



TITLE:	Obstetrics & Gynaecology		
COURSE CODE:	481 Gyne		
CREDIT HOURS:	11 hours		
CONTACT CLOCK HOURS:	Theoreticals		
	Tutorials & Practicals		7:30AM-4:30PM
PREREQUISITE:	Background in Medicine & Surgery		

Introduction:

Obstetrics & Gynaecology is the branch of Medicine which deals with the health care of the woman. It is concerned with the physiological, psychological and pathological events of the reproductive and menopausal processes.

Obstetrics deals with all aspects of pregnancy, including: antenatal care, normal physiology, early pregnancy problems and other pathological events which occurs during pregnancy and labour. Obstetrics also involves the study of the fetus as an individual which is intimately related to the health of the mother.

All doctors will definitely care for females patients at some points in their lives, and as such, students are expected to get a wide experience in this branch of medicine. Therefore this denotes that, great emphasis should be placed on the care and health & well being of the woman.

Aims and Objectives:

All undergraduate students must have three basic components; knowledge, clinical skills and attitude in order to be enthusiastic and well motivated efficient future doctors. This will enables the students to proceed into either general practice or other specialities. One of the most important objectives of the care of the woman is the recognition of the pathological events during pregnancy, labour and the immediate postpartum.

Obstetrics & Gynaecology:

During the Academic year, three courses in Obstetrics & Gynaecology are held on 12 weekly basis, starting with female students in the start of the academic year followed by two subsequent male courses. In addition, a summer course of 8 weeks will be run for those who have failed during the previous year.

Students spend 12 weeks in Obstetrics & Gynaecology after having done rotation in basic medicine and surgery. They reach the Obstetrics & Gynaecology rotation at fourth (4th) year of their medical school. Hence, they have basic medical knowledge and background to help them go through the subject of Obstetrics & Gynaecology.

The Organization of the Course:

The integrated course will contain 40 lectures for all students, 12 tutorials for each group (8 groups), a Skill lab & Instrument Teaching, and Ultrasound Sessions. It also involves daily activities, these include: ward rounds with bedside teaching, clinic attendance and operating room, labour ward and accident and emergency sessions.

Daily Clinical Teachings				
Ward Rounds	O.R.	Labour & Delivery	Accident & Emergency	Clinics

Lectures	Tutorial	Skill Lab & Instruments
40 Lectures 2 times daily for 4 weeks	12 Tutorials Twice a week for 6 weeks every Sunday & Tuesday	1 Skill lab & 1 Instrument Session

1. The following is a concise outlook of the curriculum.

The syllabus in Obstetrics & Gynaecology is intended to be a guide, which will help students to achieve the expected level of knowledge on this course. The course initially starts with intensive lectures in the morning.

Students are assigned to different high rank hospitals in Riyadh. Each clinical attachment is for 6 weeks and they rotate along these hospitals to obtain maximum benefits.

The Clinical skills which are required includes; the ability to take a history, examine a pregnant and non pregnant woman "under supervision" and produce a plan of management for the woman's condition. Experience is obtained by seeing the patient on admission to hospital and following them up through their hospital stay.

The clinical work includes: Antenatal and Gynaecology case presentations, attendance at Antenatal and Gynaecology Clinics, observing & assisting at Obstetrics & Gynaecology operations and obtaining some experiences in Obstetrical and Gynaecological emergencies.

Counseling: the students should be given specific encouragement and guidance during the study period. In addition, during the course and in particular following the continuous exam, weak students will identify themselves and will be given additional help.

2. The syllabus:

- The syllabus is given for general guidance only. The students should be as broad as possible.

- During the attachment, students should aim to cover the subjects listed in theory, in the clinical sessions and in the tutorials.
- The background knowledge (physiology of conception, development of the fetus and anatomy of pelvis) will help understanding of the list below in the syllabus, which are given in forms of lectures.

2.1.1. **Obstetrics:**

History taking and examination of the pregnant and postpartum woman.

- Reproductive Biology
 - Conception
 - Implantation
 - Placenta
 - Fetal Circulation
- Physiological Changes in Pregnancy
- Antenatal Care to include: Calculating Expected Date of Delivery and Gestational Age. Knowledge of screening tests, maternal education, method of monitoring and fetal health assessment.
- Management of labour & fetal surveillance (antenatal & Intrapartum).
- Abnormal Labour including knowledge of premature labour, pre-mature rupture of membranes, malpresentations (breech, face, brow) failure to progress in labour and cephalo-pelvic disproportion (CPD) Maternal Medical Disorders in Pregnancy including; hypertensive disorders, pre eclampsia, eclampsia
 - Diabetes in Pregnancy
 - Cardiovascular Disease in Pregnancy
 - Anaemia and Thyroid Diseases in Pregnancy
 - Urinary Tract Disease in Pregnancy
 - Thromboembolic Diseases in Pregnancy
- Perinatal Infections
- Antepartum Haemorrhage (placenta previa, abruptio placenta, vasa previa)
- RH Isoimmunization and ABO incompatibility
- Post Partum Haemorrhage & Coagulation Disorders
- Intrauterine Growth Restriction & Intrauterine Fetal Death
- Multiple Pregnancy
- Puerperium, its complication & Puerperal Sepsis
- Instrumental Deliveries & Caesarean Section
 - Vaginal Birth after Caesarean Section (VBAC)
- Analgesia & Anaesthesia in labour

