, apply and interpret the proper test of significance.	Tutorial on SPSS	Assignments SPSS exam

D. General skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Appraise scientific evidence	Discussions	Research assignment
B. Use information technology to manage information, access on-line medical information; for the important topics.	tutorial	Research and audits' assignment

4. Course contents (topic s/modules/rotation

Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skills C	General Skills D
Introduction	A-F	A-D	-	A&B
Tables and graphics	D	A-D	-	A&B
Sampling	C	-	-	A&B
Methodology of data collection	B	-	-	A&B
Type of variables	A	-	-	A&B
Proportion test& Chi-square test	E,F	C&D	-	A&B
Student T test& Paired T test	E,F	C&D	F	A&B

ANOVA test	E,F	C&D	F	A&B
Non parametric tests	E,F	C&D	F	A&B
Discrimination analysis factor analysis	E,F	C&D	-	A&B
SPSS Introduction	A-F	A-D	-	A&B
Data entry and cleaning of data	A	A-D	A-C	A&B
Transforming of variables	A	A&B	A-C	A&B
Descriptive statistics	D	A-D	D&E	A&B
Graphic presentation	D	A&B	D	A&B
Chi square and interpretation of results	E,F	C&D	F	A&B
Correlation Regression	E,F	C&D	F	A&B
Multiple and logistic Regression	E,F	C&D	F	A&B

5. Course Methods of teaching/learning:

1. Lectures
2. Assignments
3. Discussions
4. Exercises
5. Tutorial on SPSS v.16

6. Course Methods of teaching/learning: for students with poor achievements

1. Lectures
2. Assignments
3. Extra Discussions

4. Extra Exercises
5. Tutorial on SPSS v.16

7. Course assessment methods:

i. Assessment tools:

1. Practical examination
2. Attendance and active participation
3. Assignments
4. SPSS examination
5. written exam

ii. Time schedule: After 6 months from applying to the M D degree.

iii. Marks: 50

8. List of references

i. Lectures notes

Department lecture notes

ii. Essential books

Medical statistics

iii. Recommended books

Discovering statistics using SPSS

Periodicals, Web sites, etc

9. Signatures

Course Coordinator:	**Head of the Department:**
Date:	**Date:**

Course 2; Research Methodology

Name of department: Department of Dermatology, Venereology & Andrology
Faculty of medicine
Assiut University
2022-2023

1. Course data

- **Course Title: Research methodology**
- **Course code: FAC309B**
- **Specialty: Offered to all clinical and academic specialties**
- **Number of credit points: 1 credit point**
- **Department (s) delivering the course: Department of public health**
- **Coordinator (s):**
  - **Course coordinator:** : According to Departmental councils
- **Date last reviewed:** 2022
- **Requirements (prerequisites) if any :**
  - **Completed Master degree in any of the academic or clinical departments of Medicine.**

2. Course Aims

To provide graduate students with the skills of:

- Research proposal,
- Writing planning and implementing rigorous research,
- Writing and publishing scientific papers.

3. Intended learning outcomes (ILOs):

To be able to write a rigorous research proposal

A. knowledge and understanding

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Explain differences between different study designs	Lecture and discussion	Written examination
B. Identify sources and types of bias in research		
C. Describe the different sampling strategies, and compute sample size		
D. Select and design valid measurement tools for research		
E. Explain ethical issues in conducting research on human subjects		

F. describe the rules of authorship in scientific writing		
G. List the steps involved in proposal writing		
H. Identify a research problem within a conceptual framework	Lecture on Criteria to Consider to identify a research problem	Discussion
I. Use the web sources to do a literature search	Practical tutorial on web	Assignment
J. Select the appropriate study design for the research question	Lecture on various study designs	Written examination
K. Minimize bias in designing research	Lecture on the different types of bias	Written examination
L. Screening & theoretical background	Lectures on criteria for successful screening program& criteria for evaluation a screening test.	Written examination

B. intellectual skills

Competency and Skills	Methods of teaching/ Learning	Methods of Evaluation
A. Apply basic science & knowledge	Discussions &seminars	Written examination

for appraising scientific literature		

C. Practical skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Develop a budget and time line for the research	Tutorial	Assignments
B. Design a data entry file	Tutorial on Epi-info or Excel	Assignments Written exam
C. Identify steps required in fielding the study	Lecture	Assignments Written exam
D. Identify steps required for calculation Sensitivity, Specificity, positive predictive value, negative predictive value, Accuracy of a screening test	Lecture	Assignments Written exam

D. general skills

Practice based learning improvement & professionalism

(Scientific Paper writing skills)

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. To be able to write an abstract	Tutorial	Written examination case study for critique
B. Write the introduction	Tutorial	Written examination
C. Write the methodology section	Tutorial	Written examination

D. Present the results	Tutorial	Written examination
E. Perform Discussion section	Tutorial	Written examination
F. Learn Authorship ethical rules	Tutorial	Written examination

4. Course contents (topic s/modules/rotation

Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skills C	General Skills D
Introduction & proposal writing	G	A	A	A-F
Epidemiological Study designs	A,J	A	B,C	-
Screening & theoretical background	L	A	-	-
Screening practical	L	A	D	-
Sample size calculation	B	A	B,C	-
Research bias	H	A	C	F
Ethics in research	E,F	A	C	F

5. Course Methods of teaching/learning:

1. Lectures
2. Assignments
3. Discussion
4. Exercises

6. Course assessment methods:

i. Assessment tools:

1. Written examination
2. Attendance and active participation
3. Class
4. Assignments

ii. Time schedule: After 6 months from applying to the M D degree.

iii. Marks: 50 marks.

7. List of references

i. Lectures notes

- Department lecture notes

ii. Essential books

- An epidemiologic Approach to Reproductive Health,CDC,FHI, and WHO Phyllis A. wingo, James E.Higgens, Goerge L. Rubin, and S.Christine Zahniser

iii. Recommended books

- Evidence Based Medicine How to practice and teach EBM.
- David Sachett, Sharon E. Straus, W.Scott Richardson , William Rosenberg R.Brain Haynes

iv. Periodicals, Web sites, … etc

- Dissertation workshop open courseware JHSPH

8. Signatures

Course Coordinator:	**Head of the Department:**
-	-

Date	Date:

Course 3: Medicolegal Aspects and Ethics in Medical Practice and Scientific Research

Name of department: Forensic medicine and clinical toxicology

Faculty of medicine

Assiut University

1. Course data

- **Course Title: Medicolegal Aspects and Ethics in Medical Practice and Scientific Research**
- **Course code: FAC310C**
- **Specialty: Family *medicine*, *Emergency Medicine* in Anesthesia and Andrology, Sexology and sexual transmitted disease(1st part).**
- **Number of credit points: 1 credit point**
- **Department (s) delivering the course: Forensic Medicine and Clinical Toxicology**

- **Coordinator (s):**
  - **Course coordinator:**
    Prof. Randa Hussein
  - **Assistant coordinator (s) Assist.**
    Prof. Heba Attia

- **Date last reviewed:** January 2022
- **Requirements (prerequisites) if any :**
  - **Completed Master degree.**

2. Course Aims

To describe the basic ethical and medicolegal principles and bylaws relevant to practice in the field of General medicine, Special medicine, Pediatrics, Public health, Oncology and Rheumatology

3. Intended learning outcomes (ILOs):

A knowledge and understanding

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Mention principals of Taking consent.	Lecture and discussion	Oral &Written exam
B. Mention principals of Writing a death certificate	Lecture and discussion	Oral &Written exam
C. Mention principals of diagnosing death.	Lecture and discussion	Oral &Written exam
D. Mention principals of writing toxicological reports and trauma reports.	Lecture and discussion	Oral &Written exam
E. Explain principals of medical reports.	Lecture and discussion	Oral &Written exam
F. List indications and principals of induced emesis, gastric lavage and samples collection.	Lecture and discussion	Oral &Written exam

B. intellectual

Competency and Skills	Methods of teaching/	Methods of Evaluation

	learning	
A. Present case, seminars in death certificate	Lecture and discussion	Oral &Written exam
B. Present case, seminars in toxicological cases	Lecture and discussion	Oral &Written exam

C. Practical skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Identify medical ethics and ethics in research.	Lecture and discussion	Reading Discussion
B. Prepare and write consent.	Lecture and discussion	Reading Discussion
C. Identify medical responsibilities.	Lecture and discussion	Reading Discussion
D. Write death certificate.	Lecture and discussion	Reading Discussion and active participation
E. Deal with a case of Suspicious death	Lecture and discussion	Reading Discussion and active participation
F. Perform gastric lavage, induce emesis, and obtain samples.		
G. Write medical and toxicological reports	Lecture and discussion	Reading Discussion and active participation
H. Develop and carry out patient management plans for Euthanasia, and Organ Transplantation		
I. Counsel patients and their		

families about specialty related conditions including Permanent infirmities, Euthanasia, and Organ Transplantation		

D general skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Present a case.	Lecture and discussion	Global rating logbook
B. Write a consultation note	Lecture and discussion	Global rating logbook
C. Inform patients and maintaining comprehensive.	Lecture and discussion	Global rating logbook
D. Make timely and legible medical records	Lecture and discussion	Global rating logbook
E. Acquire the teamwork skills	Lecture and discussion	Global rating logbook

4. Course contents (topic s/modules/rotation

Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge A	Intellectual B	Practical skills C	General Skills D
1. Death and death certificate.	B,C	A	D,E	A
2. Medical Reports	A		G	A,D,E
3. Toxicological and Trauma reports	D,F	B	G,F	A,E
4. Ethics in research.	A		A	

5. Medical ethics.	E		A,B,C,H,I	B,C,E

5. Course Methods of teaching/learning:

1. Lectures.
2. Discussions.
3. Exercises.

6. Course assessment methods:

i. Assessment tools:

1. Written examination.
2. Attendance and active participation.
3. Oral examination.

ii. Time schedule: After 6 months from applying to the M D degree.

iii. Marks: 50 (35 for written exam and 15 for oral exam).

7. List of references

i. Lectures notes

- Course notes.
- Staff members print out of lectures and/or CD copies.

ii. Essential books

- Medical Ethics Manual. World medical association. Third edition 2015.
- Medical ethics and law. Dominic Wilkinson, 3rd edition 2019.
- Bernard Knight and Pekka Saukko (2015: Knight Forensic Pathology. Hodder Arnold press

iii. Recommended books

- Medical ethics. MC Francis. 3rd edition 2009
- Cambridge textbook of Bioethics 3rd edition 2008
- Byard, Roger W. Pekka Saukko, Bernard Knight (2015): Knight's forensic pathology 4th ed.CRC Press.
- Shannon, M. W., Borron, S. W., Burns, M. J., Haddad, L. M., & Winchester, J. F. (2007). Haddad and Winchester's clinical management of poisoning and drug overdose. Philadelphia: Saunders/Elsevier.

- Goldfrank, Lewis R.; Howland, Mary Ann; Hoffman, Robert S.; Nelson, Ewis S.; Lewin, Neal A (2019): Goldfrank's Toxicologic Emergencies, 11th ed. McGraw Hill / Medical.

- Adam Negrusz and Gail Cooper (2013): Clarke's Analytical Forensic Toxicology. 2nd ed. London: Pharmaceutical Press.

- Biswas Gautam (2021): Review of Forensic Medicine & Toxicology. 5th ed. Jaypee Brothers Medical Pub.

- Gilbert Corrigan (2012): Essential Forensic Pathology: Core Studies and Exercises.1st ed. CRC Press.

- Kalipatnapu N. Rao (2012): Forensic Toxicology: Medico-Legal Case Studies. 1st ed. CRC Press.

iv. Journal and web site

- Journals of all Egyptian Universities of Forensic Medicine and Clinical Toxicology.
- All International Journals of Forensic Medicine and Clinical Toxicology which available in the university network at www.sciencedirect.com.
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8. Signatures

- Course Coordinator: Prof. Heba Attia Yassa **Prof. Randa Hussein Abdel hady**	**- Head of the Department:** **Prof. Randa Hussein Abdel hady**
Date23-1-2022	**Date**: 23/1/2022

Course 4: Surgical Anatomy

- ***Name of department: Dermatology , Andrology and Venereology department.***

- ***Faculty of medicine***
- ***Assiut University***
- ***2019-2020/2020-2021***

1. Course data

- **Course Title: Surgical anatomy Course**
- **Code:321A**

Specialty: Andrology ,sexology and Sexually transmitted diseases

- **Number of credit points: 1 credit points (100%); Didactics 1CP(100%); PRACTICAL (O)CP, Total 1CP .**
  - **Department (s) delivering the course:** Department of Dermatology, STDs and Andrology as annually approved by both departments councils.
- **Coordinator (s):**
  - **Course coordinator:** As annually approved by departments council.
  - **Date last reviewed: 2/2019**
    - **Requirements (prerequisites) if any : Completed Master degree.**

2. Course Aims

2/1-Provide the advanced data of Anatomy with surgery applied that are necessary for Andrology, Sexology and STDs

As the candidate is able to Master the advanced skills related to the following :

- Male reproductive organs.

