

T6. Course Specification (CS)

Institution	Najran university	Date of Report	1438/1437
College/Department: College of Medicine			

A. Course Identification and General Information

1. Course title and code: Reproductive System 472 REP-5			
2. Credit hours 5 (4+1)			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Bachelor of Medicine and Surgery			
4. Name of faculty member responsible for the course : Dr. Abdel HafeezYagoub			
5. Level/year at which this course is offered level 7/year 4			
6. Pre-requisites for this course (if any): According to bylaws			
7. Co-requisites for this course (if any) None.			
8. Location if not on main campus: Main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="70%"/>
b. Blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. Correspondence	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="10%"/>
f. Other	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="20%"/>
Comments:			

B Objectives

1. Summary of the main learning outcomes for students enrolled in the course:

By the end of this course the students are expected to:

- 1) Describe the structure and function of the reproductive system.
- 2) Describe the symptoms and signs of some common diseases, injuries and disturbances of this system.
- 3) Develop a problem solving approach to reproductive system disorders.
- 4) Explain the pathogenesis of various reproductive healthsystem diseases, presentation, investigations (laboratory, radiological, etc), and management.

2. Course development plan:

- 1) Continuous updating of the information, knowledge and skills included in the course through the continuous search for new knowledge and skills available in recent publications (books, researches, internet and others).
- 2) Continuous improvements in teaching methods to encourage the students to participate effectively in their various academic activities.
- 3) Continuous evaluation of the course content, student level and establish plans accordingly.

C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

The purpose of this block is to enable the students to describe and discuss the development, structure, function, the main problems and diseases of the reproductive system. The reproductive system is responsible for the continuity of life, being the site of pregnancy and canal of birth. Pregnancy and labour, though physiological phenomena, are sometimes complicated by certain conditions, e.g. diabetes; hypertension which increases foetal and maternal morbidity and mortality. To perform this reproductive function a lot of processes-physiological, biochemical and structural- and organs are involved. Any malfunction or illness of any part of this system may affect the process of reproduction and result in serious problems to the fetus and the mother. Also, sexually transmitted infections e.g. AIDS are increasing in incidence worldwide and becoming a threat affecting the community at personal and family levels. On the other hand, infertility is becoming a challenging clinical problem which needs a thorough gynecological workup through investigations and costly treatment? For which the revolution of assisted reproduction has given hope to infertile couples to have a child.

Topics Covered	No. of Weeks	Contact Hours
Week 1		
PBL	0.20	4(0+4)
The bony pelvis and its applied anatomy	0.05	1(1+0)
The scrotum Testis and epididymis and vas deferens	0.05	1(1+0)
Histology of the testis and associated ducts, penis, prostate, and seminal vesicle	0.05	1(1+0)
Hist. of seminal vesicle, prostate & penis	0.05	1(1+0)
Male superficial & deep perineal pouches	0.05	1(1+0)
Hormones & Function of male reproductive system & Spermatogenesis 1	0.05	1(1+0)
Hormones & Function of male reproductive system & Spermatogenesis 2	0.05	1(1+0)
Scrotum, testis, epididymis, vas deference and male perineum	0.10	2(2+0)
Semen formation and composition	0.05	1(1+0)
Male Sex Hormones, Anabolics, and its Antagonists	0.05	1(1+0)
Histology of male genital organs Lab.	0.10	2(2+0)
Testicular Pathology	0.05	1(1+0)
Prostatic Pathology	0.05	1(1+0)
Factors affecting spermatogenesis SDL		0.33(0.33+0)
Sex Hormones SDL		0.33(0.33+0)
Week 2		
PBL	0.18	4(0+4)
Sexually transmitted Diseases Seminar Group	0.09	2(0+2)
Bact. Causes of Genital infections 1 Trep & pallid	0.04	1(1+0)
Development & anomalies of testes & its ducts	0.04	1(1+0)
TTT of ED & aphrodisiacs	0.04	1(1+0)
Development & anomalies of scrotum & penis	0.04	1(1+0)
Metabolism of Sperms	0.04	1(1+0)
Drug Treatment of Male Infertility	0.04	1(1+0)
Interpretation of Seminal Analysis Lab	0.09	2(0+2)
Genital infections 2 Treponema pallidum	0.04	1(1+0)
Bact. Causes of Genital infec. Chlamydia Tr	0.09	1(1+0)
Parasitic Causes of Genital Infections	0.09	2(2+0)
Diagnostic Methods of Syphilis and Gonorrhoea Lab	0.09	2(0+2)

