

**Hashemite University**

**Faculty of Medicine, Department of Obstetrics and Gynecology**

**2018 -2019**

## **Obstetrics and Gynaecology I Syllabus**

### **Course information**

Course title: Obstetrics and Gynaecology Number 1

Course number: 111505501

Credit hours: 9

Course date: 26/8/2018 for 8 weeks

Repeated

Course meeting time: 0800-1700 hrs Sunday through Thursday

Course location: Prince Hamza Hospital (PHH)

Al-Zarqa Government Hospital

Prince Hashem Hospital/ Royal Medical Services

Al-Bashir Hospital

## Instructors:

Instructor	Office Location	Office hours	Phone	E-mail
Dr Fida Al-Asali		Thursday 0800-1700hrs	0791752614	<a href="mailto:Fida_a_99@yahoo.com">Fida_a_99@yahoo.com</a>
Dr Rami Kilani		Thursday hrs1700-0800	077540100	<a href="mailto:Rkilani200@yahoo.com">Rkilani200@yahoo.com</a>
Dr Firas AL-Rshoud		Thursday 0800-1700hrs	0797354672	
Dr Hamza Al-Amoosh		Thursday 0800-1700hrs	0799444792	

Instructors can be contacted at PHH.

WhatsApp group is created every rotation for easier communication and announcements.

Pre-requested course: Passing year four successfully

## **Course description**

This course offers a general obstetrics-gynaecology experience over eight weeks. Rotating within four hospitals, the students will be exposed to a variety of cases including antenatal, postnatal patients, Obstetric and gynaecological assessment, pre-operative patients in a clinic setting. Hospital rounds, assisting in patient deliveries, including operative deliveries (Instrumental and C/Sections) and Gyn Surgery, are expected.

Course Expectations: Progressive levels of responsibility, culminating in the ability to evaluate and formulate an appropriate treatment, care plan.

## **Learning outcomes**

- **By the end of this course students will be able to adequately perform and develop;**
  1. Complete assessment of obstetric and gynecologic patient
  2. Obtain complete obstetric and gynecologic history according to general medical guidelines
  3. Communication skills necessary for basic doctor-patient interaction
  4. Identify normal and abnormal conditions in labour
  5. Formulate differential diagnosis of common obstetric and gynecologic presentations
  6. Demonstrate knowledge in continued and extended care to an obstetric and gynecologic patient
  7. Identify important obstetric emergencies
  8. Recognize medical conditions that might affect obstetrics and gynecology and vice versa
  9. Awareness of the prevalence of various obstetric and gynecologic conditions
  10. Interpret basic laboratory results in the field of obstetrics and gynecology

- **Knowledge and understanding**

By the end of the course, students should be able to describe, explain, recognize and demonstrate understanding of;

## ➤ GYNECOLOGY

1. The basic anatomy of the female genital tract, including histology
2. The development of the female genital tract and their clinical applications.
3. Normal sex differentiation, chromosomal sex, inter sex disorders and their management
4. The physiology of menstruation, physiology of ovulation, abnormal uterine bleeding, and its management
5. The causes of primary and secondary dysmenorrhea, clinical picture and management, premenstrual syndrome, possible etiology, clinical picture and management
6. The physiology of puberty, precocious puberty, its causes and management, delayed puberty, its causes and management
7. The causes of primary amenorrhea, clinical picture and management of secondary amenorrhea, causes and management, including hyperprolactinaemia and polycystic ovary syndrome
8. The normal human sexual response, common sexual problems and their management.
9. The magnitude of the infertility problem and its different etiologies, basic diagnostic tools, and treatment of infertility including assisted conception outlines
10. The causes, types and methods of diagnosis and management of lower and upper genital tract infections with emphasis on methods of prevention of serious complications of sexual transmitted diseases
11. Various contraceptive methods (types, mode of action, advantages, disadvantages, indications, contraindications, and complications)
12. The physiology of menopause and its management, hormone replacement therapy indications, contraindications and routes of administration
13. The magnitude of endometriosis and adenomyosis, their causes, diagnostic and management options