- Identification of different details of male pelvic organs.

3. Intended learning outcomes (ILOs):

A- A Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Describe the **Anatomy** advances related to advanced Andrology, Sexology and STDs diseases including: - Embryology of male reproductive organs -Anatomy of male reproductive and sex organs - Anatomy of male pelvis. B. Explain the advanced embryology and anatomy of internal and external male genital organs. C. Illustrate the following : - The advanced anatomy of male genital organs to outline the diagnosis, treatment, prevention and control of andrological diseases. - The impact of embryology and anatomy .	Lectures Didactics	Written and oral examination Log book

B- Intellectual outcomes

ILOs	Methods of teaching/ Learning	Methods of Evaluation

A. Correlates the advanced facts of anatomy with clinical reasoning, diagnosis and management of common diseases related to Andrology, Sexology and STDs	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches for diagnosis of common andrological or venereal diseases and select the most appropriate and cost-effective tool leading to the identification of the cause.		
C- Report and appraise a concise scientific activity according to standard scientific thinking and integrity.		

C- Practical Skills =0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Appraises evidence from scientific studies(journal club)	Lectures	Logbook
B. Perform data management including data entry and analysis.		
C .Facilitate learning of junior students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	-Observation -Senior staff experience	Logbook
E. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation

F.Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation -Senior staff experience	Logbook
G.Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
H.Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	Logbook

4. Module contents (topic s/modules/rotation

Module Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Embryology of internal male genital organs	A	A-D	-	A-E
Embryology of external male genital organs	A	A-D		A-E
Anatomy of internal male genital organs	A	A-D		A-E
Anatomy of external male genital organs)	A	A-D		A-E
Anatomy of the male pelvis	A	A-D		A-E
Anatomy of the anterior abdominal wall	A	A-D		A-E

5 module Methods of teaching/learning:

i. **Lectures**
ii. **Laboratory work**

6 module Methods of teaching/learning: for students of limited abilities

- **Lectures**
- **Laboratory work**

7- module assessment methods:

i. Assessment tools:

- Written and oral examination
- Log book

ii. Time schedule: at the end of 1st part.

iii. Marks 50(25+25)

8- List of references:

Course Notes

Essential book:

Cunningham's Textbook of Anatomy

Recommended textbook:

Grey's Textbook of Anatomy

Periodicals, Web Sites, www.pubmed.com

9. Signatures

Course Coordinator	
Unit 1 Coordinator: ……	**Head of the Department:** ……
Date: ……	**Date:** ……
Unit 2 Coordinator: ……	**Head of the Department:** ……
Date: ……	**Date:** ……

Course 5:General Surgery Advanced

I. course data

- Course Title: General surgery advanced
- Course Code VSA311
- Specialty : Andrology, Sexology and STDs
- Number of points: 2CP ;1CP (50%) DIDACTICS, 1CP(50%)Practical
- Department (s) delivering the course: General surgery Department in conjunction with Department of Dermatology, Venereology and Andrology as annually approved by both departments councils.
- Coordinators: Staff members of General surgery Department in conjunction with Staff members of Department of Dermatology, Venereology and Andrology as annually approved by both departments councils.
- Date last reviewed:2/2019
- Requirements (prerequisites) if any : Completed master degree
-
- Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course Aims

2/1 Provide the candidate with the advanced knowledge and skills of general surgery related to Andrology, Sexology and STDs.

3. Intended learning outcomes (ILOs):

A) Knowledge and understanding

ILOS	**Methods of teaching/ learning**	**Methods of Evaluation**
A-Describe in advanced details the symptoms and sings of most common and uncommon surgical conditions related to andrology diseases. • Shock, Hemorrhage, blood transfusion, antibiotics in surgery • Surgical infections, gas gangrene and tetanus • Soft tissue infections. • Diseases of lymph nodes • Undescended testis • Scrotal swellings • (hydrocele, varicocele, epididymis) • Hernia and testicular tumors • Congenital anomalies of the external genitalia	Lectures And didactics	Written and oral examination Log book

B-Intellectual outcomes

ILOs	**Methods of teaching/ Learning**	**Methods of Evaluation**
A. Correlates the facts of relevant advanced and clinically supportive sciences with clinical reasoning, diagnosis and management of common and uncommon surgical diseases related to **Andrology.**	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical surgical situations related to **Andrology**		
C. Design and present cases , seminars in common surgical **Andrology** problem		
D-Formulate management plans and alternative decisions in different surgical situations in the field of the **Andrology**		

C) Practical Skills

Competency and Skills	Methods of teaching/ Learning	Methods of Evaluation
A- Take professional case history . B- Proper Diagnosis of different surgical conditions mentioned above and related emergencies. C- Master the skills for selection of patients suitable to elective surgical interventions. D- Manage preoperative steps related to andrological procedures. E- Order appropriate investigations for surgically related andrological conditions. F- Manage efficiently with other colleagues in management of surgical elderly patient.	Lectures and training (clinical and log training) Lectures seminars, discussion with senior staff observation Clinical work	Written and oral examination Log book

D- General skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology(audit, logbook)	Lectures	Logbook
B. Appraises evidence from scientific studies(journal club)		
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	Observation -Senior staff experience	Logbook
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present professionally a case in different topics related to Andrology, Sexology and STDs		
K. Write effectively a report in different topics related to Andrology, Sexology and STDs		
L. Council patients and families about different topics related to Andrology, Sexology and STDs		

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation -Senior staff experience	Logbook
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	Observation -Senior staff experience	Logbook
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		
R. Assist patients in dealing with system complexities.		

4.Course contents (topic s/modules/rotation

Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Shock, Hemorrhage, blood transfusion, antibiotics in surgery	A	A,B,D	A,B,F	A-E
Surgical infections, gas gangrene and tetanus	A	A,B,D	A,B,F	A-R
Soft tissue infections.	A	A,B,D	A,B,F	A-E
Undescended Testis	A	A,B,D	A,B,F	A-E
Scrotal swellings (hydrocele, varicocele, epididymis)	A	A-D	A-F	A-P
Hernia and testicular tumors	A	A-D	A,B,D,E,F	A-P
Congenital anomalies of the external genetalia	A	A-D	A-F	A-P

5 Course Methods of teaching/learning:

1. **Lectures**
2. **seminars,**
3. **discussion with senior staff**
4. **observation**
5. **Clinical work**

6 Course Methods of teaching/learning: for students of limited abilities

1. Lectures
2. seminars,
3. discussion with senior staff
4. observation
5. Clinical work

7- Course assessment methods:

i. Assessment tools:

1. Written (50), oral (10) and clinical (20) examination
2. Log book

ii. Time schedule: 1ST PART
iii. Marks: 80 **MARK**

8. List of references

8.1- Course Notes
8.2- ***Essential Books (Text Books):***
- Bailey and Love's Short Practice of Surgery.
- RECOMMENDED BOOK
- Current Surgical Diagnosis and Treatment, 11th Edition.
- WEBSITE: www.Pubmed.com

9. Signatures

Course Coordinator	
Course Coordinator: ……	**Head of the Department:** ……
Date: ……	**Date:** ……

Course 6: Clinical Pathology Advanced & Medical Microbiology and Immunology advanced

It is divided into 2 units:
Unit 1: : Clinical Pathology Advanced
Unit 2: : Medical Microbiology and Immunology advanced
Course code: AVS321B#
Credit points 2 CP

Course 6; Unit 1: Clinical pathology Advanced

- ***Name of department: Dermatology , andrology and venereology department***
- ***Faculty of medicine***
- ***Assiut University***
- **2019-2020/2020-2021**

I. Unit data

- **Unit Title: Clinical pathology advanced**
- **Course code: VSA221B#**
- **Specialty:** Andrology, Sexology and STDs
- **Number of points: 1 CP for didactic teaching.**
- **Department (s) delivering the course:** clinical pathology department in conjunction with Department of Andrology, Sexoloy and STDs as annually approved by both departments councils.
- **Coordinators:** Staff members of clinical pathology department in conjunction with Department of Andrology, Sexology and STDs as annually approved by both departments councils.
- **Date last reviewed: 2019**
- **Requirements (prerequisites) if any:**
  Completed master degree

2. Unit Aims

2/1-Provide the advanced facts **of clinical pathology** that are necessary for Andrology, Sexology and STDs.

-**AS at the end of unit the candidate should able to master the following**;

- Apply approach for semen analysis.
- Identification how to do DNA fragmentation index.
- Testicular markers evaluation.
- Epididymal, prostatic and seminal vesicular markers evaluation

3. Intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Describe and explain different advanced aspects and future perspectives of: 1) Laboratory diagnosis of sexually transmitted diseases (HIV , HSV, HBV, HPV, Chlamydia, gonorrhea, syphilis, and others) 2) Semen analysis 3) CASA 4) DNA fragmentation tests 5) Tests assessing sperms chromatin condensation 6) Endocrinal evaluation of male infertility 7) Genetic evaluation of male infertility 8) Post coital test 9) Diagnostic tests for Immunological male infertility 10) Tumour markers of prostatic and testicular markers. 11) Sertoli cells markers 12) PSA. 13) Markers of spermatogenesis. 14) Epididymal markers 15) Prostatic markers 16) Seminal vesicle markers 17) Testicular markers.	Lectures Didactics	Written and oral examination Log book

B-Intellectual outcomes

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A-Apply conceptual Lab approach for pathogenesis of common male genital infections.	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book
B-Formulate a systematic clinical lab approach for microbiological diagnosis of common male genital infections.		

C- Practical Skills=0

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Appraises evidence from scientific studies(journal club)	Lectures	Logbook
B-Perform data management including data entry and analysis.		
C-Facilitate learning of junior students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	-Observation -Senior staff experience	Logbook
E. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation -Senior staff experience	Logbook
G. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
H. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	Logbook

4. Contents (topic s/modules/rotation
Unit Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Laboratory diagnosis of sexually transmitted diseases	A	A,B	-	A-E
Semen analysis interpretation	A	A,B	-	A-E
DNA fragmentation tests interpretaion	A	A,B	-	A-E
Genetic infertility work-up	A	A,B	-	A-E
Immunological infertility work-up	A	A,B	-	A-E
Testicular and prostatic cancer markers	A	A,B	-	A-H

5 Methods of teaching/learning:

iii. **Lectures**
iv. **Seminars**
v. **Didactic teaching.**

6 Methods of teaching/learning: for students of limited abilities

- **Lectures**
- **Seminars**
- **Didactic teaching**

7- Assessment methods:

i. Assessment tools:

- Written (40)and oral(10) examination
- Log book

ii. Time schedule: at the end of 1st part.

iii. Marks 50 (40+10)

8- List of references:

Lecture notes

9. Signatures

Unit 1 Coordinator: ……	**Head of the Department:** ……
Date: ……	**Date:** ……

Course 6; Unit 2 : Medical Microbiology and Immunology Advanced

Name of department: Department of Dermatology, Venereology & Andrology Faculty of medicine Assiut University

2019- 2020/2020-2021

1.Unit data

- **Unit Title: : Medical Microbiology and Immunology Advanced**
- **Unit code: VSA321B#**
- **Specialty: Andrology , Sexology and Sexually Transmitted Diseases**
- **Number of credit points: 1 credit point for didactics**
  - **Department (s) delivering the course:** Microbiology and Immunology Department in conjunction with Department of Dermatology, Venereology and Andrology as annually approved by both departments councils
  - **Coordinator (s):** Annually approved by both departments councils
- **Date last reviewed: 2/2019**
- **Requirements (prerequisites) if any :**
  - **Completed Master degree.**

2. Unit Aims

2/1- Provide the advanced facts **of Microbiology and Immunology** that are necessary for Andrology, Sexology and STDs

BY THE END OF unit ,the candidate should be able to master the following skills ;

*List the causative microorganisms, pathogenesis, and microbiological diagnosis of the following clinical conditions:

A. Male genital tract infections
B. Sexually-transmitted infections.
C. Genital warts.
D. Identify the types, causative microorganisms, risk factors and preventive measures of nosocomial infections.