Trauma to the testis and the penis SDL		0.33(0.33+0)
Diagnostic Methods of Parasites Affecting the Genital SystemLab	0.09	2(0+2)
Week 3		
PBL	0.15	4(0+4)
Infertility &ART Seminar	0.07	2(0+2)
Ovary & Uterine Tubes	0.04	1(1+0)
Uterus and Vagina (Anat.)	0.04	1(1+0)
Hist. Of the Ovary	0.04	1(1+0)
Pelvic peritoneum and visceral fascia	0.04	1(1+0)
Female superficial & deep perineal pouches	0.04	1(1+0)
Hormones of female reproductive System (Functions & regulation)	0.07	2(1+0)
Gross anatomy of the female genital tract DR	0.07)	2(0+2)
Ovarian Cycle	0.04	1(1+0)
Ovulation	0.04	1(1+0)
Female Sex Hormones, analogs, antagonists	0.04	1(1+0)
Drug Treat. Of Female Infertility	0.04	1(1+0)
Female perineum DR	0.07	2(0+2)
Normal Pelvic Examination	0.04	1(1+0)
Normal Labor (Obs&Gyn) Lab	0.04	1(1+0)
Interpretation of the Pregnancy Test Lab	0.07	2(0+2)
Endometrial cycle SDL		0.33(0.33+0)
Drug Treat. Of Female Infertility SDL		0.33(0.33+0)
Week 4		
PBL	0.15	4(0+4)
ART Seminar	0.07	2(0+2)
Assisted ReproductionTutorial	0.07	2(0+2)
Hist. Of the uterus , tubes & vagina	0.04	1(1+0)
Development & anomalies of the ovary	0.04	1(1+0)
Development & anomalies of uterine tubes, uterus & vagina	0.04	1(1+0)
Hist. Of the uterus , , uterine tubes, vagina & ovary Lab	0.07	2(0+2)
Development & anomalies of female external genitalia	0.04	1(1+0)
Menopause	0.04	1(1+0)
Hormonal Contraceptives	0.04	1(1+0)
Uterine Pathology	0.04	1(1+0)
Contraception (Lab)	0.07	2(0+2)
Vulval, Vaginal, and cervical pathology	0.04	1(1+0)

Pathology of Ovarian Disease	0.04	1(1+0)
Pathology of the Placenta	0.04	1(1+0)
Vertical transmission of HIV	0.04	1(1+0)
Contraceptive Methods	0.04	1(1+0)
Clinical correlation of the bony pelvis	0.04	1(1+0)
Collective Practical	0.07	2(0+2)
Ovarian and cervical pathology SDL		0.33(0.33+0)
Week 5		
Intersex (Seminar)	0.07	2(0+2)
PBL	0.14	4(0+2)
Normal Appearance of the Reproductive organs on different imaging modalities (Tut.)	0.07	2(0+2)
The uterus and Cervix during Pregnancy and Labor	1(1+0)	1(1+0)
Abdominal and Pelvic examination Skills Lab	0.04	3(0+3)
Normal Pelvic Examination Skill lab	0.10	3(0+3)
Congenital Anomalies	0.04)	1(1+0)
Scrotal examination	0.10	3(0+3)
Pathology of the Reproductive organs on different imaging modalities Tutorial	0.07	2(0+2)
Viral Causes of Genital Infec.1	0.04	1(1+0)
Viral Causes of Genital Infec.2 HPV , HSV	0.04	1(1+0)
AIDS	0.04	1(1+0)
Treatment of Sexually Transmitted Diseases	0.04	1(1+0)
Diagnostic Cytology and Histology in ob/gyn	0.04	1(1+0)
The Douglas Pouc Tutorial	0.07	2(0+2)

