

**Jordan University of Science and Technology**

**Faculty of Medicine**

**Department of Obstetrics and Gynecology**

**2018-2019**

**COURSE TITLE : Obstetrics and gynecology**

**COURSE CODE : MED 510.**

**CREDIT HOURS : 9 credits**

**SEQUENCE : 5<sup>th</sup> year, 8 weeks**

**COURSE COORDINATOR: Dr. Rawan Obeidat**

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## **Course Description:**

The Obstetrics and Gynecology Clerkship utilizes a variety of well-supervised clinical settings, organized interactive learning experiences, and directed learning assignments to expose all medical students to the breadth of this unique specialty. Students will establish a solid foundation of skills and knowledge in women's health, which will be both applicable and important in any potential future career choice.

Course objectives are concise and are distributed to students at the beginning of the rotation. Faculty members and registrars who participate in teaching are familiar with these objectives. The breadth and depth of obstetrics and gynecology rotation appears to be well defined by the syllabus. The syllabus describes a broad array of condition that a physician would normally encounter. The syllabus also describes clinical skills students are required to master and to demonstrate their proficiency to the instructors.

Students are taught by physicians who are faculty members of the school. They report to their respective course directors and participate in regular faculty committee meetings at the medical school. Student questionnaires are used by the course directors as a tool to monitor student educational experience across multiple hospital sites.

Student evaluation of OBS & GYN rotation reveals high degree of satisfaction. Students attribute this to an attentive faculty and the availability of a large variety and number of patients to hone their clinical skills. The course director has maintained a consistently high-quality OBS & GYN clerkship program at all six affiliated hospitals. Student questionnaires are used by the course director to monitor course consistency. The questionnaire sought information concerning the quality of instruction, supervision by the faculty, small group conferences, breadth of clinical exposure, and student performance evaluation. And finally, the department maintains a program to identify academically weak students early enough during the clerkship to begin tutoring efforts

### **Method of instruction**

Fifth year medical students spend 8 weeks in obstetrics and gynecology department offered at six teaching hospitals. The course includes daily small group conferences, where students spends 90 minutes in taking history from inpatients in the ward and labor suite, and then they perform physical examination and review patient records to see the management patients had in the hospital. Afterward, students will have 90 minutes session where these cases will be discussed in small sub-groups with the instructors.

Students rotate in six different hospitals during the course:

1. Al-Ramtha Hospital
2. Princess Badeea Teaching Hospital
3. King Abdulla university hospital (KAUH)
4. Al-Mafraq Hospital
5. Al Mafraq Military Hospital
6. Prince Rashid Ben Al-Hasan Military Hospital

The course also includes a 30 minutes morning sessions in the group who attend king Abdullah university hospital & afternoon lectures that cover the main topics in obstetrics and gynecology. In addition, students present seminars that discuss the topics that have not been covered in lectures. The course includes 50 hours of lectures and seminars. In general, students will spend 50% of the clerkship gaining exposure to pregnancy/obstetrics; and 50% of the clerkship gaining exposure to gynecologic problem including surgery. Students are exposed to outpatient/ambulatory setting and on-call shifts during their OBS & GYN rotation in their 6<sup>th</sup> year medical school.

The students are expected to generate a problem list or differential diagnosis for common obstetrics and gynecology complaints and to know how to reach a diagnosis by rationale utilization of laboratory and imaging facilities.

### **Evaluation and distribution of marks**

Student evaluation consists of three components:

- 45% of the final grade is based on written examinations.
- 40% of the grade is based on students demonstrating clinical skills in a structured bedside examination and the standard patient approach.
- 15% of the grade is based on the instructor's evaluation of the students' attitude, values, and interpersonal skills with patients, colleagues and the medical team.

The average class score on standardized exams ranges from 70%-75%. The failure rate has consistently been below 2%.

### **Attendance Requirements**

All clerkship experiences are mandatory, and any absence must be recorded via the absence tracking system.