*Use the microscope.

*Demonstrate different types of conventional culture media.

*Apply staining techniques of bacteria and fungi.

*Identify the morphological and cultural characters of bacteria and fungi.

*Interpret biochemical test for identification of bacteria and fungi.

*Interpret antibiotic susceptibility testing.

3. Intended learning outcomes (ILOs):

A. Knowledge and understanding

Competency and Skills	Methods of teaching/ Learning	Methods of Evaluation
A. Describe the **Microbiological and immunological** advances related to Andrology, Sexology and STDs diseases including: A. - To provide the students with an advanced facts of the protective functions of the immune system and its role in the pathophysiology of male genital infections. B. To provide the students with the advanced knowledge of bacteriology, virology and mycology and its applications in the andrology and venereology field. C. To demonstrate advanced conceptual awareness of male genital infections, their microbial causes, clinical presentation, laboratory diagnosis, prevention and treatment. D. To aware the students with the advanced techniques of sterilization and infection control.	Lecture and discussion	Oral &Written exam

B. intellectual skills

Competency and Skills	Methods of teaching/ Learning	Methods of Evaluation
A. Correlates the facts of Microbiology and Immunology with clinical reasoning, diagnosis and management of common diseases related to Andrology, Sexology and STDs	Didactic (lectures, seminars,	Oral &Written exam

B. Demonstrate an investigatory and analytic thinking (problem solving) approaches for laboratory diagnosis of common dermatologic or venereal diseases and select the most appropriate and cost-effective tool leading to the identification of the causative organism.	tutorial)	
C- Categorize a microorganism as a bacterium, virus or fungus according to standard taxonomy.		
D- Report and appraise a concise scientific activity according to standard scientific thinking and integrity.		

C. Practical skills =0

D.General skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Appraises evidence from scientific studies(journal club)	Lectures	Logbook
B.Perform data management including data entry and analysis.		
C.Facilitate learning of junior students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
D.Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	-Observation -Senior staff experience	Logbook
E. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation -Senior staff experience	Logbook
G.Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
H. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	Logbook

4. Course contents (topic s/modules/rotation)

Course Matrix

Time Schedule: First Part revise course matrix

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Bacterial structure, physiology, and classifications Bacterial genetics, antibacterial agents, mechanism of actions and resistance	A	A-D	-	A-E
Staphylococci, Streptococci, and Enterrococci	A	A-D	-	A-E
Clostridia and other Gram positive bacilli(Corynebacteria,Liseria,bacillus group, and Actinomycosis)	A	A-D	-	A-E
Nisseria, Porvobacteria(Haemophyilus,Bordetella,BrucellaLegionellaYerisinia,Pasteurella)	A	A-D	-	A-E
Enterobacteriaceae	A	A-D	-	A-E
Pseudomonas,Vibrios,Campylobacter,Helicobacter Gram negative anaerobic bacteria	A	A-D	-	A-H

Spirochates, Mycobacteria,Clamydia,Mycoplasma,	**A**	**A-D**	-	**A-H**
Basic mycology: classification and antifungal agents	**A**	**A-D**	-	**A-E**
Basic virology ,major virus group	**C**	**A-D**	-	**A-E**
Basic immunology: immune response(tissues and cells, types)	**B**	**A-D**	-	**A-E**
Humoral immunity, Immunoglobulins, Complement,Ag-Ab reactions)	**B**	**A-D**	-	**A-E**
Cell mediated immunity,Cytokines, Immunity to bacterial infections and immunoprophylaxis	**B**	**A-D**	-	**A-E**
Autoimmunity and tumor immunology	**B,C**	A-D	-	**A-E**
Immunodeficiency and infections in immunocomprommized host	**B**	A-D	-	**A-H**
Sterilization and disinfection	**A**	A-D	-	**A-H**
Sexually transmitted infections	**A**	A-D	-	**A-H**
Skin and soft tissue infections	**A,C**	A-D	-	**A-H**

5 Module Methods of teaching/learning:

vi. **Lectures**

vii. **Laboratory work**

6 Methods of teaching/learning: for students of limited abilities

- **Lectures**
- **Laboratory work**

7- module assessment methods:

i. Assessment tools:

- Written (30 degrees) and oral (20 degrees) examination
- Log book

ii. Time schedule: at the end of 1st part.

iii. Marks =50

List of references :-

- Jawetz, Melnick, and Adelberg's Medical Microbiology. Geo F. Brook, Janet S. Butel, Stephen A. Morse (eds).
- Medical Microbiology, A short course. Ellen J. Baron, Robert SC, Dexte HH, James NM, Jerrold AT (eds). Wilsey-Liss.
- Microbiology, a clinical approach. Anthony S, Jennifer S, Danielle MS (eds). Garland science.
- PowerPoint version of the lecture uploaded on the Facebook page of Microbiology and Immunology Department, Faculty of Medicine, Suez Canal University.
- Hand-outs prepared by microbiology staff members in the department.
- Web sites:

asmnews@asmusa.org

http://www.microbelibrary.org
www.pubmed.com

9. Signatures

Course Coordinator	
Unit 1 Coordinator: **…….**	**Head of the Department:** **……**
Date: ……	**Date: ……**
Unit 2 Coordinator: **…….**	**Head of the Department:** **……**
Date: ……	**Date: ……**

Course 7: Psychiatry & Psychosexual Disorders

- **Name of department: Dermatology , Andrology and venereology department.**
- **Faculty of medicine**
- **Asyut University**
- **2019-2020/2020-2021**

1. Course data

- **Course Title: Psychiatry & Psychosexual Disorders**
- **Course code: VSA320**
- **Specialty: Andrology ,Sexology and Sexually transmitted diseases**
- **Number of credit points:1 credit points (100%); Didactics 1CP 0.75CP(0.75%); PRACTICAL 0.25(0.25)CP .**
  - **Department (s) delivering the course:** Neuropsychiatry Department in conjunction with Department of Dermatology, Venereology and Andrology.
- **Coordinator (s):According to approval of departmental councils**

Date last reviewed:

- **Requirements (prerequisites) if any: Completed Master degree.**

2. Course Aims

2/1 Provide the advanced knowledge and attitudes required for psychiatric problems related to sexology and andrological complaints.

2/2 Acquire the advanced psychosexual facts that are necessary for andrology and sexology

3. Intended learning outcomes (ILOs):

A) Knowledge and understanding

ILOS	Methods of teaching/ learning	Methods of Evaluation
A. Describe the advances of psychology and sexology related to Andrology problems including the following: Psychology of sex Disorders of sexual cycle Paraphilias Gender identity disorders B- Illustrate the art of psychiatric concepts and condition related to andrology including the following: -advanced facts and classification in psychiatry advanced management strategies in psychiatry -Interface between psychiatry and andrology - Common and uncommon psychiatric conditions and their management.	Lectures Didactics discussion	Written and oral examination Log book

B) Intellectual outcomes

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Correlates the facts of **advanced** Sexology and psychiatry with clinical reasoning, diagnosis and management of related condition to Sexology and Andrology diseases**.**	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to the conditions mentioned above.		

C) Practical Skills

ILOS	Methods of teaching/ learning	Methods of Evaluation
A. Take full medical, Psychological history and assessment of patients. B- Diagnose psychiatric related andrological malfunctions C- Investigate properly in context with psychological condition of patients in our practice. D- carry out management strategy for different psychological related conditions in association with psychologists. E. Communicate effectively with patients, relatives and psychiatrists. F. Cope with ethical and legal issues which occur during the management of patients with psychiatric problems .	training (clinical) Discussion Observation ▪ **Lectures.** ▪ **Tutorial.** ▪ **Discussion** ▪ **Observation** ▪ **CLINICAL CASE**	Written and oral examination Log book

D) General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Appraises evidence from scientific studies(journal club)	Lectures Discussion, observation	Logbook
B.Perform data management including data entry and analysis.		
C.Facilitate learning of junior students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
D.Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	-Observation -Senior staff experience	Logbook
E.Provide information using effective nonverbal, explanatory, questioning, and writing skills.		

Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
F.Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation -Senior staff experience	Logbook
G.Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
H. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	Logbook

4. Course contents (topic s/modules/rotation
Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Psychology of sex	A	A	-	B-E
Disorders of sexual cycle	A	A	-	A-H
Paraphilias	A	A	-	A-H
Gender identity disorders	A	A,B	-	B-E
Introduction and classification in psychiatry	B	A	-	B-E
Introduction to management strategies in psychiatry	B	A	-	B-E
Interface between psychiatry and andrology	B	A	-	B-E
Common psychiatric conditions and their management	B	A,B	A-F	A-H

5 Course Methods of teaching/learning:

- Lectures
- tutorial.
- discussion
- observation
- clinical case

6 Course Methods of teaching/learning: for students of limited abilities

- Lectures
- tutorial.
- discussion
- observation
- clinical case

7. Course assessment methods:

i. Assessment tools:

- Written and oral examination
- Log book

ii. Time schedule: first part

iii. Marks: 50 (40+10)

8. List of references

Course Notes: lecture notes.

9. Signatures

Course Coordinator: ……	**Head of the Department:** ……
Date: ……	**Date:** ……

Course 8: Internal Medicine Advanced

I. Course data

- **Course Title:** Internal Medicine advanced
- **Course code: VSA318**
- **Specialty:** Andrology, Sexology and STDs
- **Number of points: 1 CP ;0.5CP(50%) for didactics as well as trainig**
- **Department (s) delivering the course:** Internal medicine Department in conjunction with Department Andrology, Sexology and STDs as annually approved by both departments councils.
- **Coordinators:** Staff members Internal Medicine Department in conjunction with Department of Andrology, Sexoloy and STDs as annually approved by both departments councils.
- **Date last reviewed: 2-2019**
- **Requirements (prerequisites) if any:**
  Completed master degree

2. Course Aims

2/1 Provide the advanced facts **internal medicine** that are necessary for Andrology, Sexology and STDs

3. intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Advanced Description of the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:- 1. Approach to the Patient: History and Physical Examination 2. Hematopoiesis; Hematopoietic Growth Factors & The Peripheral Blood Smear 3. Immunosuppressing Drugs Including Corticosteroids 4. Antithrombotic Therapy 5. Principles of Genetics and the Inherited basis of common diseases 6. The Innate and the Adaptive Immune System 7. Prevention and Control of Health Care-Associated Infections 8. Diabetes mellitus	Lectures Didactics	Written and oral examination Log book

9. Arterial Hypertension 10. Atherosclerosis, Thrombosis, and Vascular Biology 11. Diseases of the Aorta & Atherosclerotic and other Peripheral Arterial Disease 12. Chronic Kidney Disease 13. Treatment of Irreversible Renal Failure 14. Hepatic Failure and Liver Transplantation 15. Approach to the Anemias 16. Disorders of Lipid Metabolism 17. Wilson Disease 18. Neuroendocrinology and the Neuroendocrine System 19. The Systemic Vasculitides 20. Approach to the Patient with Urinary Tract Infection 21. Tuberculosis 22. Autonomic Disorders and Their Management		
B. Mention the principles of advanced management of : Organ failure (cardiac, hepatic, renal, respiratory) Systemic failure(shock) Disorders of electrolytes and acid base balance Cardiac arrhythmia Diabetes mellitus		

Neuropsychiatric aspects of aging		
C. State update and evidence based knowledge of conditions mentioned in B.		
D. Memorize the facts and principles of the relevant advanced and clinically supportive sciences of medical problem related to Andrology		
E. Explain the facts and principles of the relevant advanced and clinically supportive sciences of medical problem related to Andrology		
F. Describe the advanced ethical and medicolegal principles of medical problem revenant to the Andrology		
G. Describe the advances of quality assurance to ensure good clinical care in his field		
H. Explain the ethical and scientific principles of medical research		
I. Explain the impact of common medical health problems in the field of Andrology on the society		