2.1.2 Gynaecology:

History taking and examination in Gynaecology; Knowledge of;

- Embryology of female genital tract, malformation & Intersex
- Physiology of Menstrual Cycle and Ovulation, all will help in the understanding of the Gynaecological syllabus.
- Complications of early pregnancy, diagnosis and management of :
 - Abortion
 - Ectopic Pregnancy
 - Molar Pregnancy
- Puberty normal & Precocious
- Contraception, different methods, failure, side effects
- Infection of lower genital tract & pelvic inflammatory disease & sexually transmitted disease.
- Infertility & Hirsutism
- Dysmenorrhea, Pre Menstrual Syndrome & Endometriosis and Adenomyosis
- Incontinence & Genital Prolapse
- Amenorrhea, Primary & Secondary
- Uterine Fibroids
- Menopause
- Abnormal Uterine Bleeding
 - ✘ Dysfunctional Uterine Bleeding
 - ✘ Menorrhagia
 - ✘ Peri Menopausal and post menopausal Bleeding
- Functional Ovarian Cysts
- Ovarian Cancer
- Gestational Trophoblastic Disease
- Cervical Intraepithelia, Neoplasia & Cervical Cancer
- Endometrial hyperplasia, atypia and Endometrial Cancer

2.1.3. Neonatology

- Neonatology Medicine is taught along side Obstetrics
 - ✘ Resuscitation of the newborn
 - ✘ Apgar Score
 - ✘ Management of Premature Neonate & Infant of Diabetic Mothers and growth restricted neonates

2.1.4. Procedures in Obstetrics & Gynaecology:

- Students have to observe these procedures to help with their understanding in Obstetrics & Gynaecology.

Deliveries/Procedures:

- Normal Vaginal Deliveries
- Caesarean Section
- Forcep delivery
- Ventouse Extraction
- Assisted Vaginal Breech Delivery
- Twins Delivery
- Surgical Induction, Artificial rupture of membrane
- Fetal Scalp Electrode Application
- Fetal Blood Sampling
- Episiotomy Repair
- Manual Removal of Placenta
- External Cephalic Version (ECV)
- Amniocentesis

Gynaecological Surgeries:

- Dilatation & Curettage (D&C)
- Evacuation Suction & Curettage (E&C) for retained product of conception
- Hysteroscopy
- Vaginal Surgeries; pelvic floor repair, anterior & posterior repair.
- Diagnostic and Therapeutic Laparoscopy
 - ✘ Ectopic Pregnancy
 - ✘ Ovarian Cyst
 - ✘ Salpingectomy/Salpingostomy
 - ✘ Sterilization
- Laparotomy
 - ✘ Ovarian Cystectomy
 - ✘ Myomectomy
 - ✘ Hysterectomy

Office Procedures

- Insertion of Intra Uterine Contraceptive Device (IUCD)
- Ring Passeries for utero vaginal prolapse
- Endometrial Sampling
- Cervical Cauterization, Cryo Surgery
- Colposcopy
- Removal of Cervical Polyps
- Hysterosalpingography (HSG)

Ultrasound Scan in Obstetrics & Gynaecology

Specialized Clinic:

- Reproductive Endocrinology Clinic
- Assisted Reproductive Technology Clinic
- Colposcopy Clinic
- Oncology Clinic
- Menopausal Clinic
- Urogynaecology Clinic
- Recurrent Fetal Loss Clinic
- Genetic Counseling Clinic

3. Academic Activities:

3.1. Formal Lectures:

A total of 40 lectures are given to cover the syllabus listed above. Each lecture will last 60 minutes and is given to the whole group of student in the lecture hall for about 80 to 100 students. The students are given 2 lectures in the morning from Saturday until Wednesday for the first 6 weeks of this course.

General Guidelines for Tutorials

The students are divided into 8 groups each with maximum of 10 students.

In the tutorial, the teacher facilitates and controls the group in an interactive way in order to encourage discussion, student's involvement, critical thinking and justifies decisions. Tutorial also engages them in problem solving activities, which ultimately, improves the student's communication, and interpersonal skills.