14. The causes, diagnosis and management of uterovaginal prolapse
15. Urogynaecological conditions including urinary incontinence (types of incontinence) urodynamic studies, voiding difficulties, frequency and urinary tract infections
16. The pathology, classification and clinical picture of cervical, uterine, ovarian, fallopian tube, vaginal and vulval benign and malignant tumors with emphasis on screening methods and early recognition and broad lines of their management
17. Medico-legal aspects of gynecology and psychological aspects
18. The etiology of bleeding in early pregnancy (abortion, ectopic, vesicular mole) and their management
19. Recurrent miscarriage and mid-trimester miscarriage, causes and management

➤ **OBSTETRICS**

1. The basic physiological background of fertilization, implantation, and early development of the fetus, placenta, cord, placental functions, formation and functions of liquor, and the basis of fetal circulation
2. The physiological changes produced by pregnancy
3. The basic principles of antenatal care, and recognize high-risk pregnancies and their magnitude with emphasis on preventable and avoidable causes and their management
4. Different medical disorders occurring during pregnancy and their management (e.g. Hyperemesis, anemia, thromboembolic diseases, diabetes, urinary tract infections, cardiac diseases, respiratory diseases, thyroid diseases, autoimmune diseases etc...)
5. Pregnancy induced hypertension, pre-eclampsia, and eclampsia (definitions proteinuria, pathophysiology, predisposing factors, clinical picture and, management of eclampsia, and HELLP syndrome)

6. Different methods of assessment of fetal well-being (non-stress test, biophysical profile, and color Doppler)
7. The physiology, mechanism, and management of normal labor (including partogram and fetal monitoring)
8. The fetal lie, presentation, position, and discuss malpresentation (occipito-posterior, face, brow, breech, shoulder) causes, clinical picture and management
9. The causes, outline and management of complications of third stage of labor
10. The types, causes, investigation and management of ante-partum hemorrhage (placenta previa and abruptio placenta)
11. The etiology, pathology, diagnosis and management of amniotic fluid disorders (oligo/poly-hydramnios), fetal growth disorders and Rh-isoimmunization
12. The basic and surgical anatomy of the female pelvis and the fetal skull
13. The physiological changes during puerperium and the recommended program of postnatal visits with abnormalities occurring in puerperium and their management
14. The indices, causes and prevention of maternal and perinatal morbidity and mortality
15. The indications, techniques, and complications of induction of labor
16. The types, indications, techniques and complications of obstetric forceps, ventouse and cesarean section
17. The causes, complications, diagnosis and treatment of the common types of contracted pelvis, soft tissue obstruction, abnormal uterine action, obstructed labor, ruptured uterus, and genital tract injuries during labor
18. The causes, diagnosis, and management of post-term pregnancy and hazards of post-maturity, prematurity, and intrauterine fetal death
19. Multiple gestation, definition, prevalence, classification, etiology, complications, differential diagnosis, antenatal and intrapartum management
20. The causes and management of intra-uterine growth restriction

21. Various obstetric emergencies including uterine rupture, uterine inversion, amniotic fluid embolism and shock in an obstetric patient
22. The definition, prevalence, classification, etiology, clinical features and treatment of preterm labour
24. Normal fetal development and growth

### **Instructional methods:**

Various learning approaches and activities are incorporated into this course including

➤ **Bedside teaching/ward rounds**

Students prepare the cases and present them. Physical examination is demonstrated and students are observed doing the examination with a feedback.

➤ **RIME with Reasons**

RIME is a classification measure of a student's progression from that of a **R**eporter to **I**nterpreter, to **M**anager/**E**ducator. Most medical students should be able to demonstrate they can reliably gather the facts on patients and present this information in an organized manner. It is expected that the students will progressively synthesize this information, learning to connect signs and symptoms with tests, and to develop a differential diagnosis.

➤ **Prompting students** by asking questions to think and search evidence based resources.

Students value questioning, especially when we ask their opinion and ask them to formulate a plan. Active questioning will give them the opportunity to demonstrate their knowledge, reasoning and management skills.

➤ **Presentations/Seminars**

These are done by both the instructors and the students in big and small groups. The students are asked to attend morning reports and departmental meetings.