B- Intellectual outcomes

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Correlates the advanced facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common medical diseases related to Andrology.	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical medical situations related to Andrology.		
C. Design and present cases , seminars in common medical Andrology problem		
D-Formulate management plans and alternative decisions in different medical situations in the field of the Andrology		

C- Practical Skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A- Take full medical history B- Examine different systems efficiently & elicit signs. C- Order appropriate investigations for common medical conditions. D- Demonstrate effective communication with patients, relatives and colleagues. E- Cope with ethical and legal issues which occur during the management of patients with general medical problems.	training (clinical)	clinical problem solving and oral examination Log book

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Appraises evidence from scientific studies(journal club)	Lectures	Logbook
B. Perform data management including data entry and analysis.		
C. Facilitate learning of junior students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	-Observation -Senior staff experience	Logbook
E. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation -Senior staff experience	Logbook
G. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
H. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	Logbook

4. Module contents (topic s/modules/rotation
Module Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Allergic manifestations	A-C	A-D	-	A-E
Organ failure (cardiac,hepatic,renal,respiratory)	A-I	A-D	A-E	A-H
Systemic failure(shock)	A-I	A-D	A-D	A-H
Disorders of electrolytes and acid base balance	A-I	A-D	A-D	A-H
Diabetes mellitus	A-I	A-D	A-D	A-H
Infection in immunocompromized host/HIV	A-I	A-D	A-D	A-H
Altered hypothalamo-pituitary-gonadal axis	A-I	A-D	A-D	A-H
Pituitary hypo- and hyper function	A-I	A-D	A-D	A-H
Thyroid hypo- and hyperfunction	A-I	A-D	A-E	A-H

5 Methods of teaching/learning:

i. **Lectures**
ii. **Laboratory work**

6 Methods of teaching/learning: for students of limited abilities

- **Lectures**
- **Clinical work**

7 Assessment methods:

i. Assessment tools:

- Written (35) and oral (10) and practical (15) examination
- Log book

ii. Time schedule: at the end of 1st part.

iii. Marks 60 : (35+15+10)

8- List of references:

8.1- Course Notes

8.2- ***Essential Books (Text Books):***

Davidson's textbook of medicine edition 23th

Current textbook of medicine 57th edition 2018

Cecil textbook of medicine 22nd edition

Recommended book

Harrison textbook of medicine 20th edition

8.3 Periodic website:

www.Pubmed.com,www.freemedicaljournals.com

9. Signatures

Course Coordinator	
Course Coordinator: **…….**	**Head of the Department:** **……**
Date: ……	**Date: ……**

Course 9: Advanced Andrology, Sexology. and Sexually transmitted diseases

- ***Name of department: Dermatology, Venereology and Andrology***
- ***Faculty of medicine***
- ***Assiut University***
- **2019-2020/2020-2021**

I. Course data

- Course Title: Advanced Andrology, Sexology and Sexually transmitted diseases(STD)
- Course code: VSA321C
- It is divided into 5 units.
  - Unit 1: Male reproductive Medicine and Surgery (Advanced)
  - Unit 2: Assisted Reproduction (Advanced)
  - Unit 3: Sexual Medicine and Surgery(Advanced)
  - Unit 4; Sexually transmitted diseases (STDs) (Advanced)
  - Unit 5; Andrology related disorders(Advanced)
- Specialty : Andrology, Sexology and sexually transmitted diseases(STD).
- Number of points: 147 CP ; Didactics: 24CP(16.3%); Practical 123CP (83.7%).

Unit title	Didactics	Practical	**Total**

	CP	CP	**CP**
Specialized Courses: **Course 7:Advanced andrology ,sexology and sexually transmitted diseases**	24	123	**147**
Unit 1: Male reproductive Medicine and Surgery (Advanced)	5	30	35
Unit 2: Assisted Reproduction(Advanced)	4	10	14
Unit 3 : Sexual Medicine and Surgery(Advanced)	5	29	34
Unit 4: Sexually transmitted diseases (STDs) (Advanced)	5	29	34
Unit 5 : Andrology related disorders(Advanced)	5	25	30

- Department (s) delivering the course: ***Dermatology, Venereology and Andrology***

- Coordinator (s):

  - Course coordinator:
  - Dr Emad El Dien Kamal
  - Assistant coordinators:

    Dr Ali Mahran.

- Date last reviewed: 3/2019.
- Requirements (prerequisites) if any :
- Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course Aims

1) To Enable the candidates to keep with the international advanced standards of patient care in Andrology, Sexology and STDs by achieving high levels of:

- a- Clinical skills.
- b- Patient care skills.
- c- Surgical maneuvers and skills.

2) To introduce the candidates to the advances of scientific research.

3) Enable them to continue the professional careers as consultants in Egypt.

4) Make them recognized as consultants abroad.

5) Enable them to pursue higher studies and degrees.

6) Enable them to understand and to get the best of published scientific research and to do their own research.

3. Course intended learning outcomes (ILOs)

Course 9; unit 1& 2: Male reproductive Medicine and Surgery and Assisted Reproduction (Advanced)

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Explain professionally the update and evidence based etiology, clinical picture, diagnosis and management of the following common ad rare diseases and clinical conditions: • Kallman syndrome • Prader- Labhart Willi syndrome • Bardet Moon Biedl syndrome • Hyperprolactinaemia • Y- Chromosome microdeletions • Other pretesticular causes • Varicocele • Testicular Torsion • Klinefelters syndrome • Noonan Syndrome.	Didactic; -Lectures -Clinical rounds -Operative theatre -Seminars -Clinical rotations (service teaching)	*Oral and written exam* *log book*

• Obstructive infertility. • Ejaculatory and coital infertility. • Androgens resistance syndromes. • 5α-reductase 2 deficiency. • Other Post-Testicular causes. • Immunological Infertility. • Infection and infertility. • Drugs and environmental causes of male infertility • Systemic diseases and infertility		
B. Mention in details state of art of the following rare diseases and conditions: • Generalized pituitary dysfunction (Panhypopituitarism). • Isolated gonadotrophins deficiency • "Fertile eunuch syndrome" • Male anorexia nervosa . • GnRH receptor gene mutations • Idiopathic hypogonadotrophic hypogonadism. • Gonadotropin gene mutations • Combined pituitary hormone deficiency		

(CPHD)) • Adrenal hypoplasia congenita (AHC). • Steroidogenic factor-1 (SF-1) gene mutations. • Leptin and leptin receptor gene mutations. • Activating LHR gene mutations (Testotoxicosis) • Myotonic dystrophy. • Sex reversal syndrome (XX syndrome) • XYY Syndrome. • Gonadal Dysgenesis (Streak gonads). • 5α-Reductase 2 gene mutations (5α-reductase 2 deficiency (Perineoscrotal hypospadias with pseudovagina (PHP)). • Complete testicular feminization syndrome • Partial androgen insensitivity syndrome (PAIS) • Incomplete testicular feminization • Reifenstein Syndrome.		
C. Explain advanced methods and new techniques in:		

• Artificial insemination with husband semen. • Semen processing. • Sperm retrieval. • Cryopreservations. • Vetrification. • Ovarian stimulation. • Ovum pick up • Intracytoplasmic sperm injection. • Assisted hatching. • Preimplantation genetic diagnosis. • Emrbyo transfere. • Spermatogenic cells culture. • Sex selection. • Reproductive semicloning. • Stem cell implantation.		
D. Explain the facts and principles of the relevant advanced and clinically supportive sciences related to male infertility and ART.		
E. Describe the advanced ethical and medicolegal principles revenant to infertility and ART.		
F. Describe the advances of quality assurance to ensure good clinical care in his		

field		
G. Explain the advanced ethical and scientific principles of medical research		
H. Explain the impact of common health problems in the field of specialty on the society.		

B-Intellectual outcomes

ILOs	**Methods of teaching/ learning**	***Methods of Evaluation***
A. Design and present case in common and rare problem related to Various andrological disorders.	Clinical rounds Senior staff experience	*Procedure/case presentation* *Log book*
B. Apply the advanced and clinically supportive sciences which are appropriate to the specialty related conditions, problem and topics.		
C. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to andrology		
D. Plan research projects.		
E. Write scientific papers.		
F. Lead risk management activities as a part of clinical governs.		
G. Plain quality improvement activities in		

the field of medical education and clinical practice in his specialty.		
H. Create / innovate plans, systems, and other issues for improvement of performance in his practice.		
I. Present and defend his / her data in front of a panel of experts		
J. Formulate management plans and alternative decisions in different situations in the field of the Infertility and ART.		

C-Practical skills (Patient Care)

ILOs	**Methods of teaching/ learning**	***Methods of Evaluation***
A-Take history, examine and clinically diagnose different conditions related to Infertility and ART	Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	
B-Order the following non invasive&invasive diagnostic procedures:	Clinical round with senior staff	Procedure presentation - Log book

• Semen analysis. • CASA (computer assisted semen analysis). • Peroxidase and leucoscreen tests for pus cells. • Alpha glucosidase and fructose. • Sperm functions tests. • Sperm ultra structure studies. • Expressed prostatic secretion analysis. • Urine analysis. • Post-orgasmic urine. • Hormonal profile (FSH, LH, Total and free testosterone, Prolactin, Estradiol and TSH). • HCG stimulation test. • Karyotyping. • Y chromosome microdeletions studies. • Scrotal duplex ultrasound. • Trans rectal ultrasound. • Seminal vesiculography. • Diagnostic testicular biopsy.	Observation Post graduate teaching Hand on workshops	- Chick list

C. Interpret the following non invasive &invasive diagnostic procedures: ▪ Testicular biopsy.	Clinical round with senior staff	
D-Perform the following non invasive & invasive diagnostic procedures: • Semen analysis. • CASA (computer assisted semen analysis). • Expressed prostatic secretion analysis. • HCG stimulation test. • Scrotal duplex ultrasound. • Trans rectal ultrasound. • Diagnostic testicular biopsy.	Clinical round with senior staff -Perform under supervision of senior staff	
E-Perform the following non invasive& invasive therapeutic procedures: • Varicocelectomy. • Hydrocelectomy. • Orchidopexy. • Epididymo-vasostomy. • Transurethral resection of verumontanum (TUR). • Different sperm retrieval techniques: ○ TESE (testicular sperm extraction).	Clinical round with senior staff -Perform under supervision of senior staff	

○ Microsurgical TESE. ○ TESA (testicular sperm aspiration). ○ PESA (percutaneous epididymal sperm aspiration). ○ MESA (microsurgical epididymal sperm aspiration).		
F-Develop patient management plans for the following problems: • Klinefelters syndrome. • Kallman syndrome • Hyperprolactinaemia. • Hypogonadotrophic hypogonadism. • Hypergonadotrophic hypogonadism. • Functional azoospermia. • Obstructive azoospermia. • Varicocele. • Sertoli cell only syndrome • Congenital bilateral absent vas deferens.	Clinical round with senior staff	*Procedure/case presentation Log book*
G-Counsel and educate patients and their family about Various infertility disorders:		

▪ Functional infertility. ▪ Obstructive infertility. ▪ IUI. ▪ ICSI. ▪ Cryopreservation.		
H-Use information technology to support patient care decisions and patient education for the infertility and ART related conditions.		
I- Provide health care services aimed at preventing the following conditions: • Epididymo-orchitis. • Tuberculosis. • Testicular trauma. • Testicular torsion. • Prostatitis.		
J-Work with health care professionals, including those from other disciplines, to provide patient-focused care.		
K-Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records).		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology in the common problems (plain and conduct audit cycles)	Case log - Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and Portfolios
B. Locate, appraises, and assimilates evidence from scientific studies related to patients' health problems.	-Journal clubs - Discussions in seminars and clinical rounds	
C. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness		
D. Use information technology to manage information, access on-line medical information; and support their own education		
E. Lead the learning of students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Create and sustain a therapeutic and ethically sound relationship with patients	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure /case presentation Log book Portfolios Chick list
G. Perform the following oral communications:		
H. Fill the following reports:		
I. Work effectively with others as a member or leader of a health care team e.g. in labor ward		

Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
J. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest.	Observation Senior staff experience Case taking	1. Objective structured clinical examination 2. Patient survey
K. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.		1. 360o global rating
L. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
M.Work effectively in different health care delivery settings and systems.	Observation Senior staff experience	1. 360o global rating
N.Practice cost-effective health care and resource allocation that does not compromise quality of care		1. Check list evaluation of live or recorded performance
O.Advocate for quality patient care and assist patients in dealing with system complexities		1. 360o global rating 2. Patient survey
P.Partner with health care managers and health care providers to assess, coordinate, and improve health care and predict how these activities can affect system performance		

Unit 3 : Sexual Medicine and Surgery(advanced)

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Explain professionally the updated and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: • Erectile dysfunction. • Priapism. • Premature ejaculation. • Delayed ejaculation. • Retrograde ejaculation. • Inhibited orgasm. • Anorgasmia. • Hypoactive sexual desire • Hyperactive sexual desire. • Vaginismus. • Dyspareunia. • Female sexual dysfunction. • Sexual deviations.	Didactic; -Lectures -Clinical rounds -Operative theatre -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - MCQ examination -Oral and written exam
B. Mention in details the state of art of the following rare diseases and conditions:		

• Priapism. • Pyronies disease. • Female sexual dysfunction. • Hypoactive sexual desire. • Inhibited sexual desire. • Vagnismus. • Dyspareunia .		
C. Explain advanced methods and new techniques in: • Diagnosis of Erectile dysfunction. • Treatment of erectile dysfunction. • Penile prosthesis. • Gene therapy in erectile dysfunction. • Treatment of premature ejaculation.		
D. Explain the facts and principles of the relevant advanced and clinically supportive sciences related to sexology.		
E. Describe the advanced ethical and medicolegal principles revenant to the sexology.		
F. Describe the advanced of quality assurance to ensure good clinical care in his field		
G. Explain the advanced ethical and scientific principles of medical research		
H. Explain the impact of common health problems in the field of sexology on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Design and present case in common problem related to Various sexual disorders.	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B. Apply the advanced and clinically supportive sciences which are appropriate to the specialty related conditions, problem and topics.		
C. Demonstrate an investigatory and analytic thinking “problem – solving “approaches to clinical situation related to sexology.		
D. Plan research projects.		
E. Write scientific papers.		
F. Lead risk management activities as a part of clinical governs.		
G. Plain quality improvement activities in the field of medical education and clinical practice in sexology.		
H. Create / innovate plans, systems, and other issues for improvement of performance in sexology.		
I. Present and defend his / her data in front of a panel of experts		
J. Formulate management plans and alternative decisions in different situations in the field of sexology.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. professionally take history, examine and clinically diagnose different conditions related to sexology.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	- OSCE at the end of each year -log book & portfolio - MCQ examination
B. Order the following non invasive/invasive diagnostic procedures: • Intracavernosal injection of vaso-active drugs. • Pharmaco-dynamic penile duplex. • Regiscan. • Cavernosometry. • Cavernosography. • Post-orgasmic urine. • Hormonal profile (FSH, LH, Total and free testosterone, Prolactin, Estradiol and TSH).	Clinical round with senior staff Observation Post graduate teaching Hand on workshops	-Procedure presentation - Log book - Chick list
C. Interpret the following non invasive&invasive diagnostic procedures: Rigiscan.	Clinical round with senior staff	Procedure presentation - Log book - Chick list
D. Perform the following non invasive&invasive diagnostic procedures:	Clinical round with senior staff	Procedure presentation

• Penile duplex. • Cavernosometry. • Intracorporal injection. • Caverosography.	-Perform under supervision of senior staff	- Log book - Chick list
E. Perform the following non invasive/invasive therapeutic procedures: • Penile prosthesis. • Correction of penile curvature. • Repair of fracture penis.	Clinical round with senior staff Operative theatre	
F. Develop patient management plans for the following problems: • Erectile dysfunction. • Peyronies disease. • Priapism. • Ejaculatory disorders. • Female sexual dysfunctions. • Sexual deviations.		
G. Counsel and educate patients and their family about Various sexual diorders: ▪ Erectile dysfunctions. ▪ Ejaculatory dysfunction. ▪ Sexual deviations. ▪ Female sexual dysfunctions.		

▪ Disorders of libido.		
H. Use information technology to support patient care decisions and patient education for the sexology related conditions.		
I. Provide health care services aimed at preventing the following conditions: • Priapism. • Peyronies disease. • Female sexual dysfunctions.		
J. Work with health care professionals, including those from other disciplines, to provide patient-focused care.		
K- Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records).		

D-General Skills

Practice-Based Learning and Improvement

ILOs	**Methods of teaching/ learning**	**Methods of Evaluation**
A. Perform practice-based improvement activities using a systematic methodology in the common problems (plain and conduct audit cycles)	-Case log -Observation and supervision -Written & oral communication	Procedure /case presentation -Log book and Portfolios
B. Locate, appraises, and assimilates evidence from scientific studies related to patients' health problems.	-Journal clubs - Discussions in seminars	

	and clinical rounds	
C. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness		
D. Use information technology to manage information, access on-line medical information; and support their own education		
E. Lead the learning of students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	**Methods of teaching/ learning**	**Methods of Evaluation**
F. Create and sustain a therapeutic and ethically sound relationship with patients	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure /case presentation Log book Portfolios Chick list
G. Perform the following oral communications: Present a case in a common Sexology problem		
H. Fill the following reports: Medicolegal reports		
I. Work effectively with others as a member or leader of a health care team e.g. in labor ward		

Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
J. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest.	Observation Senior staff experience Case taking	1. Objective structured clinical examination 2. Patient survey
K. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.		1. 360o global rating
L. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Work effectively in different health care delivery settings and systems.	Observation Senior staff experience Case taking	1. 360o global rating
N. Practice cost-effective health care and resource allocation that does not		1. Check list evaluation of

compromise quality of care		live or recorded performance
O.Advocate for quality patient care and assist patients in dealing with system complexities		1. 360o global rating 2. Patient survey
P.Partner with health care managers and health care providers to assess, coordinate, and improve health care and predict how these activities can affect system performance		

Course 9;unit 4: SEXUALLY TRANSMITTED DISEASES(Advanced)

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Explain professionally the updates and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: • Gonorrhoea • Non gonococcal urethritis • Lymphogranuloma venerium • Granuloma inguinal • Mycoplasma • Chancroid • Syphilis • Herpes simplex • HIV • Genital warts • Genital warts • Other Viral STDs • Fungal STDs • Protozoal and Parasitic STDs	Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - MCQ examination -Oral and written exam

• Genital Ulcers • Systemic manifestations of STDs • Rieters syndrome and sexually reactive arthritis. • Gay bowel syndrome.		
B. Mention in details the state of art of the following rare diseases and conditions: • HIV. • Reiter's syndrome and sexually reactive arthritis.		
C. Explain advanced methods and new techniques in: -HIV treatment.		
D. Explain the facts and principles of the relevant advanced and clinically supportive sciences related to STDs.		
E. Describe the advanced ethical and medicolegal principles revenant to the STDs.		
F. Describe the advancesof quality assurance to ensure good clinical care in his field		
G. Explain the advanced ethical and scientific principles of medical research		
H. Explain the impact of common health problems in the field of specialty on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Design and present case in common problems related to Various STDs disorders.	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B. Apply the advanced and clinically supportive sciences which are appropriate to the specialty related conditions, problem and topics.		
C. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to STDs		
D. Plan research projects about the topics of STDs.		
E. Write scientific papers in STDs.		
F. Lead risk management activities as a part of clinical governs.		
G. Plain quality improvement activities in the field of medical education and clinical practice in his specialty.		
H. Create / innovate plans, systems, and other issues for improvement of performance in his practice.		
I. Present and defend his / her data in front of a panel of experts		
J. Formulate management plans and alternative decisions in different situations in the field of the STDs.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A-Take history Professionally, examine and clinically diagnose different conditions related to STDs.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	- OSCE at the end of each year -log book & portfolio - MCQ examination
B-Order the following non invasive/invasive diagnostic procedures: • Gram Stain. • Culture for gonorrhea. • EPS. • Elista test for HIV. • Western blot. • Non specific serological tests. • Specific serological tests. • Dark ground test. • Chlamydizem tests.	Clinical round with senior staff Observation Post graduate teaching Hand on workshops	-Procedure presentation - Log book - Chick list
C-Interpret the following non invasive/invasive diagnostic procedures: Gram stain.	Clinical round with senior staff	Procedure presentation - Log book - Chick list
D- Perform the following non invasive/invasive diagnostic procedures: -EPS.	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list

E- Develop patient management plans for the following problems: • Gonorrhoea • Non gonococcal urethritis • Lymphogranuloma venerium • Granuloma inguinal • Mycoplasma • Chancroid • Syphilis • Herpes simplex • HIV • Genital warts • Genital warts • Other Viral STDs • Fungal STDs • Protozoal and Parasitic STDs • Genital Ulcers • Systemic manifestations of STDs • Rieters syndrome and sexually reactive arthritis. • Gay bowel syndrome.		
F-Counsel and educate patients and their family about Various disorders: • Gonorrhoea		

• Non gonococcal urethritis • Lymphogranuloma venerium • Granuloma inguinal • Mycoplasma • Chancroid • Syphilis • Herpes simplex • HIV • Genital warts • Genital warts • Other Viral STDs • Fungal STDs • Protozoal and Parasitic STDs • Genital Ulcers • Systemic manifestations of STDs • Rieters syndrome and sexually reactive arthritis. • Gay bowel syndrome.		
G-Use information technology to support patient care decisions and patient education for the STDs related conditions.		
H- Provide health care services aimed at preventing the following conditions: • Gonorrhoea		

• Non gonococcal urethritis • Lymphogranuloma venerium • Granuloma inguinal • Mycoplasma • Chancroid • Syphilis • Herpes simplex • HIV • Genital warts • Fungal STDs • Protozoal and Parasitic STDs		
I- Work with health care professionals, including those from other disciplines, to provide patient-focused care.		
J-Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records).		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Perform practice-based improvement activities using a systematic methodology in the common problems (plain and conduct audit cycles)	-Case log -Observation and supervision -Written & oral communication	Procedure/case presentation -Log book and

		Portfolios
B- Locate, appraises, and assimilates evidence from scientific studies related to patients' health problems.	-Journal clubs - Discussions in seminars and clinical rounds	
C- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness		
D- Use information technology to manage information, access on-line medical information; and support their own education		
E- Lead the learning of students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ Learning	Methods of Evaluation
F- Create and sustain a therapeutic and ethically sound relationship with patients	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book Portfolios Chick list
G- Perform the following oral communications: Counsel and educate patients and their family about: Different STDs		
H-Fill the following reports: Medicolegal reports		
I-Work effectively with others as a member or leader of a health care team e.g. in labor ward		

Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
J-Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest.	Observation Senior staff experience Case taking	1. Objective structured clinical examination 2. Patient survey
K- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.		1. 360o global rating
L- Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
M-Work effectively in different health care delivery settings and systems.	Observation Senior staff experience	1. 360o global rating
N-Practice cost-effective health care and resource allocation that does not compromise quality of care		1. Check list evaluation of live or recorded performance
O-Advocate for quality patient care and assist patients in dealing with system complexities		1. 360o global rating 2. Patient survey

P-Partner with health care managers and health care providers to assess, coordinate, and improve health care and predict how these activities can affect system performance		

Course 9;Unit 5: Andrology related disorders(advanced)

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A. Explain professionally the updates and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: • Congenital anomalies of the testis. • Congenital anomalies of the penis. • Congenital anomalies of the urethra. • Congenital anomalies of the vas deferens. • Intersex. • Puberty disorders	Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE at the end of each year -log book & portfolio - MCQ examination -Oral and written exam
B-Mention in details the state of art of the following rare diseases and conditions: • Male pseudohermaphroditism. • Female pesudohermaphroditis. • True hermaphroditism.		

• Testicular vanishing syndrome.		
C. Explain advanced methods and new techniques in: • Male contraception.		
D. Explain the facts and principles of the relevant advanced and clinically supportive sciences related to general andrological problems.		
E. Describe the advanced ethical and medicolegal principles revenant to andrology		
F. Describe the advanced of quality assurance to ensure good clinical care in his field		
G. Explain the advanced ethical and scientific principles of medical research		
H. Explain the impact of common health problems in the field of specialty on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	*Methods of Evaluation*
A-Design and present case in common problem related to Various andrological disorders.	Clinical rounds Senior staff experience	Procedure/case presentation Log book
B-Apply the advanced and clinically supportive sciences which are appropriate to the specialty related conditions, problem and topics.		
C- Demonstrate an investigatory and analytic thinking “problem – solving “approaches to clinical situation related to andrology		
D- Plan research projects.		
E-Write scientific papers.		