Excused absences will be remediated as deemed appropriate by the Clerkship Director and are not to exceed 4 days per course. Exceptions to this may be considered in consultation with the Clerkship Director and the Associate Dean for Student Affairs.

# Course Learning Outcomes

1. Develop competence in the medical interview and physical examination of women and incorporate ethical and social perspectives to provide culturally competent health care.
2. Apply recommended prevention strategies to women throughout the lifespan.
3. Demonstrate knowledge of preconception care including the impact of genetics, medical conditions and environmental factors on maternal health and fetal development.
4. Explain the normal physiologic changes of pregnancy including interpretation of common diagnostic studies.
5. Describe common problems in obstetrics.
6. Demonstrate knowledge of intrapartum care.
7. Demonstrate knowledge of postpartum care of the mother and newborn.
8. Describe menstrual cycle physiology, discuss puberty and menopause and explain normal and abnormal bleeding.
9. Describe the etiology and evaluation of infertility
10. Develop a thorough understanding of contraception
11. Demonstrate knowledge of common benign gynecological conditions.
12. Formulate a differential diagnosis of the acute abdomen and chronic pelvic pain
13. Demonstrate knowledge of perioperative care and familiarity with gynecological procedures.
14. Describe gynecological malignancies including risk factors, signs and symptoms and initial evaluation.
15. Provide a preliminary assessment of patients with sexual concerns

## **Learning objectives of the course**

By the end of their rotation in this course, the students are expected to achieve the following specific objectives:

### **A. Lectures:**

<b>No</b>	<b>Title</b>	<b>Objectives</b>
1	<b>History taking and physical exam</b>	<ol style="list-style-type: none"><li>1. Learn how to take history of present pregnancy, analysis of the main complaint, past obstetrics history and gynecology history</li><li>2. Learn obstetrics terms e.g. parity, gravity..etc.</li><li>3. Learn how to perform obstetrics exam</li><li>4. Learn how to perform gynecology exam</li></ol>
2	<b>Diabetes and pregnancy</b>	<ol style="list-style-type: none"><li>1. Classify types of diabetes in pregnancy</li><li>2. List complications of diabetes in pregnancy</li><li>3. Discuss diagnostic and screening tests for diabetes in pregnancy</li><li>4. Discuss the line of treatment for each type including glycemic control, fetal wellbeing, time and mode of delivery</li></ol>
3	<b>Ectopic pregnancy</b>	<ol style="list-style-type: none"><li>1. Define ectopic pregnancy</li><li>2. Identify the clinical presentation of ectopic pregnancy</li><li>3. Highlight the risk of ruptured ectopic</li><li>4. Provide a diagnostic approach for patient with suspected ectopic pregnancy</li><li>5. Outline the principles of medical and surgical management of ectopic pregnancy</li></ol>

4	<b>Uterine cancer</b>	<ol style="list-style-type: none"> <li>1. List the types of uterine cancer</li> <li>2. Identify the risk factors and the clinical presentation of uterine cancer</li> <li>3. Suggest appropriate investigations for patient diagnosed with uterine cancer</li> <li>4. Identify the prognosis of different types of uterine cancer</li> <li>5. Outline the management options of uterine cancer</li> </ol>
5	<b>Ovarian cancer</b>	<ol style="list-style-type: none"> <li>1. List major types of ovarian cancer</li> <li>2. Identify the risk factors and clinical manifestations of ovarian cancer</li> <li>3. Suggest appropriate approach for patient with suspected ovarian cancer</li> <li>4. Identify the poor prognostic factors in patient with ovarian cancer</li> <li>5. Outline the management options of ovarian cancer</li> </ol>
6	<b>Anemia in pregnancy</b>	<ol style="list-style-type: none"> <li>1. Define WHO definition of anemia in pregnancy</li> <li>2. List different types of anemia in pregnancy</li> <li>3. Describe the presentation and clinical manifestations of anemia in pregnancy</li> <li>4. List the main investigations</li> <li>5. Outline the treatment of the most common causes of anemia in pregnancy</li> </ol>
7	<b>Menorrhagia</b>	<ol style="list-style-type: none"> <li>1. Define menorrhagia</li> <li>2. List the main causes of menorrhagia</li> <li>3. Suggest a diagnostic approach for patients with menorrhagia</li> <li>4. Outline the medical and surgical management options for patients with menorrhagia</li> </ol>
8	<b>Infertility</b>	<ol style="list-style-type: none"> <li>1. Define primary and secondary infertility</li> <li>2. List causes of female and male infertility</li> <li>3. Suggest a diagnostic approach to couples with infertility</li> <li>4. Outline the treatment options for couples with infertility</li> </ol>
9	<b>Contraception</b>	<ol style="list-style-type: none"> <li>1. Define the different types of available contraceptive methods</li> <li>2. Name advantages and disadvantages of each method</li> <li>3. List the main contraindications for some contraceptive method</li> <li>4. Suggest a systemic approach for patient seeking contraception</li> </ol>