- **Shadowing in the outpatient clinics**
- **Attending/Assisting in the operating theatre**
- **Attending the labour ward**, the student will interpret Non-stress test, do obstetric and vaginal examination, watch normal and instrumental deliveries and have hands on practice.
- **Log books to check competencies and tailor individual plans if needed**
- **OSCE assessment at the end of the 8-week rotation**

## **Text book and materials**

Recommended books:

1. Essentials in Obstetrics and Gynecology
2. Monga A. Gynaecology by Ten Teachers
3. Baker PN. Obstetrics by Ten Teachers
4. Magowan B, Owen P, Drife J. Clinical Obstetrics and Gynaecology
5. Callahan TL, Caughey AB, Heffner LJ. Blueprints Obstetrics and Gynaecology
6. Edmonds DK. Dewhurst Textbook of Obstetrics and Gynecology
7. Morgan M, Siddighi S. National Medical Series for Independent Study Obstetrics and Gynecology
8. Novak's Gynaecology
9. Williams Obstetrics
10. Current clinical strategies, gynecology and obstetrics



## **Grading Policy:**

Grades can be based on the following:

Class attendance/ participation: 20%

End of Course OSCE evaluation: 35%

Final MCQ Exam: 45%

**Total points 100**

## **Course Policies:**

Late Assignments will not be accepted

Missed exams (OSCE) will only be repeated if there is an acceptable excuse at the departmental meeting. The exam will be done with the following group.

Theory and oral exams follow the HU guidelines and need approval at the Faculty meeting.

Absence as per the HU guidelines 10% of the rotation without an excuse, 15% with an excuse. Missing any part of the daily allocated activities will be counted for as absence.

Cheating will be treated as per the HU guidelines.

## **Classroom Protocol:**

The students should demonstrate the following professional and ethical behavior and skills:

1. Each student is dutiful, arrives on time & stays until all tasks are complete
2. Consistently follows through on patient care responsibilities
3. Accepts and readily responds to feedback, is not resistant to advice
4. Assures professionalism in relationships with patients, staff & peers
5. Displays integrity & honesty in medical ability and documentation
6. Acknowledges errors, seeks to correct errors appropriately
7. Is well prepared for and seeks to provide high quality patient care
8. Identifies the importance to care for underserved populations in a non-judgmental manner

### **Important Dates to Remember:**

Last Thursday of the 8-week rotation: OSCE assessment

Final Exam Preparation holiday: 21- 25/4/2019

Final Exams: 28/4 - 9/5/2019

### **Students rights and responsibilities**

Students are expected to be present for the various elective activities that will be noted by the clinical staff in the department.

Attendance is expected at the various clinical activities including morning ward rounds, operating room when assigned, afternoon rounds, conferences, and any activity specifically requested by the attending instructor.

Students are expected to be punctual for all of the various activities noted on the weekly schedule.

Failure to adhere to the schedule will result in undue delays and inconveniences to patients, students and faculty.

Dress Code: It is expected that students carry themselves in professional manner; this includes appropriate clothing while engaged in patient care. This also applies to the operating room where scrubs are needed.

**Responsibilities of the Instructors:**

1. Treat all learners with respect and fairness.
2. Treat all learners equally regardless of age, gender, race, ethnicity, national origin, religion, disability, or sexual orientation.
3. Provide current materials in an effective format for learning.
4. Be on time for didactic, investigational, and clinical encounters.
5. Provide timely feedback with constructive suggestions and opportunities for improvement/remediation when needed.

**Course Schedule:**

. The group will be subdivided into four smaller groups rotating in four hospitals.

PHH	1	2	3	4
QAH	2	3	4	1
Prince Hashem	3	4	1	2
Al-Bashir	4	1	2	3

Lectures will be presented twice weekly, on Sundays & Tuesdays 1300-1600hrs

	<u>Lecture</u>	<u>Objectives</u>
1	<b>Embryology and Anatomy</b>	Demonstrate understanding of embryology and anatomy of: - External genitalia