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Practical (lab)	Seminars	BST	Skill lab	PBL	SDL	Total
Contact Hours	56	8	22	8	3	6	20	6	129
Credit hours	3,11	0.22	0.61	0.22	0.05	0.11	0.55	0.11	5

3. Additional private study/learning hours expected for students per week.

10-15

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it. Every course is not required to include learning outcomes from each domain.

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

NQF Learning Domains And Course Learning Outcomes		Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
	By the end of this course the students should be able to 1.1Describe the structure, function and pathology of the reproductive systems 2recognize the symptoms and signs of some common diseases, injuries and disturbances of reproductive system. 3define laboratory investigations and medicaltreatment of some reproductive diseases	Lectures. Seminars and tutorials. PBL sessions. Practical classes. Bedside teaching.	MCQ OSPE

2.0	Cognitive Skills		
2.1	By the end of this course the student should be able to: 1. Explain the pathogenesis, clinical investigations and management of various reproductive diseases. 2. Develop a problem solving approach to reproductive system disorders.	Interactive lectures. Seminars and tutorial. PBL sessions Practical classes that include brain storming problem solving questions. Bedside teaching	MCQ OSPE
3.0	Interpersonal Skills & Responsibility		
3.1	By the end of this course the student should be able to: 1) Act as efficient team members, participate in class discussion and present a talk to colleagues and Behave ethically in lectures and practical classes with the staff, colleagues.	1) Seminars. 2) PBL sessions 3) Practical classes. 4) Bedside teaching.	MCQ OSPE
4.0	Communication, Information Technology, Numerical		
4.1	By the end of this course the student should be able to: 1) Utilize different knowledge resources e.g. library, websites, power point presentation and calculate laboratory results mathematically and statistically.	1) Seminars. 2) PBL sessions 3) Practical classes	MCQ OSPE Log book
5.0	Psychomotor		
5.1	By the end of this course the student should be able to: 1) Perform basic clinical assessment of reproductive systems and show normal and abnormal reproductive structures by palpation or by using diagnostic tools.	1) Practical classes. 2) Bedside teaching. 3) Skills lab.	OSPE Log book

Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
Knowledge	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write

Cognitive Skills	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
Interpersonal Skills & Responsibility	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
Communication, Information Technology, Numerical	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
Psychomotor	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

Suggested assessment methods and teaching strategies are:

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)		Week Due	Proportion of Total Assessment
1	First quiz	2 nd	20 %
2	Second quiz	3 rd	
3	Third quiz	4 th	

4	Fourth quiz	5 th	
5	Seminar	3 weeks	5%
6	PBL sessions	5 weeks	5%
7	End of course exam MCQs and OSPE	6 week	70%

D. Student Academic Counseling and Support

Arrangements for availability of the staff member for individual student consultations and academic advice:

- 1) Allocation of office hours by the departments
- 2) Academic supervision
- 3) Academic surveillance.

E. Learning Resources

List Required Textbooks

1. **ANATOMY, EMBRYOLOGY AND HISTOLOGY:**

- 1) Snell: Clinical Anatomy by Systems 1st ed
- 2) Sadler: Langman's Medical Embryology 11th ed
- 3) Junqueira: Basic Histology 10th ed

PHYSIOLOGY:

- 1) Guyton and Hall Textbook of Medical Physiology, 13th Edition by John E. Hall, Arthur C Guyton Hardcover, 1120 Pages, Published (2016) by Saunders ISBN: 978-4557-7005-
- 2) Ganong's Review of Medical Physiology, 24th Edition (LANGE Basic Science) 24th Edition by Kim E. Barrett (Author), Susan M. Barman (Author), Scott Boitano (Author), Heddwen Brooks (Author) McGraw-Hill's (2012) ISBN-13: 978-0071780032, ISBN-10: 0071780033

BIOCHEMISTRY:

- 1) Review of Biochemistry by Harper.
- 2) Lippincott clinical biochemistry.