10	<b>Antinatal care (ANC)</b>	<ol style="list-style-type: none"> <li>1. Identify the importance of regular ANC in obstetrics</li> <li>2. Discuss ANC for both low and high risk pregnancies</li> </ol>
11	<b>Multiple pregnancy</b>	<ol style="list-style-type: none"> <li>1. Identify types of multiple pregnancy</li> <li>2. List risk factors of multiple pregnancy</li> <li>3. Name maternal and fetal complications of multiple pregnancy</li> <li>4. Outline the management of patient with multiple pregnancy including ANC, time and mode of delivery</li> <li>5. Identify strategies to reduce the risk of high order multiple pregnancies</li> </ol>
12	<b>Preterm labor and preterm premature rupture of membranes "PPROM"</b>	<ol style="list-style-type: none"> <li>1. Define preterm labor and PPRM</li> <li>2. List risk factors for preterm labor and PPRM</li> <li>3. List maternal and fetal complications of preterm labor and PPRM and their presentation</li> <li>4. Describe clinical and lab investigations needed for the diagnosis and follow up</li> <li>5. Outline the management of patients with preterm labor and PPRM</li> </ol>
13	<b>Amenorrhea</b>	<ol style="list-style-type: none"> <li>1. Define primary and secondary amenorrhea</li> <li>2. List the causes for each type of amenorrhea</li> <li>3. Discuss the clinical approach and the investigations needed for each type of amenorrhea</li> <li>4. Outline the treatment options for patient with amenorrhea</li> </ol>
14	<b>Endometriosis</b>	<ol style="list-style-type: none"> <li>1. Define endometriosis</li> <li>2. List risk factors for endometriosis</li> <li>3. Describe the main clinical presentation of endometriosis</li> <li>4. Learn the impact of endometriosis on infertility</li> <li>5. Learn the physical and the psychological impact of chronic pain associated with endometriosis on patient life</li> <li>6. Describe the diagnostic tool of endometriosis</li> <li>7. Outline the medical and surgical available treatment options for endometriosis</li> </ol>