		<ul style="list-style-type: none"> <li>- Vagina</li> <li>- Uterus</li> <li>- Fallopian tubes</li> <li>- Ovaries</li> <li>- Clinical presentation of transverse vaginal septum</li> <li>- Imperforate hymen (clinical picture and management)</li> </ul>
2	<b>Normal and abnormal sexual development</b>	<p>Describe and recognize;</p> <ul style="list-style-type: none"> <li>- Stages of puberty</li> <li>- Disorders of sexual development</li> <li>- Precocious puberty (causes and management)</li> <li>- Ambiguous genitalia (investigations and management)</li> </ul>
3	<b>The normal menstrual cycle</b>	<p>Demonstrate understanding of;</p> <ul style="list-style-type: none"> <li>- Characteristics</li> <li>- Proliferative phase/ Follicular phase</li> <li>- Ovulation</li> <li>- Secretary/ luteal phase</li> </ul> <p>Disorders of menstruation</p> <ul style="list-style-type: none"> <li>- Premenstrual syndrome (definition, etiology, diagnostic criteria, treatment)</li> <li>- Dysmenorrhea (definition, primary and secondary dysmenorrhea, diagnostic criteria, treatment)</li> <li>- Abnormal uterine bleeding</li> </ul> <p>Menorrhagia (definition, causes and management)</p>

4	<b>Amenorrhea (primary and secondary)</b>	Describe;  <ul style="list-style-type: none"> <li>- Definition</li> <li>- Etiology</li> <li>- History</li> <li>- Physical examination</li> <li>- Investigations</li> <li>- Treatment</li> </ul>
5	<b>Physiological changes in pregnancy</b>	Demonstrate understanding of the normal physiological changes that occur in pregnancy including;  Integumentary system Cardiovascular system Hematologic system Respiratory system Gastrointestinal system Genitourinary system Neurological system Endocrinal system
6	<b>Disorders of early pregnancy</b>	Describe the following subjects;  <ul style="list-style-type: none"> <li>- Miscarriage (definition, types, causes and management)</li> <li>- Recurrent miscarriage (causes, investigations and management)</li> </ul>
7	<b>Ectopic pregnancy</b>	Demonstrate understanding of;  <ul style="list-style-type: none"> <li>- Definition</li> <li>- Epidemiology</li> <li>- Etiology</li> <li>- Risk factors</li> </ul>

		<ul style="list-style-type: none"> <li>- Differential diagnosis</li> <li>- Clinical features</li> <li>- Investigations</li> <li>- Treatment</li> <li>- Prognosis</li> </ul>
8	<b>Trophoblastic Diseases</b>	<p>Describe the following items;</p> <ul style="list-style-type: none"> <li>- Epidemiology</li> <li>- Hydatidiform mole (complete mole, incomplete mole; risk factors, clinical features, investigations and treatment)</li> <li>- Malignant GTN (types, staging, follow-up, treatment)</li> </ul>
9	<b>Contraception</b>	<p>Demonstrate advanced knowledge of</p> <ul style="list-style-type: none"> <li>- Natural and barrier methods</li> <li>- IUCD (mechanism of action, absolute and relative C/I, side effects)</li> <li>- Oral contraceptives including combined pills and progesterone only pills (mechanism of action, health benefits, drug interactions, absolute and relative contraindications, treatment options, missed pills, side effects, types,</li> <li>- Emergency contraception</li> <li>- LARC long acting reversible contraception (IUCD, Depo-provera, implants)</li> <li>- Hormone releasing-IUS</li> <li>- Male and female sterilization</li> </ul>
10	<b>Subfertility</b>	<p>Recognize the following items;</p>

		<ul style="list-style-type: none"> <li>- Approach to infertile couple</li> <li>- History</li> <li>- Physical examination</li> <li>- Etiology (ovulatory dysfunction, tubal factors, cervical factors, uterine factors, multiple factors, unknown factors)</li> </ul> <p>Treatment</p>
11	<b>Gynaecological infections</b>	<p>Recognize the following aspects;</p> <ul style="list-style-type: none"> <li>- Physiological discharge</li> <li>- Noninfectious vulvovaginitis (pre-pubertal, postmenopausal)</li> <li>- Infectious vulvovaginitis (candidiasis, bacterial vaginosis, trichomoniasis)</li> <li>- Sexually transmitted diseases (Chlamydia, gonorrhoea, genital warts, molluscum contagiosum, herpes simplex of the vulva, syphilis, chancroid, donovanosis, lymphogranuloma venereum)</li> </ul>
12	<b>PID and chronic pelvic pain</b>	<p>Recognize the following aspects;</p> <ul style="list-style-type: none"> <li>- Definition</li> <li>- Etiology</li> <li>- Risk factors</li> <li>- Clinical presentation</li> <li>- Investigations</li> <li>- Diagnosis</li> <li>- Treatment</li> <li>- Complications</li> </ul> <p>Differential Diagnosis of chronic pelvic pain,</p>