F- Lead risk management activities as a part of clinical governs.		
G- Plain quality improvement activities in the field of medical education and clinical practice in his specialty.		
H- Create / innovate plans, systems, and other issues for improvement of performance in his practice.		
I- Present and defend his / her data in front of a panel of experts		
J-Formulate management plans and alternative decisions in different situations in the field of the General andrology.		

C-Practical skills (Patient Care)

ILOs	**Methods of teaching/ learning**	***Methods of Evaluation***
A-Professionally take history, examine and clinically diagnose different conditions related to andrology	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	- OSCE at the end of each year -log book & portfolio - MCQ examination
B-Order the following non invasive/invasive diagnostic procedures: • Scrotal Ultrasound. • Hormonal profile.	Clinical round with senior staff Observation Post graduate teaching Hand on workshops	-Procedure presentation - Log book - Chick list

• Trans-rectal ultrasound.		
C-Interpret the following non invasive/invasive diagnostic procedures: ▪ Pelvi-abdomenal ultrasound. ▪ Trans-rectal ultrasound.	Clinical round with senior staff	Procedure presentation - Log book - Chick list
D-Perform the following non invasive/invasive diagnostic procedures: • Scrotal Ultrasound. • Trans-rectal ultrasound.	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
E-Perform the following non invasive/invasive therapeutic procedures: • Orchidopexy. • Hydrocelectomy.	Clinical round with senior staff	
F-Develop patient management plans for the following problems: • Intersex. • Puberty disorders • Gynecomastia. • Congenital anomalies of male genital tract. • Orchitis. • Epidiymo-orchitis. • Epididymitis. • Prostatitis. • Prostato-seminal vesiculitis. • Balanitis.		

• Posthetitis.		
G-Counsel and educate patients and their family about Various disorders: ▪ Gynecomastia. ▪ Male contarception. ▪ Puberty disorders. ▪ Prostatitis. ▪ Andropause.		
I- Use information technology to support patient care decisions and patient education for the andrology related conditions.		
J- Provide health care services aimed at preventing the following conditions: • Epididymo-orchitis. • Prostatitis.		
K- Work with health care professionals, including those from other disciplines, to provide patient-focused care.		
L- Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records).		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A- Perform practice-based improvement activities using	-Case log -Observation	Procedure/case

a systematic methodology in the common problems (plain and conduct audit cycles)	and supervision -Written & oral communication	presentation -Log book and Portfolios
B- Locate, appraises, and assimilates evidence from scientific studies related to patients' health problems.	-Journal clubs - Discussions in seminars and clinical rounds	
C-Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness		
D- Use information technology to manage information, access on-line medical information; and support their own education		
E- Lead the learning of students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ Learning	Methods of Evaluation
F- Create and sustain a therapeutic and ethically sound relationship with patients	Simulations Clinical round Seminars Lectures Case presentation Hand on workshops	Global rating Procedure/case presentation Log book Portfolios Chick list
G- Perform the following oral communications: The need for premarital checkup in some circumstances		
H-Fill the following reports: Medicolegal reports		
I-Work effectively with others as a member or leader of a health care team e.g. in labor ward		

Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
J-Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest.	Observation Senior staff experience Case taking	1. Objective structured clinical examination 2. Patient survey
K- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.		1. 360o global rating
L Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
M-Work effectively in different health care delivery settings and systems.	Observation Senior staff experience	1. 360o global rating
N-Practice cost-effective health care and resource allocation that does not compromise quality of care		1. Check list evaluation of live or recorded performance
O-Advocate for quality patient care and		1. 360o

assist patients in dealing with system complexities		global rating 2. Patient survey
P-Partner with health care managers and health care providers to assess, coordinate, and improve health care and predict how these activities can affect system performance		

4. Course contents (Topics/modules/Rotation)

Time Schedule: Second part

Topic	**Covered ILOs**			
- **Unit 1 :Infertility and Assisted Reproductive Technology (ART)**	**Knowledge**	**Intellectual**	**Practical skills**	**General Skills**
- **Unit 1&2 :Infertility and Assisted Reproductive Technology (ART)**	**A-H**	**A-J**	**A-L**	**A-P**
1. Introduction				
2. Kallman syndrome				
3. Prader- Labhart Willi syndrome				
4. Bardet Moon Biedl syndrome				
5. Hyperprolactinaemia				
6. Generalized pituitary dysfunction (Panhypopituitryism).				

7. Isolated gonadotrophins deficiency				
8. “Fertile eunuch syndrome”				
9. Male anorexia nervosa.				
10. GnRH receptor gene mutations				
11. Idiopathic hypogonadotrophic hypogonadism.				
12. Y- Chromosome microdeletions				
13. Gonadotropin gene mutations				
14. Combined pituitary hormone deficiency (CPHD))				
15. Adrenal hypoplasia congenita (AHC).				
16. Steroidogenic factor-1 (SF-1) gene mutations.				
17. Leptin and leptin receptor gene mutations.				
18. Activating LHR gene mutations (Testotoxicosis)				
19. Myotonic dystrophy.				
20. Sex reversal syndrome (XX syndrome)				
21. XYY Syndrome.				

22. Varicocele				
23. Testicular Torsion				
24. Klinefelters syndrome				
25. Noonan Syndrome				
26. Gonadal Dysgenesis (Streak gonads).				
27. Obstructive infertility				
28. Ejaculatory and coital infertility				
29. Androgens resistance syndromes				
30. 5α-reductase 2 deficiency				
31. Immunological Infertility				
32. Infection and infertility				
33. Drugs and environmental causes of male infertility				
34. Systemic diseases and infertility				
35. Diagnosis of male infertility				
36. Medical Treatment of infertility				
37. Surgical treatment for male infertility				
38. Introduction to ART				
39. Artificial insemination with				

husband semen.				
40. Semen processing.				
41. Sperm retrieval.				
42. Cryopreservations.				
43. Vetrification.				
44. Ovarian stimulation.				
45. Ovum pick up				
46. Intracytoplasmic sperm injection.				
47. Assisted hatching.				
48. Preimplantation genetic diagnosis.				
49. Emrbyo transfere.				
50. Spermatogenic cells culture.				
51. Sex selection.				
52. Reproductive semicloning.				
53. Stem cell implantation.				

Topic Unit 3:sexology	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
Unit 3:sexology Advanced	**A-H**	**A-J**	**A-L**	**A-P**
1. Introduction to sexology				
2. Disorders of libido				
3. Introduction to ED				
4. Aetiology of ED				
5. Peyronies disease				
6. Priapism				
7. Diagnosis of ED				
8. Medical treatment of ED				
9. Sex therapy for ED				
10. Surgical treatment of ED				
11. Gene Therapy				
12. Ejaculatory disorders				
13. Female sexual dysfunction				
14. Sexual deviations				

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
Unit 4 STD Advanced	A-H	A-J	A-L	A-P
1. Introduction and epidemiology of STDs				
2. Gonorrhoea				
3. Non gonococcal urethritis				
4. Lymphogranuloma venerium				
5. Granuloma inguinal				
6. Mycoplasma				
7. Chancroid				
8. Syphilis				
9. Herpes simplex				
10. HIV				
11. Genital warts				
12. Genital warts				
13. Other Viral STDs				
14. Fungal STDs				
15. Protozoal and Parasitic STDs				
16. Genital Ulcers				
17. Systemic				

manifestations of STDs				
18. Rieters syndrome and sexually reactive arthritis				
19. Gay bowel syndrome				

Covered ILOs			
Knowledge	**Intellectual**	**Practical skills**	**General Skills**
A-H	A-J	A-L	A-P

5. Course Methods of teaching/learning

1. Didactic; Lectures

2. Clinical rounds

3. Seminars Clinical rotations

4.(service teaching) Observation

5.Post graduate teaching

6.Hand on workshops

7.Perform under supervision of senior staff

8.Simulations

9.Case presentation

10. Case Taking

6. Course Methods of teaching/learning: for students with poor achievements

1. Didactic;Intensive Lectures
2. Clinical rounds
3. Seminars Clinical rotations
4. (service teaching) Observation
5. Post graduate teaching
6. Hand on workshops
7. Perform under supervision of senior staff
8. Simulations
9. More Case presentation
10. More Case Taking

7. Course assessment methods:

i. Assessment tools:

1. Clinical examination
2. Written and oral examination
3. Chick list
4. log book & portfolio

5. Procedure/case presentation
6. One MCQ examination in f the second year and one in the third year
7. Objective structured clinical examination
8. Check list evaluation of live or recorded performance
9. Patient survey
10. 360o global rating

ii. Time schedule: 2nd part
iii. Marks: 1200 marks.(500 didactic,400 oral,300 practical)

8. List of references

I. Lectures notes

Hard or soft copies from lectures by staff members of the Dep. of Dermatology, Venereology & Andrology

II. Essential books

Andrology (male reproductive health and dysfunction,2010).
(Eberhard Nieschlag , Hermann M Behre, and Susan Nieschlag)

III. Recommended books

Reproductive endocrinology
(Samuel SC Yein, Robert B Jaffe, and Robert L Barbieri).
Sexually transmitted diseases of the tropics (Arya),1998
Sexually transmitted diseases (Mc Millan),2006
Male Reproductive Health and Dysfunction (Neichlag),2010
Text book of Erectile Dysfunction (Goldstein),2013
Male Infertility (Lipshults),2009

IV. Periodicals, Web sites, … etc

- Andrologia
- Human Andrology
- Int journal of Andrology
- Journal of Sexual Medicine
- www.pubmed.com
- Asian J of Andrology website (www.AJA.org)

- fertility and sterility

9. Signatures

Course Coordinators: **…….**	**Head of the Department:**
Date: **……..**	**Date:** **……..**

ANNEX 2
Program Academic Reference Standards (ARS)

1- Graduate attributes for medical doctorate

***The Graduate (after residence training and medical doctorate years of study) must*:**

1- Demonstrate competency and mastery of basics, methods and tools of scientific research and clinical audit in the chosen field of andrology and STDs.

2- Have continuous ability to add knowledge to the andrology and STDs through research and publication.

3- Appraise and utilise relevant scientific knowledge to continuously update and improve clinical practice.

4- Acquire excellent level of medical knowledge in the basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care and scientific research.

5- Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion.

6- Identify and create solutions for health problems in his specialty.

7- Acquire an in depth understanding of common areas of andrology and STDs, from basic clinical care to evidence based clinical application, and possession of required skills to manage independently all problems in these areas.

8- Demonstrate leadership competencies including interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public.

9- Function as teacher in relation to colleagues, medical students and other health professions.

10- Master decision making capabilities in different situations related to his field of practice.

11- Show leadership responsiveness to the larger context of the health care system, including e.g. the organization of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.

12- Demonstrate in depth awareness of public health and health policy issues including independent ability to improve health care, and identify and carryout system-based improvement of care.

13- Show model attitudes and professionalism.

14- Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in theandrology and STDs or one of its subspecialties.

15- Use recent technologies to improve his practice in the andrology and STDsfield.

16- Share in updating and improving clinical practice in the andrology and STDsfield.

2- Competency based Standards for medical doctorate

2.1- Knowledge and understanding

By the end of the program, the graduate should demonstrate satisfactory knowledge and understanding of

2-1-A- Established, updated and evidence- based theories, basics and developments of andrology and STDs and relevant sciences.

2-1-B- Basics, methods and ethics of medical research.

2-1-C- Ethical and medicologal principles of medical practice related to andrology and STDs field.

2-1-D- Principles and measurements of quality in theandrology and STDs field.

2-1-E- Principles and efforts for maintainace and improvements of public health.

2- Intellectual skills

By the end of the program, the graduate should be able to demonstrate thefollowing

2-2-A- Application of basic and other relevant science to solve specialty related Problems.

2-2-B- Problem solving based on available data.

2-2-C- Involvement in research studies related to the andrology and STDs

2-2-D- Writing scientific papers.

2-2-E- Risk evaluation in the related clinical practice.

2-2-F- Planning for performance improvement in the andrology and STDs field.

2-2-G- Creation and innovation in the andrology and STDs field.