13	<b>Cervical cancer</b>	<ol style="list-style-type: none"> <li>1. Identify the relation between Human papilloma virus “HPV” and the risk of cervical cancer</li> <li>2. Highlight the importance of cervical screening in reducing the incidence of cervical cancer</li> <li>3. List types of cervical cancer</li> <li>4. List risk factors of cervical cancer</li> <li>5. Identify the clinical presentations of both early and advanced cervical cancer</li> <li>6. Describe the clinical, laboratory and radiological investigations in patients with cervical cancer</li> <li>7. Outline the treatment options available for early and advanced cervical cancer</li> <li>8. Name the strategies to reduce the incidence of cervical cancers including smears and HPV vaccine</li> </ol>
14	<b>Coagulation disorders in pregnancy</b>	<ol style="list-style-type: none"> <li>1. List the causes of coagulation disorders in pregnancy</li> <li>2. Learn the physiological changes in coagulation system in pregnancy and puerperium</li> <li>3. Identify the presentation of coagulation disorders in pregnancy</li> <li>4. Discuss the management approach to coagulation disorders in pregnancy</li> </ol>
15	<b>Antepartum hemorrhage</b>	<ol style="list-style-type: none"> <li>1. Define antepartum hemorrhage (APH)</li> <li>2. Recognize the two main causes of APH: placenta previa &amp; abruption placenta</li> <li>3. Define placenta previa and identify its risk factors</li> <li>4. Recognize the clinical presentation of abruption placenta</li> <li>5. List maternal and fetal complications in APH</li> <li>6. Outline the management plan in APH</li> <li>7. Highlight the importance of good counseling in patient with APH</li> </ol>
16	<b>Gestational trophoblastic disease “GTD”</b>	<ol style="list-style-type: none"> <li>1. Define and classify GTD</li> <li>2. Discuss presentations of GTD</li> <li>3. Describe the diagnostic work up in patient with GTD</li> <li>4. Outline treatment options in patient with GTD</li> </ol>

17	<b>Miscarriages</b>	<ol style="list-style-type: none"> <li>1. Define miscarriage</li> <li>2. Name the types of miscarriages</li> <li>3. Identify the clinical presentations of the different types of miscarriages</li> <li>4. Outline the treatment options for each type of miscarriage</li> </ol>
18	<b>Rh-isoimmunization</b>	<ol style="list-style-type: none"> <li>1. Identify the risk factors of Rh-isoimmunization</li> <li>2. Highlight the importance of prophylactic Ant-D in patients with Rh negative blood group</li> <li>3. Describe the complications of Rh-isoimmunization in future pregnancies</li> <li>4. Outline treatment options for patient with Rh-isoimmunization</li> </ol>
19	<b>Hypertensive disorders in pregnancy</b>	<ol style="list-style-type: none"> <li>1. Classify hypertensive disorders in pregnancy</li> <li>2. Mentions risk factors for preeclampsia</li> <li>3. Recognize the fetal and maternal complications of preeclampsia</li> <li>4. Discuss the management of mild and sever preeclampsia</li> <li>5. Discuss the management of eclampsia</li> <li>6. Name the main antihypertensive drugs used in pregnancy</li> <li>7. Discuss the management of patient with chronic hypertension in pregnancy</li> </ol>
20	<b>Urinary incontinence</b>	<p>List the types of urinary incontinence</p> <ol style="list-style-type: none"> <li>1. Review the pathophysiology of the main types of incontinence</li> <li>2. Learn the approach to patient with incontinence</li> <li>3. Learn the medical and surgical management of different types of urinary incontinence</li> </ol>
21	<b>Genital prolapse</b>	<ol style="list-style-type: none"> <li>1. List the risk factors for genital prolapse</li> <li>2. Identify the clinical presentations of genital prolapse</li> <li>3. Discuss the surgical and non-surgical options for treatment of genital prolapse</li> </ol>

## B. Seminars:

No.	Title	Objectives
1	<b>Analgesia and anesthesia in labor</b>	<ol style="list-style-type: none"><li>1. Identify the different types of analgesia used in labor</li><li>2. Identify the types of anesthesia used in cesarean section</li><li>3. List the advantages of regional analgesia and anesthesia</li><li>4. Name the contraindications of regional analgesia and anesthesia</li></ol>
2	<b>Management of normal labor</b>	<ol style="list-style-type: none"><li>1. Define the four stages of labor</li><li>2. Describe the management of each stage of labor</li><li>3. Discuss the modality used to monitor fetal wellbeing in labor</li><li>4. Describe the methods used to assess the progress of labor</li><li>5. Describe the active management of the third stage of labor</li><li>6. Interpret labor partogram</li></ol>
3	<b>Mechanism of labor and cardiotocography “CTG”</b>	<ol style="list-style-type: none"><li>1. Revise the anatomy of female pelvis</li><li>2. Identify different types of female pelvic cavity</li><li>3. Identify mechanism of labor in first and second stage of labor</li><li>4. Interpret antenatal and intrapartum CTG</li><li>5. List causes of abnormal CTG in labor</li></ol>
4	<b>Malpresentaion</b>	<ol style="list-style-type: none"><li>1. Define malpresentation</li><li>2. List risk factors for malpresentation</li><li>3. Describe the management of malpresentation in labor</li></ol>
5	<b>Vaginal discharge and sexually transmitted disease “STD”</b>	<ol style="list-style-type: none"><li>1. Identify the main causes of abnormal vaginal discharge</li><li>2. Describe the clinical presentation of STD</li><li>3. Discuss investigation and treatment modalities in patient with STD</li><li>4. Discuss investigation and treatment of different causes of abnormal vaginal discharge</li></ol>