		definition, investigations and management
13	<b>Fetal development and growth &amp; Intra-uterine growth restriction</b>	Describe the normal fetal development and growth  Recognize the following aspects; <ul style="list-style-type: none"> <li>- Symmetrical</li> <li>- Asymmetrical</li> <li>- Causes</li> <li>- Investigations</li> </ul> Management
14	<b>Menopause</b>	Describe the definition, etiology, clinical features, investigations, treatment, hormone replacement therapy  Osteoporosis definition, risk factors, management
15	<b>Perinatal infection</b>	Describe the clinical features, investigations and management of; <ul style="list-style-type: none"> <li>- Rubella</li> <li>- Toxoplasmosis</li> <li>- CMV</li> <li>- Chicken pox</li> <li>- Hepatitis</li> <li>- Herpes Simplex</li> </ul>
16	<b>Antenatal care and minor problems of pregnancy Prepregnancy education</b>	Recognize antenatal care issues and minor problems of pregnancy including screening tests, frequency of visits



17	<b>Assessment of fetal well-being</b>	Describe the following items; <ul style="list-style-type: none"> <li>- CTG</li> <li>- Doppler ultrasound</li> <li>- Biophysical profile</li> <li>- prenatal diagnosis (amniocentesis, chorionic villus sampling, fetal blood sampling)</li> </ul>
18	<b>Medical diseases complicating pregnancy (1)</b>	Describe the epidemiology, risk factors, clinical features, investigations, treatment, prophylaxis <ul style="list-style-type: none"> <li>- iron deficiency anemia</li> <li>- folate deficiency anemia</li> <li>- Hemoglobinopathies</li> <li>- Sickle cell syndrome</li> <li>- Thrombocytopenia</li> <li>- Respiratory infections</li> <li>- Bronchial asthma</li> <li>- Systemic lupus</li> </ul>
19	<b>Medical diseases complicating pregnancy (2)</b>	<ul style="list-style-type: none"> <li>- Endocrine disorders including hypo- and hyperthyroidism</li> <li>- Hyperemesis gravidarum</li> <li>- Heartburn</li> <li>- Cholestatic jaundice</li> <li>- Constipation</li> <li>- UTI and asymptomatic bacteruria</li> </ul>
20	<b>Thromboembolic and cardiac disease in pregnancy</b>	Describe the epidemiology, risk factors, clinical features, investigations, treatment, prophylaxis

21	<b>Diabetes in pregnancy</b>	Recognize pertinent facts relating to the classification and definitions, etiology, epidemiology, risk factors, management during pregnancy, labor, postpartum, gestational DM, long term complications
22	<b>Pre-eclampsia and hypertensive disorders of pregnancy</b>	Describe the following items; classification, definitions, etiology, risk factors, management
23	<b>Hirsutism</b>	Definition, etiology, diagnostic criteria, treatment) Polycystic Ovarian Syndrome (etiology, diagnosis, clinical features, investigations, treatment
24	<b>Rhesus iso-immunization and non-immune hydrops</b>	<ul style="list-style-type: none"> <li>- Causes of fetomaternal bleeding</li> <li>- Detection of affected babies</li> <li>- Management</li> </ul>
25	<b>Multiple gestations</b>	<ul style="list-style-type: none"> <li>- Epidemiology</li> <li>- Types</li> <li>- Clinical features</li> <li>- Management and mode of delivery</li> <li>- Twin-twin transfusion syndrome</li> </ul>
26	<b>Preterm labour</b>	Definition, etiology, epidemiology, risk factors, clinical features, management, prognosis, prevention) PROM (definition, etiology, epidemiology, risk factors, clinical features, management, prognosis, prevention