PHARMACOLOGY:

- 1) Pharmacological basis of therapeutics by Goodman and Gillman.
- 2) Basic & Clinical Pharmacology by B.G. Katzung.

PATHOLOGY:

- 1) Basic Pathology by Cotran, Kumar and Robbins.
- 2) Textbook of Pathology. Rubin and Farber.

MICROBIOLOGY:

- 3) Parasitology by Blacklock. Jawetz, Melnick, & Adelberg's Medical Microbiology. Latest edition.
- 4) Manual of Clinical Microbiology. Murray PR, et al. ASM Press. Latest Edition.

MEDICINE:

- 1) Current Medical diagnosis & treatment.
- 2) Davidson's principles and practice of medicine.

SURGERY:

- 1) Bailey & loves: short practice of surgery

Obstetrics and gynecology

- 1) Obstetrics by Ten Teachers, Nineteenth edition, Edited by Philip N. Baker and Louise C. Kenny
- 2) Gynecology by Ten Teachers, Nineteenth edition, Edited by Ash Monga and Stephen Dobbs

2. List Essential References Materials (Journals, Reports, etc.)

1) www.jbcrs.org/

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

1. ANATOMY, EMBRYOLOGY AND HISTOLOGY:

- 1) Drake: Gray's Anatomy for Medical Students 2nd ed flashcards
- 2) Moore: Clinically Oriented Anatomy 6th ed
- 3) Moore: Essential Clinical Anatomy 3rd ed
- 4) Agur: Grant's Atlas of Human Anatomy 12th ed
- 5) Abrahams: McMinn's Atlas of Human Anatomy 6th ed +
- 6) Lumely: Surface Anatomy: The Anatomical Basis of Clinical Examination 4th ed
- 7) Melloni: Melloni's Illustrated Review of Human Anatomy 3rd ed
- 8) Putz: Sobota Atlas of Human Anatomy, volume 1 14th edition
- 9) Standrig: Gray's Anatomy: The Anatomical Basis of Clinical Practice, Expert Consult 40th ed
- 10) Goldberg: Clinical Anatomy Made Ridiculously Simple 3rd ed
- 11) Lisowski: Anatomical Terms and Their derivation 1st ed
- 12) Norton: Netter's Head and Neck Anatomy for Dentistry 1st ed
- 13) Canby: Problem-Based Anatomy 1st ed
- 14) Ellis: Clinical Anatomy 11th ed
- 15) Netter: Atlas of Human Anatomy, Professional Edition 4th ed
- 16) Sinnatamby: Last's Anatomy 11th ed
- 17) Snell: Clinical Anatomy: An Illustrated Review with Questions and Explanations 4th ed
- 18) Drews: Color atlas of Embryology
- 19) Sadler: Langman's Medical Embryology 11th ed
- 20) Moore: The Developing Human: Clinically Oriented Embryology with Student Online Access 8th ed
- 21) Bogart: Elsevier's Integrated Anatomy and Embryology 1st ed
- 22) Snell: Clinical Embryology for Medical Students 2nd ed (or latest)
- 23) Eroschenko: Di Fiore Atlas of Histology with Clinical Correlations 11th ed
- 24) Kerr: Functional Histology 2nd ed
- 25) Kiernan: Histological and Histochemical Methods: Theory and Practice 4th ed
- 26) Ovalle: Netter's Essential Histology 1st ed