6	<b>Menopause and hormonal replacement therapy “HRT”</b>	<ol style="list-style-type: none"> <li>1. Define menopause</li> <li>2. Identify menopausal symptoms</li> <li>3. Describe different types of HRT</li> <li>4. Discuss the indication of HRT use in menopause</li> <li>5. List the contraindications of HRT use</li> </ol>
7	<b>Medical disorders in pregnancy</b>	<ol style="list-style-type: none"> <li>1. Discuss the main medical diseases in pregnancy including thyroid disease, cardiovascular disease, epilepsy ...etc.</li> <li>2. Describe the effect of pregnancy on main medical disorders</li> <li>3. Describe the effect of the major medical problems on pregnancy</li> <li>4. Explain the importance of multidisciplinary approach in managing medical disorders in pregnancy</li> </ol>
8	<b>Puerperium</b>	<ol style="list-style-type: none"> <li>1. Define puerperium</li> <li>2. List the most common problems in puerperium</li> <li>3. Describe the diagnostic approach and treatment modalities for the most common problems in puerperium including postpartum depression, mastitis, ...etc.</li> </ol>
9	<b>Pelvic inflammatory disease “PID”</b>	<ol style="list-style-type: none"> <li>1. Define PID</li> <li>2. List risk factors for PID</li> <li>3. Describe the most common microorganism in PID</li> <li>4. Discuss the complications of PID</li> <li>5. Mention the investigations needed in patient with suspected PID</li> <li>6. Discuss the treatment of both acute and chronic PID</li> </ol>
10	<b>Postpartum hemorrhage “PPH”</b>	<ol style="list-style-type: none"> <li>1. Define primary and secondary PPH</li> <li>2. Identify the causes of PPH</li> <li>3. Discuss the management of massive PPH</li> <li>4. List the complications of PPH</li> <li>5. Discuss the medical and surgical treatment options used in the management of different causes of PPH</li> </ol>
11	<b>Uterine fibroid</b>	<ol style="list-style-type: none"> <li>1. Define leiomyoma</li> <li>2. List risk factors of leiomyoma</li> <li>3. List types of leiomyoma</li> <li>4. Describe the clinical presentation of leiomyoma</li> <li>5. Outline the different available treatment options for patient with leiomyoma</li> </ol>

12	<b>Intrauterine growth restriction “IUGR”</b>	<ol style="list-style-type: none"> <li>1. Define IUGR</li> <li>2. Mention types of IUGR</li> <li>3. List risk factors for IUGR</li> <li>4. Describe fetal complication in IUGR</li> <li>5. Learn the role of CTG, ultrasound and Doppler US in the management of IUGR</li> </ol>
13	<b>Prolonged labor and induction of labor</b>	<ol style="list-style-type: none"> <li>1. Define prolonged pregnancy</li> <li>2. Describe possible complications of prolonged pregnancy</li> <li>3. Discuss the available method for induction of labor</li> <li>4. List the main indication of induction of labor in obstetrics</li> <li>5. Mention the contraindication of induction of labor</li> <li>6. List the major complications of induction of labor</li> </ol>