27	<b>Post-term pregnancy</b>	<ul style="list-style-type: none"> <li>- Definition</li> <li>- Epidemiology</li> <li>- Etiology</li> <li>- Clinical features</li> <li>- Investigations</li> <li>- Treatment</li> </ul>
28	<b>Antepartum haemorrhage</b>	<ul style="list-style-type: none"> <li>- placenta previa (definition, etiology, epidemiology, risk factors, clinical features, investigations, treatment)</li> <li>- Placental abruption (definition, etiology, epidemiology, risk factors, clinical features, investigations, treatment)</li> <li>- Vasa previa (definition, etiology, epidemiology, risk factors, clinical features, investigations, treatment)</li> </ul>
29	<b>Normal Labour</b>	<p>Definition, stages of labour, fetal movement chart, fetal monitoring in labour</p> <p>Partogram, pain management in labour including epidural</p>
30	<b>Induction on Labour including termination of pregnancy(TOP) for fetal anomalies</b>	<p>Definition, prerequisites, indications, risks, contraindications, methods, complications</p> <p>Ethical issues of TOP</p>
31	<b>Malposition and malpresentation</b>	<p>Definition, epidemiology, risk factors, clinical features and management of;</p> <ul style="list-style-type: none"> <li>- Abnormal presentation</li> </ul>

		<ul style="list-style-type: none"> <li>- Transverse lie</li> <li>- Breech</li> <li>- O.P</li> <li>- Face</li> <li>- Brow</li> </ul>
32	<b>Operative Delivery</b>	<ul style="list-style-type: none"> <li>- C.S; epidemiology, indications, types, risks, complications during operation, early and late postoperative periods</li> <li>- Instrumental delivery including forceps and vacuum indications, prerequisites, complications</li> </ul>
33	<b>Postpartum haemorrhage (PPH) &amp; other complications of the third stage</b>	Definition, epidemiology, etiology, investigations, treatment
34	<b>Puerperium</b>	Definition, post-partum care, postpartum pyrexia, postpartum mood alterations
35	<b>Maternal and perinatal mortality</b>	Maternal mortality (definition, causes and how to reduce it) <ul style="list-style-type: none"> <li>- Perinatal mortality (definition, causes and how to reduce it)</li> </ul>
36	<b>Psychological aspects of obstetrics and gynaecology</b>	<ul style="list-style-type: none"> <li>- Normal sexual response</li> <li>- Sexual disorders</li> <li>- Psychological aspects of gynaecology</li> <li>- Causes and management of vaginismus, anorgasmia, impotence, premature ejaculation</li> </ul>
37	<b>Endometriosis</b>	<ul style="list-style-type: none"> <li>- Definition</li> </ul>

	<b>and adenomyosis</b>	<ul style="list-style-type: none"> <li>- Etiology</li> <li>- Risk factors</li> <li>- Sites of occurrence</li> <li>- Clinical features</li> <li>- Investigations</li> <li>- Treatment</li> </ul>
38	<b>Uterovaginal prolapse</b>	<ul style="list-style-type: none"> <li>- Definition</li> <li>- Etiology</li> <li>- Types (uterine, vault, cystocele, rectocele, enterocele)</li> <li>- Clinical presentation</li> <li>- Investigations</li> <li>- Treatment</li> </ul>
39	<b>Urogynaecology</b>	<ul style="list-style-type: none"> <li>- Types of incontinence</li> <li>- Causes</li> <li>- Urodynamic studies</li> <li>- Treatment</li> </ul>
40	<b>Benign diseases of the uterus</b>	<ul style="list-style-type: none"> <li>- Leiomyomata (definition, epidemiology, pathogenesis, clinical features, investigations, treatment)</li> </ul>
41	<b>Endometrial cancer and PMB</b>	Epidemiology, risk factors, classification and types, clinical features, FIGO staging, investigations, spread, treatment)
42	<b>Premalignant and malignant disease of cervix</b>	Benign cervical lesions Epidemiology, risk factors, Pap smear classification and types, clinical features, FIGO

		staging, investigations, spread, treatment, screening
43	<b>Benign and malignant tumours of the ovary and fallopian tubes</b>	Epidemiology, risk factors, classification and types, clinical features, FIGO staging, investigations, spread, treatment
44	<b>Conditions affecting vulva and vagina</b>	Benign vulvar lesions Malignant vulvar lesions (Epidemiology, risk factors, classification and types, clinical features, FIGO staging, investigations, spread, treatment)
45	<b>Operative procedures in gynaecology And consenting patients</b>	Procedure, indications and possible complications of D&C ERPC, suction evacuation Laparoscopy Laparotomy TAH+/-BSO
	<b><u>Total number of lectures</u></b>	<b><i>36 lectures in 8 weeks</i></b>

This will be followed by OSCE exam on the last Thursday in the 8<sup>th</sup> week.