- 27) Young: Wheater's Functional Histology 5th ed
 - 28) Junqueira: Basic Histology 10th ed
 - 29) Jensch : Questions and Answers in Microscopic Anatomy 1st ed
 - 30) Tesler: Elseviers Integrated Histology 1st ed
 - 31) Snell: Clinical and Functional Histology for Medical Students (latest ed)
 - 32) Basic Histology text and atlas by Junqueira.
 2. **PHYSIOLOGY:**
 - 1) Principle of Anatomy & physiology by Tortora.
 3. **BIOCHEMISTRY:**
 - 1) Review of Biochemistry by Harper.
 - 2) Lippincott clinical biochemistry.
 4. **PHARMACOLOGY:**
 - 1) Pharmacological basis of therapeutics by Goodman and Gilman.
 - 2) Basic & Clinical Pharmacology by B.G. Katzung.
 5. **PATHOLOGY:**
 - 1) Basic Pathology by Cotran, Kumar and Robbins.
 - 2) Textbook of Pathology. Rubin and Farber.
 - 3) Pocket companion to pathological Basis of disease by Robbins. Basic pathology, Robbins and Cotran
 - 4) Murray's pathology
 6. **MICROBIOLOGY:**
 - 1) Medical Microbiology and Immunology by Warren Levinson.
 - 2) Medical Microbiology and Immunology by Warren Levinson & Ernest Jawetz, Examination Board Review.
 - 3) Parasitology by Blacklock. Jawetz, Melnick, & Adelberg's Medical Microbiology. Latest edition.
 - 4) Manual of Clinical Microbiology. Murray PR, et al. ASM Press. Latest Edition.
 - 5) Bailey and Scott's Diagnostic microbiology. Latest edition.
 7. **MEDICINE:**
 - 1) Current Medical diagnosis & treatment.
 - 2) Davidson's principles and practice of medicine.
 - 3) Harrison's principles of internal medicine.
 8. **SURGERY:**
 - 1) Bailey & Love: short practice of surgery
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4. List Electronic Materials(eg. Web Sites, Social Media, Blackboard, etc.)
- 1) www.Uptodate.com
 - 2) Medicalstudent.com
 - 3) www.medscape.org
 - 4) www.WHO.org
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5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

1) Saudi Digital Library

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

1) Lecture room suitable for students.

2) Laboratory (dissection room-DR, physiology, biochemistry, microbiology, pathology, pharmacology and clinical skills) suitable for students.

3) Teaching hospital for bedside teaching.

2. Computing resources (AV, data show, Smart Board, software, etc.)

Computers, multimedia in lecture room, PBL rooms and laboratories.

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

Library supplied with reference text books, electronic resources.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

1) Continuously throughout the block by direct interviewing of the students.

2) End of block questionnaire

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

1) Feedback from colleagues.

2) Class observation by supervisors.

3 Processes for Improvement of Teaching

1) Continuous updating of course contents.

2) Regular meetings where problems are discussed and recommendations made.

3) Workshops on teaching methods.

4) 4. Review of recommended teaching strategies.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

1) Arrange with another institution to have common test items included in an exam and compare marks given.

2) Invitation of an external examiner on regular bases.

There will be an evaluation at the end of the block to assess the course execution, outcome and feedback from different sources to arrive at an appropriate modifications needed if any.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- 1) Continuous updating of the information, knowledge and skills included in the course through the continuous search for new knowledge and skills available in recent publications (books, researches, internet and others).
- 2) Continuous improvements in teaching methods to encourage the students to participate effectively in their various academic activities.
- 3) Continuous evaluation of the course content, student level and establish plans accordingly.

Name of instructor: **Dr. Abdel Hafeez Yagoub Mohamed**

Signature: _____ *Abdel Hafeez* _____ Date Report Completed: 14/1/1438

Name of field experience teaching staff:

Program coordinator:

Signature: _____ Date: _____