2-2-H- Evidence – based discussion.

2-2-I- Decision making in different situations related to the andrology and STDsfields.

2.3- Clinical skills

By the end of the program, the graduate should be able to

- ***Competency-based outcomes for Patient Care:-***

2-3-A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in his field of practice.

2-3-B- Master patient care skills relevant to that andrology and STDs for patients with all diagnoses and procedures.

2-3-C- Write and evaluate reports for situations related to the field of andrology and STDs**.**

<u>2.4- General skills</u>

By the end of the program, the graduate should be able to

- ***Competency-based outcomes for Practice-based Learning and Improvement***

2-4-A-Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management

2-4-B- Use competently all information sources and technology to improve his practice.

2-4-C- Master skills of teaching and evaluating others.

- ***Competency-based objectives for Interpersonal and Communication Skills***

2-4-D-Master interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.

- ***Competency-based objectives for Professionalism***

2-4-E-Master Professionalism behavior, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

- ***Competency-based objectives for Systems-based Practice:***

2-4-F-Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.

2-4-G- Participate in improvement of the education system.

2-4-H- Demonstrate skills of leading scientific meetings including time management

2-4-O- Demonstrate skills of self and continuous learning

Annex 3, Methods of teaching/learning

Annex 3, Methods of teaching/learning

	Patient care	**Medical knowledge**	**Practice-based learning/ Improvement**	**Interpersonal and communication skills**	**Professionalism**	**Systems-based practice**
Didactic (lectures, seminars, tutorial)	X	X		X	X	X
journal club,	X	X	X			
Educational prescription	X	X	X	X	X	X
Present a case (true or simulated) in a grand round	X	X	X	X	X	
Observation and supervision	X		X	X	X	X
conferences		X	X	X		X
Written assignments	X	X	X	X	X	X
Oral assignments	X	X	X	X	X	X

Teaching methods for knowledge

- Didactic (lectures, seminars, tutorial)
- journal club
- Critically appraised topic
- Educational prescription (a structured technique for following up on clinical questions that arise during rounds and other venues).
- Present a case (true or simulated) in a grand round
- Others

Teaching methods for patient care

- Observation and supervision /Completed tasks procedure/case logs
- On-the-job" training without structured teaching is not sufficient for this skill (checklists).
- Simulation is increasingly used as an effective method for skill/ teamwork training.

Teaching methods for other skills

- Written communication (e.g., orders, progress note, transfer note, discharge summary, operative reports, and diagnostic reports).

- Oral communication (e.g., presentations, transfer of care, interactions with patients, families, colleagues, members of the health care team) and/or non verbal skills (e.g., listening, team skills)

- Professionalism, including medical ethics, may be included as a theme throughout the program curriculum that includes both didactic and experiential components (e.g., may be integrated into already existing small group discussions of vignettes or case studies and role plays, computer-based modules) and may be modeled by the faculty in clinical practice and discussed with the resident as issues arise during their clinical practice.

Annex 4, Assessment methods

Annex 4, ILOs evaluation methods for MD students.

Method	Practical skills	K	Intellectual	General skills			
	Patient care	K	I	Practice-based learning/ Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Record review	X	X	X		X	X	X
Checklist	X				X		
Global rating	X	X	X	X	X	X	X
Simulations	X	X	X	X	X	X	
Portfolios	X	X	X	X	X		
Standardized oral examination	X	X	X	X	X		X
Written examination	X	X	X	X			X
Procedure/ case log	X	X					
OSCE	X	X	X	X	X	X	X

Annex 4, Glossary of MD students assessment methods

- Record Review – Abstraction of information from patient records, such as medications or tests ordered and comparison of findings against accepted patient care standards.

- Chart Stimulated Recall – Uses the MD doctor's patient records in an oral examination to assess clinical decision-making.

- Mini clinical evaluation: Evaluation of Live/Recorded Performance (single event) – A single resident interaction with a patient is evaluated using a checklist. The encounter may be videotaped for later evaluation.

- Standardized Patients (SP) – Simulated patients are trained to respond in a manner similar to real patients. The standardized patient can be trained to rate MD doctor's performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MD doctor's performance.

- Objective Structured Clinical Examination (OSCE) – A series of stations with standardized tasks for the MD doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MD doctors.

- Procedure or Case Logs – MD doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.

- PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MD doctors.

- Case /problems – assess use of knowledge in diagnosing or treating patients or evaluate procedural skills.

- Models: are simulations using mannequins or various anatomic structures to assess procedural skills and interpret clinical findings.

Both are useful to assess practice performance and provide constructive feedback.

- 360 Global Rating Evaluations – MD doctors, faculty, nurses, clerks, and other clinical staff evaluate MD doctors from different perspectives using similar rating forms.

- Portfolios – A portfolio is a set of project reports that are prepared by the MD doctors to document projects completed during the MD study years. For each type of project standards of performance are set. Example projects are summarizing the research literature for selecting a treatment option, implementing a quality improvement program, revising a medical student clerkship elective, and creating a computer program to track patient care and outcomes.

- Examination MCQ – A standardized examination using multiple-choice questions (MCQ). The in-training examination and written board examinations are examples.

- Examination Oral – Uses structured realistic cases and patient case protocols in an oral examination to assess clinical decision-making.

- Procedure or Case Logs – MD doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.

- PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MD doctors.

Annex 5, Program evaluation tools

By whom	Method	sample
Quality Assurance Unit	Reports Field visits	#
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
Stakeholders	Reports Field visits Questionnaires	#
Senior students	Questionnaires	#
Alumni	Questionnaires	#

Annex 6, Program Correlations:

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الدكتوراة مع المعايير الأكاديمية المعتمدة من كلية الطب □ جامعة أسيوط لدرجة الدكتوراة في طب وجراحة امراض الذكورة والتناسل

I- General Academic Reference Standards (GARS) versus Program ARS

1- Graduate attributes

Faculty ARS	NAQAAE General ARS for postgraduate Programs
1- Demonstrate competency and mastery of basics, methods and tools of scientific research and clinical audit in andrology and STDs.	١-إتقان أساسيات و منهجيات البحث العلمي
2- Have continuous ability to add knowledge new developments to andrology and STDs.through research and publication.	٢-العمل المستمر علي الإضافة للمعارف في مجال التخصص
3- Appraise and utilise scientific knowledge to continuously update and improve clinical practice and relevant basic sciences.	٣-تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص و المجالات ذات العلاقة
4- Acquire excellent level of medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care and scientific	٤-دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا و مطورا للعلاقات البينية بينها
5- Function as a leader of a team to provide patient care that is appropriate, compassionate for dealing with effective and health Problems and health promotion. 7- Acquire an in depth understanding of common areas of speciality, from basic clinical care to evidence based clinical application, and possession of skills to manage independently all problems in these areas.	٥-إظهار وعيا عميقا بالمشاكل الجارية و النظريات الحديثة في مجال التخصص
6- Identify and create solutions for health problems in andrology and STDs..	٦-تحديد المشكلات المهنية و إيجاد حلولا مبتكرة لحلها
5- Function as a leader of a team to	٧-إتقان نطاقا واسعا من المهارات المهنية في

provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion. 7- Acquire an in depth understanding of common areas of andrology and STDs., from basic clinical care to evidence based clinical application, and possession of skills to manage independently all problems in these areas.	مجال التخصص
16- Share in updating and improving clinical practice in andrology and STDs. 9- Function as teacher in relation to colleagues, medical students and other health professions.	٨- التوجه نحو تطوير طرق و أدوات و أساليب جديدة للمزاولة المهنية
15- Use recent technologies to improve his practice in andrology and STDs.	٩-استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية
8- Demonstrate leadership competencies including interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public. 5- Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion.	١٠-التواصل بفاعلية و قيادة فريق عمل في سياقات مهنية مختلفة
10- Master decision making capabilities in different situations related to andrology sexology and STDs.	١١-اتخاذ القرار في ظل المعلومات المتاحة
11- Show leadership responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.	١٢-توظيف الموارد المتاحة بكفاءة و تنميتها والعمل على إيجاد موارد جديدة
12- Demonstrate in depth awareness of public health and health policy issues including	١٣-الوعي بدوره في تنمية المجتمع والحفاظ

independent ability to improve health care, and identify and carryout system-based improvement of care.	على البيئة
13- Show model attitudes and professionalism.	١٤-التصرف بما يعكس الالتزام بالنزاهة و المصداقية و قواعد المهنة
14- Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in andrology and STDs.or one of its subspecialties. 15- Use recent technologies to improve his practice in andrology and STDs.	١٥-الالتزام بالتنمية الذاتية المستمرة و نقل علمه و خبراته للآخرين

2- Academic standards

Faculty ARS	NAQAAE General ARS for postgraduate Programs
2.1. A- Established, updated and evidence- based theories, basics and developments of andrology, sexology and STD and relevant sciences.	٢-١-أ- النظريات و الأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة
2.1. B- Basic, methods and ethics of medical research.	٢-١-ب -أساسيات و منهجيات و أخلاقيات البحث العلمي و أدواته المختلفة
2.1. C- Ethical and medicologal principles of medical practice related to andrology and STDs..	٢-١-ج- المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص
2.1. D- Principles and measurements of quality in andrology and STDs..	٢-١-د مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص
2.1. E- Principles and efforts for maintains and improvements of public health.	٢-١-هـ - المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها
2.2. A- Application of basic and other relevant science to solve andrology and STDs.related problems.	٢-٢-أ -تحليل و تقييم المعلومات في مجال التخصص و القياس عليها و الاستنباط منها
2.2.B- Problem solving based on available data.	٢-٢-ب -حل المشاكل المتخصصة استنادا علي المعطيات المتاحة
2.2.C- Involvement in research studies related to andrology and STDs..	٢-٢-ج -إجراء دراسات بحثية تضيف إلى المعارف
2.2. D- Writing scientific papers.	٢-٢-د- صياغة أوراق علمية
2.2. E- Risk evaluation in the related clinical practice.	٢-٢-هـ تقييم المخاطر في الممارسات المهنية
2.2.F- Planning for performance improvement in andrology sexologyand STDs.	٢-٢-و -التخطيط لتطوير الأداء في مجال التخصص
2-2-G- Creation and innovation in the andrology and STDs..	٢-٢-ز- الابتكار /الإبداع
2.2. H- Evidence – based discussion.	٢-٢-ح- الحوار والنقاش المبني علي البراهين والأدلة

2.2.I- Discussion making in different situations related to andrology and STDs..	٢-٢-ط -اتخاذ القرارات المهنية في سياقات مهنية مختلفة
2.3. A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in andrology and STDs.. 2.3. B- Master patient care skills relevant to andrology and STDs.or patients with all diagnoses and procedures.	٢-٣-أ -إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص
2.3. C- Write and evaluate reports for situations related to the field of andrology and STDs..	٢-٣-ب- كتابة و تقييم التقارير المهنية.
2.4.A-Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management	٢-٣-ج -تقييم و تطوير الطرق و الأدوات القائمة في مجال التخصص
2.4.B- Use competently all information sources and technology to improve his practice.	٢-٣-د - استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية
2.4.A-Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management 2.4.G- Participate in improvement of the education system.	٢-٣-هـ -التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين

II-Program ARS versus program ILOs

Comparison between ARS- ILOS for medical doctorate for Andrology,Sexology and STDs.