**C.Morning sessions :**

1	<b>Examination</b>	<b>To do practical obstetrical examination on dummy's.</b>
2	<b>CTG &amp; Partogram</b>	<b>To discuss &amp; interpretation for different cases of CTG &amp; partogram.</b>
3	<b>Physiological changes in pregnancy</b>	<b>To discuss the physiological changes in pregnancy.</b>
4	<b>Contraception</b>	<b>To know &amp; discuss different types of contraception methods.</b>
5	<b>Quiz</b>	<b>At end of each week.</b>

**RECOMMENDED TEXT BOOKS:**

Hacker & Moore's Essentials of Obstetrics and Gynecology  
Obstetrics by Ten Teachers by Philip N. Baker and Louise Kenny  
Gynecology by Ten Teachers by Ash Monga and Stephen Dobbs  
Williams Gynecology by Barbara L. Hoffman  
Williams Obstetrics by Marlene M. Corton

## Course Assessment

<b>Assessment</b>		
<b>Assessment Type</b>	<b>Expected Due Date</b>	<b>Weight</b>
First Exam		--
Second Exam		--
Midterm Exam (Theory)		--
Evaluation		<b>15</b>
Quizzes		--
Research activity		--
OSCE		<b>20</b>
Mini-OSCE		<b>20</b>
<b>Final Exam (Practical)</b>		<b>45</b>
Final Exam(Oral)		--
<b>Total</b>		<b>100</b>

## Students Learning Outcomes

<b>Student Learning Outcomes(SLOs)</b> (4-8 Maximum) Upon successful completion of this course, students should be able to:			
<b>SLOs</b>	<b>Related ILO(s)* (numbers only)</b>	<b>Evaluation Criteria (MCQ, OSCE, Homework...)</b>	
		<b>Type of Criteria (MCQ, OSCE, Homework...)</b>	<b>Weight (%)</b>
Develop competence in the medical interview and physical examination of women	1	OSCE & Mini-OSCE and instructors evaluation	30
Demonstrate knowledge of preconception care	2	MCQ, OSCE and Mini-OSCE	5
Demonstrate knowledge of intrapartum and postpartum care	3	MCQ, OSCE and Mini-OSCE	10
Describe common problems in obstetrics	4	MCQ, OSCE and Mini-OSCE	20
Develop a thorough understanding of contraception	5	MCQ, OSCE and Mini-OSCE	5
Demonstrate knowledge of common benign gynecological conditions including STD	6	MCQ, OSCE and Mini-OSCE	20
Describe gynecological malignancies including risk factors, presentation and initial evaluation.	7	MCQ, OSCE and Mini-OSCE	5
Demonstrate knowledge of perioperative care and familiarity with gynecological procedures		MCQ, OSCE and Mini-OSCE	5
			100

## **Intended Learning Outcomes (ILOs)**

- 1) Demonstrate a sufficient understanding of the structural organization and functions of the following systems of the human body: circulatory, respiratory, gastrointestinal, endocrine, hematopoietic & lymphatic, musculoskeletal, nervous, and genitourinary systems.
- 2) Conceptualize the cellular, molecular, genetic, and biochemical mechanisms that maintain body's homeostasis and their derangements in disease states.
- 3) Apply their knowledge of human anatomy and function to solve questions regarding major clinical cases and diseases.
- 4) Attain appropriate and systematic clinical history of different medical conditions and settings.
- 5) Demonstrate proficiency in performing clinical skills and procedures.
- 6) Perform relevant physical examination on patients professionally and ethically.
- 7) Identify the major signs and symptoms of disease states, recognizing risk factors and etiologies, in an interdisciplinary approach to differentially diagnose patients.
- 8) Order and interpret results of relevant basic diagnostic procedures, such as laboratory investigations and conventional imaging procedures.
- 9) Apply safe and accurate methods of pharmacotherapy of major disease states.
- 10) Critically appraise research studies guided by evidence-based medicine.
- 11) Demonstrate ability to work in diverse settings and communities.