- All the tutorials must be in the form of clinical discussion of case topics.
- Every Student must have at least two cases, one Obstetrics and one Gynaecology prepared and discussed.
- History and examination will be presented by the student.
- This will be followed by discussion on:
 - ✘ The important points that should be elaborated in the history and examination based on the case.
 - ✘ Differential Diagnosis
 - ✘ Investigations
 - ✘ Management
- Students should try to cover all varieties of cases and avoid repetition as much as possible.
- The teaching staff should evaluate the students document the grade, and provide it to the department secretary by the end of the tutorial.

3.2. Departmental Academic Activities:

All students are welcome to attend all departmental academic activities and should be encouraged to attend hospital activities when appropriate.

3.3. Clinical Teaching:

The first week of clinical teaching sessions are spent in demonstration of Obstetrical history taking and physical examinations of different systems, paying particular attention to Obstetrics & Gynaecology and examination. During the subsequent weeks, bedside teaching, clinic attendance, and operating sessions are supervised by the teaching and the hospital staff.

- **Small Group Sessions**

Each group rotates in the Labour Ward, Accident & Emergency, Gynaecology, Antenatal & Postnatal Wards in addition to out patient clinics.

Students should see the out patients and in patients. This will allow them to provide continuity of care and witness the female patient in the different stages of her pregnancy or disease state. The students should also see patients pre-operatively, in the operating theater, and post-operatively.

3.4. Skill lab in Obstetrics & Gynaecology:

3.4.1. The Obstetrics simulator will enable the students to get clinical experience related to abdominal examination of the pregnant woman, fetal lies and presentations (cephalic, breech), mechanism of labour with maternal pelvis and a fetus in cephalic, and breech delivery, and type of episiotomies.

3.4.2. In Gynaecology, Bimanual pelvic examination, cervical and uterine pathology, Laparoscopy orientation and visualization of the female pelvis.

3.5 Instrument, X-Ray, Ultrasound, pathological specimens related to Obstetrics and Gynaecology are given in a form of teaching sessions to small group of students.

4. **Assessment:**

The objective structured clinical examination (OSCE), has replaced the traditional clinical component of the examination for the undergraduate students.

It ensures that students are exposed to the same scenario, eliminates to some extent examiners and patient's bias. It allows a more comprehensive assessment of the student's clinical competence.

The examination consists of ten stations, 4 minutes each station. Each station assesses a different aspect of clinical practice. This kind of examination is hoped to achieve broadened student knowledge.

The multiple choice questions (MCQs) all are single best answer type with no negative marking. The MCQs are combination of both Obstetrics & Gynaecology and neonatology, 100 MCQs are attempted in two hours period.

Students are not allowed to take part in the final examination if he/she does not fulfill a minimum of 75% attendance in the lectures/tutorials and clinical sessions.

The Continuous Assessment:

100 MCQs will score **40%** whereas 150 OSCE will score **60%**. The sum of the MCQ and OSCE results will be multiplied by **35%** to get the continuous assessment mark.

The Final Examination

100 MCQs will score **40%** whereas 150 OSCE will score **60%** of their total marks. The sum of the MCQ and OSCE results will be multiplied by **60%**.

TOTAL GRADE

The total mark of the Continuous Assessment **35%** plus the total mark of the Final Examination **60%**. In addition, the **5%** mark from the tutorials, is the mark of the Final Grades.

Formula of the Grading System;

The Continuous Assessment:	35%
The Final Examination:	60%
The Tutorial:	<u>5%</u>
Total Grade:	100%

5. **Evaluation:**

The students will be asked at the end of the study period to evaluate the course.

Recommended text Books:

1. Obstetric – Illustrated

Garrey/Govan –Hodge – Callender
Alistair W.F. Miller & Kevin P. Hannetty
Fifth Edition 2000
Churchill Livingstone

2. Gynaecology – Illustrated

A.D.T. Govan –Hodge – Callender
David Mckay Hart & Jane Norman
Fifth Edition 2000
Churchill Livingstone

3. Essential Of Obstetrics & Gynaecology

J.G. Moore, N.F. Hacker and J.C. Gambone
Fourth Edition 2004
Saunders

4. Obstetrics By Ten Teachers

Edited by S. Campbell & C. Lees
Arnold
17TH Edition

5. Gynaecology By Ten Teachers

Edited by S. Campbell & A. Monga
17TH Edition
Arnold

Students Allocation to Affiliated Teaching Institution in Riyadh:

**King Fahad National Guard Hospital
Ministry of Health (MOH)**

**Security Forces Hospital
Riyadh Military Hospital**