(ARS)	(ILOs)
2-1- Knowledge and understanding	***2-1- Knowledge and understanding***
2-1-A- Established, updated and evidence-based Theories, Basics and developments of v and relevant sciences.	**2-1-A**- Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio behavioral science relevant to his andrology and STDs as well as the evidence – based application of this knowledge to patient care.
2-1-B Basic, methods and ethics of medical research.	**2-1-B-** Explain basics, methodology, tools and ethics of scientific medical, clinical research.
2-1-C- Ethical and medicologal principles of medical practice related to andrology and STDs field.	**2-1-C-** Mention ethical, medico logical principles and bylaws relevant to his practice in the field of andrology and STDs.
2-1-D- Principles and measurements of quality in the andrology and STDs field.	**2-1-D-** Mention principles and measurements of quality assurance and quality improvement in medical education and in clinical practice of andrology and STDs.
2-1-E-Principles and efforts for maintains and improvements of public health.	**2-1-E-** Mention health care system, public health and health policy, issues relevant to this Speciality and principles and methods of system – based improvement of patient care in common health problems of the field of andrology sexologyand STDs.
***2-2- Intellectual skills*:**	***2-2- Intellectual skills:***
2-2-A-Application of basic and other relevant science to solve	**2-2-A-** Apply the basic and clinically supportive sciences which are

androlоgy and STDs related problems.	appropriate to androlоgy and STDs related conditions / problem / topics.
2-2-B-Problem solving based on available data.	**2-2-B-** Demonstrate an investigatory and analytic thinking “problem – solving “approaches to clinical situation related to androlоgy and STDs.
2-2-C- Involvement in research studies related to the androlоgy and STDs.	**2-2-C-** Plan research projects.
2-2-D Writing scientific papers.	**2-2-D-** Write scientific paper.
2-2-E-Risk evaluation in the related clinical practice.	**2-2-E-** Participate in clinical risk management as a part of clinical governance.
2-2-F-Planning for performance improvement in the androlоgy and STDs field.	**2-2-F-** Plan for quality improvement in the field of medical education and clinical practice in androlоgy sexologyand STDs.
2-2-G-Creation and innovation in the androlоgy and STDs field.	**2-2-G-** Create / innovate plans, systems, and other issues for improvement of performance in his practice.
2-2-H-Evidence – based discussion.	**2-2-H-** Present and defend his / her data in front of a panel of experts.
2-2-I-Decision making in different situations related to androlоgy and STDs fields.	**2-2-I-** Formulate management plans and alternative decisions in different situations in the field of the androlоgy sexologyand STDs.

continuous **(ARS)**	**continuous** **(ILOs)**

2-3- Clinical skills:	***2/3/1/Practical skills (Patient care :)***
2-3-A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in his field of practice. **2-3-B-** Master patient care skills relevant to andrology and STDs for patients with all diagnoses and procedures.	**2-3-1-A-** Provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. ***p.s.*** Extensive level means in-depth understanding from basic science to evidence – based clinical application and possession of skills to manage independently all problems in field of practice. **2-3-1-B-** Provide extensive level of patient care for patients with all common diagnoses and for uncomplicated procedures related to andrology sexology and STDs. **2-3-1-C-** Provide extensive level of patient care for non-routine, complicated patients and under increasingly difficult circumstances, while demonstrating compassionate, appropriate and effective care. **2-3-1-D-** Perform diagnostic and therapeutic procedures considered essential in the field of ***Andrology,Sexology and STDs***. **2-3-1-E-** Handles unexpected complications, while demonstrating compassion and sensitivity to patient needs and concerns. **2-3-1-F-** Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families in the andrology and STDs related situations. **2-3-1-G-** Gather essential and accurate information about patients of the

	andrology and STDs related conditions. **2-3-1-H** Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment for the andrology and STDs related conditions. **2-3-1-I-** Develop and carry out patient management plans for andrology and STDs related conditions. **2-3-1-J-** Counsel and educate patients and their families about andrology and STDs related conditions. **2-3-1-K-** Use information technology to support patient care decisions and patient education in all andrology and STDs related clinical situations. **2-3-1-L-** Perform competently all medical and invasive procedures considered essential for the andrology and STDs related conditions / area of practices. **2-3-1-M-** Provide health care services aimed at preventing the andrology and STDs related health problems. **2-3-1-N-** Lead health care professionals, including those from other disciplines, to provide patient-focused care in andrology and STDs related conditions**.**

2-3-C- Write and evaluate reports for situations related to the field of andrology and STDs.	**2-3-1-O-** Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive timely and legible medical records).
2-4- General skills **2-4-A-** Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management	***2/3/2 General skills*** **2-3-2-A-** Demonstrate the competency of continuous evaluation of different types of care provision to patients in the different area of andrology and STDs. **2-3-2-B-** Appraise scientific evidence. **2-3-2-C-** Continuously improve patient care based on constant self-evaluation and life-long learning. **2-3-2-D**. Participate in clinical audit and research projects. **2-3-2-E-** Practice skills of evidence-based Medicine (EBM). **2-3-2-G-** Design logbooks. **2-3-2-H-** Design clinical guidelines and standard protocols of management. **2-3-2-I-** Appraise evidence from scientific studies related to the patients' health problems.

2-4-B- Use competently all information sources and technology to improve his practice.	**2-3-2-J-** Apply knowledge of study designs and statistical methods to the appraisal of clinical studies. **2-3-2-K**- Use information technology to manage information, access on-line medical information; for the important topics.
2-4-C- Master skills of teaching and evaluating others.	**2-3-2-F-** Educate and evaluate students, residents and other health professionals.
2-4-D- Master interpersonal and communication Skills that result in effective information exchange and teaming with patients, their families, and other health professionals.	**2-3-2-L**- Master interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, including:- • Present a case. • Write a consultation note. • Inform patients of a diagnosis and therapeutic plan Completing and maintaining comprehensive. • Timely and legible medical records. • Teamwork skills. **2-3-2-M-** Create and sustain a therapeutic and ethically sound relationship with patients. **2-3-2-N**- Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills. **2-3-2-O-** Work effectively with others as a member or leader of a health care team or other professional group.
2-4-E- Master Professionalism behavior, as manifested through a commitment to carrying out professional responsibilities,	**2-3-2-P-** Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.

adherence to ethical principles, and sensitivity to a diverse patient population.	**2-3-2-Q-** Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices. **2-3-2-R-** Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value. **2-4-G**- Participate in improvement of the education system.	**2-3-2-S-** Work effectively in health care delivery settings and systems related to andrology and STDs including good administrative and time management. **2-3-2-T-** Practice cost-effective health care and resource allocation that does not compromise quality of care. **2-3-2-U-** Advocate for quality patient care and assist patients in dealing with system complexities. **2-3-2-V-** Design, monitor and evaluate specification of under and post graduate courses and programs.
2-4-H- Demonstrate skills of leading scientific meetings including time management	**2-3-2-W-** Act as a chair man for scientific meetings including time management **2-3-2-S-** Work effectively in health care delivery settings and systems related to andrology and STDs including good administrative and time management.
2-4-O- Demonstrate skills of self and continuous learning .	From A to H

III - Program matrix

Knowledge and understanding

Course	Program covered ILOs				
	2/1/A	2/1/B	2/1/C	2/1/D	2/1/E
Course 1 : Medical statistics		✓			
Course 2 : Research Methodology		✓			
Course 3 : Medicolegal Aspects and Ethics in Medical Practice and Scientific Research			✓		
Course4: Surgical Anatomy	✓				
Course 5: - General Surgery Advanced	✓				
Course 6: Clinical Pathology Advanced &Medical Microbiology and Immunology advanced	✓				
Course 7: Psychiatry and Psychosexual Disorders advanced	✓	✓			
Course 8:-Internal medicine advanced	✓	✓			
Course 9 : Advanced Andrology ,Venorology sexology, and Sexually transmitted diseases	✓	✓	✓	✓	✓

Intellectual

Course	Program covered ILOs								
	2/2/A	2/2/B	2/2/C	2/2/D	2/2/E	2/2/F	2/2/G	2/2/H	2/2/I
Course 1 : Medical statistics		✓	✓				✓		
course 2 : Research Methodology		✓	✓				✓		
Course 3 : Medicolegal Aspects and Ethics in Medical Practice and Scientific Research							✓		
Course4: Surgical Anatomy	✓	✓				✓		✓	
Course 5: - General Surgery Advanced	✓	✓							
Course 6: Clinical Pathology Advanced &Medical Microbiology and Immunology advanced	✓	✓							
Course 7: Psychiatry and Psychosexual Disorders advanced	✓	✓							
Course 8:-Internal medicine advanced	✓	✓							
Course 9 : Advanced Andrology ,Venorology sexology, and Sexually transmitted diseases	✓	✓	✓	✓	✓	✓	✓	✓	✓

Practical Skills (Patient Care)

Course	Program covered ILOs							
	2/3/1/ A	2/3/1/B	2/3/1/C	2/3/1/ D	2/3/1/E	2/3/1/F	2/3/1/ G	2/3/1/ H
Course 1 : Medical statistics								
course 2 : Research Methodology								
Course 3 : Medicolegal Aspects and Ethics in Medical Practice and Scientific Research				✓				✓
Course4: Surgical Anatomy								
Course 5: - General Surgery Advanced	✓		✓	✓	✓	✓		
Course 6: Clinical Pathology Advanced &Medical Microbiology and Immunology advanced								
Course 7: Psychiatry and Psychosexual Disorders advanced	✓		✓	✓	✓	✓		
Course 8:- Internal	✓		✓	✓	✓	✓		

medicine advanced								
Course 9 : Advanced Andrology ,Venorology sexology, and Sexually transmitted diseases	✓	✓	✓	✓	✓	✓	✓	✓

Practical Skills (Patient care)

Course	Program covered ILOs						
	2/3/1/ I	2/3/1/ J	2/3/1/ K	2/3/1/ L	2/3/1/ M	2/3/1/ N	2/3/1/ 0
Course 1 : Medical statistics							
course 2 : Research Methodology							
Course 3 : Medicolegal Aspects and Ethics in Medical Practice and Scientific Research	✓	✓					✓
Course4: Surgical Anatomy							
Course 5: - General Surgery Advanced						✓	
Course 6: Clinical Pathology Advanced &Medical Microbiology and Immunology advanced							
Course 7: Psychiatry and Psychosexual Disorders advanced						✓	
Course 8:-Internal medicine advanced						✓	
Course 9 : Advanced Andrology ,Venorology sexology, and Sexually transmitted diseases	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Program covered ILOs							
	2/3/2/A	2/3/2/B	2/3/2/C	2/3/2/D	2/3/2/E	2/3/2/F	2/3/2/G	2/3/2/H
Course 1 : Medical statistics		✓						
course 2 : Research Methodology		✓		✓	✓			
Course 3 : Medicolegal Aspects and Ethics in Medical Practice and Scientific Research								
Course4: Surgical Anatomy		✓		✓		✓		
Course 5: - General Surgery Advanced	✓		✓	✓	✓	✓		
Course 6: Clinical Pathology Advanced &Medical Microbiology and Immunology advanced		✓		✓		✓		
Course 7: Psychiatry and Psychosexual Disorders advanced	✓		✓	✓	✓	✓		
Course 8:-Internal medicine advanced	✓		✓	✓	✓	✓		
Course 9 : Advanced Andrology ,Venorology sexology, and Sexually transmitted diseases	✓	✓	✓	✓	✓	✓	✓	✓

General skills

Course	Program covered ILOs							
	2/3/2/I	2/3/2/J	2/3/2/K	2/3/2/L	2/3/2/M	2/3/2/N	2/3/2/O	2/3/2/P
Course 1 : Medical statistics	✓	✓	✓					
course 2 : Research Methodology	✓	✓						
Course 3 : Medicolegal Aspects and Ethics in Medical Practice and Scientific Research				✓				
Course4: Surgical Anatomy	✓		✓	✓		✓	✓	✓
Course 5: - General Surgery Advanced			✓	✓		✓	✓	✓
Course 6: Clinical Pathology Advanced &Medical Microbiology and Immunology advanced						✓		
Course 7: Psychiatry and Psychosexual Disorders advanced			✓	✓				
Course 8:-Internal medicine advanced			✓	✓				
Course 9 : Advanced Andrology ,Venorology sexology, and Sexually transmitted diseases	✓	✓	✓	✓	✓	✓	✓	✓

General Skills

Course	Program covered ILOs						
	2/3/2/ Q	2/3/2/R	2/3/2/S	2/3/2/T	2/3/2/ U	2/3/2/V	2/3/2/ W
Course 1 : Medical statistics							
course 2 : Research Methodology							
Course 3 : Medicolegal Aspects and Ethics in Medical Practice and Scientific Research							
Course4: Surgical Anatomy			✓				
Course 5: - General Surgery Advanced			✓				
Course 6: Clinical Pathology Advanced &Medical Microbiology and Immunology advanced	✓	✓	✓				
Course 7: Psychiatry and Psychosexual Disorders advanced	✓		✓				
Course 8:-Internal medicine advanced	✓		✓				
Course 9 : Advanced Andrology ,Venorology sexology, and Sexually transmitted diseases	✓	✓	✓	✓	✓	✓	✓

Annex 7,
Additional information: