

**THE UNIVERSITY OF JORDAN**  
**FACULTY OF MEDICINE**  
**DEPARTMENT OF OBSTETRIC AND GYNECOLOGY**

*ROTATION OUTLINE*

<b>Classification:</b>	Medicine
<b>Course Code:</b>	0510501
<b>Course Title:</b>	Obstetrics and Gynecology-1
<b>Year Level :</b>	5 <sup>th</sup> . Year
<b>Round Schedule:</b>	Arranged by individual teachers
<b>Duration (Weeks):</b>	8 Weeks
<b>Tutorial Schedule</b>	8am-5pm (sun-thurs)
<b>Credit Hours</b>	8
<b>Course Coordinator</b>	Dr. Fawaz Khaza'leh
<b>Prepared by:</b>	Dr. Fawaz Khaza'leh
<b>Date of Outline Preparation:</b>	19-05-2005
<b>Date of Last Revision:</b>	29-11-2012
<b>Checked by:</b>	Members of Department
<b>Approved by Head of Department:</b>	Dr. Fawaz Khaza'leh

## **I. Rotation Description:**

The Material covers the following:

1. Clinical orientation about taking a history and performing complete clinical examination covering common symptoms and signs associated with gynecological and obstetric diseases, supervised by consultants & residents.
2. Introduction to obstetric discipline & knowledge of the importance of obstetrics & its potential complications in decreasing mother mortality rates & how it affects neonatal outcomes.
3. Knowledge of common gynecological diseases epidemiology, underlying pathogenesis, clinical features, manifestations, differential diagnosis and management.
4. Problem solving, reaching a differential diagnosis and case management.
5. Active involvement of students in patients' care, the student being responsible for presenting assigned cases, suggesting management plan, and doing regular follow ups.
6. Attending delivery room, observing delivery management routine care.
7. Gaining familiarity with commonly used medications in gynecological and obstetric diseases.
8. Attending in operation theaters for observing gynecological procedures & operations.

Note: Half the period will be spent either in ministry of health hospitals or military hospital.

## **II. Rotation Objectives and Expected Outcomes:**

### **A. Knowledge and understanding of:**

- 1- Anatomy, physiology & embryology of the reproductive system
- 2- Process of conception and fetal development
- 3- Normal pregnancy, its disorders and measures of care that should be provided during pregnancy and perinatally
- 4- Normal delivery, device assisted delivery, and caesarean section
- 5- Principles and methods of family planning
- 6- Diseases affecting the reproductive system, their pathogenesis, manifestation, and control

### **B. Intellectual skills (cognitive and analytical)**

- 1- Demonstrate awareness of how to follow up and monitor recommended measures to promote its normal functioning and its disorders especially infertility
- 2- Relate symptoms and signs to diseases of the recommended appropriate management
- 3- Demonstrate awareness of how to diagnose pregnancy, monitor fetal development, recommend measures of care to promote normal fetal growth and development
- 4- Select appropriate perinatal care
- 5- Recommended the appropriate method of family planning

## **III. Suggested Textbook(s) and Readings**

- Hacker & Moore's Essentials of Obstetrics and Gynecology
- Gynecology by Ten teachers
- Illustrated obstetrics and gynecology

#### IV. Teaching Materials Made Available to Students

- 1- **Textbook** and references
- 2- Lecture Notes, from **seminars** prepared by the consultants and given by them.
- 3- Attending **outpatient clinics** and learn clinical assessment, examination and management methods after seeing patients, supervised by consultants and residents.
- 4- Attending **In-patient Floors** and learn clinical assessment, examination and management methods supervised by consultants.

#### V. Educational Facilities

- Classroom with whiteboard and projectors.
- College library.
- Internet.

#### VI. Rotation Outline

<b>List of Topics for 5<sup>th</sup> and 6<sup>th</sup> year students and their objectives</b>		
<b>No.</b>	<b>Topic</b>	<b>Objectives</b>
<b>1</b>	Gynecological and Obstetric History and Examination	<ol style="list-style-type: none"><li>1. Peculiarities of gynecological history taking.</li><li>2. Gynecological Examination: Abdominal, Vaginal, bimanual examinations, cervical smears.</li><li>3. Peculiarities of obstetric history taking.</li><li>4. Obstetric examination: Abdominal and vaginal examinations.</li></ol> <p>Students are trained on special dummies before being allowed to examine patients.</p>
<b>Part I: Obstetrics</b>		
<b>2</b>	Anatomy of the Female Reproductive System & Gametogenesis	<ol style="list-style-type: none"><li>1. Revision of Anatomy of female Abdomen and Pelvis.</li><li>2. Physiological changes in anatomy to gravid Uterus and surroundings.</li><li>3. Revision of oogenesis and spermatogenesis.</li></ol>
<b>3</b>	Pregnancy and Prenatal Care	<ol style="list-style-type: none"><li>1. Terms and definitions related to pregnancy.</li><li>2. Diagnosis and dating of pregnancy.</li></ol>

		<ol style="list-style-type: none"> <li>3. Effect of pregnancy on various body systems.</li> <li>4. Prenatal care and scheduled prenatal visits.</li> <li>5. Routine problems of pregnancy.</li> <li>6. Prenatal assessment of the fetus.</li> </ol>
<b>4</b>	Early Pregnancy Complications	<ol style="list-style-type: none"> <li>1. Ectopic Pregnancy: Definition, risk factors, management; Medical and surgical.</li> <li>2. Spontaneous Abortion: Related definitions, causes and diagnosis of 1<sup>st</sup> and 2<sup>nd</sup> trimester abortions.</li> <li>3. Incompetent Cervix: Definition, Risk factors, diagnosis and various modalities of management.</li> <li>4. Recurrent Pregnancy Loss: Pathogenesis, step-wise approach to diagnosis and treatment.</li> </ol>
<b>5</b>	Prenatal Screening, Diagnosis and Treatment	<ol style="list-style-type: none"> <li>1. Concept and importance of Prenatal Screening.</li> <li>2. Screening for genetic diseases: Cystic Fibrosis, Sickle-Cell Disease, Tay-Sachs Disease, Thalassemia.</li> <li>3. Major features of Chromosomal abnormalities: Down Syndrome, Trisomy 18, Trisomy 13, Turner Syndrome and Klinefelter Syndrome.</li> <li>4. Fetal congenital anomalies: Neural Tube Defects, Potter Syndrome, and Cardiac defects.</li> <li>5. Prenatal screening methods according to trimesters.</li> <li>6. Prenatal diagnosis using Amniocentesis, Chorionic Villus Sampling, Fetal Blood Sampling, and Fetal Imaging.</li> </ol>
<b>6</b>	Normal Labor and Delivery	<ol style="list-style-type: none"> <li>1. Anatomical characteristics of the fetal head and maternal pelvis.</li> <li>2. Stages of labor: Definition, characteristics and active management.</li> <li>3. Methods, indications and contraindication of induction and augmentation of labor.</li> <li>4. Methods, indications and contraindication of operative vaginal delivery.</li> </ol>
<b>7</b>	Fetal Surveillance during Labor	<ol style="list-style-type: none"> <li>1. Methods of monitoring fetal heart rate.</li> <li>2. Fetal heart rate patterns: Normal and abnormal.</li> <li>3. Recognize fetal distress on Cardiotocography (CTG) and outline proper management steps.</li> <li>4. Methods of fetal blood sampling and interpretation of results.</li> </ol>
<b>8</b>	Cesarean Section (C/S)	<ol style="list-style-type: none"> <li>1. Indications for elective and emergent C/S.</li> <li>2. Contraindications</li> <li>3. Classical and lower uterine segment varieties, advantages and disadvantages of each.</li> <li>4. Post operative care and complications.</li> <li>5. Vaginal Birth After Cesarean (VBAC)</li> </ol>
<b>9</b>	Antepartum Hemorrhage	<ol style="list-style-type: none"> <li>1. Differential diagnosis; obstetric vs. non obstetric causes.</li> <li>2. Placenta Previa: Types, risk factors, presentation, diagnosis and treatment.</li> </ol>

		<p>3. Placental Abruption: Pathogenesis, clinical features, evaluation and treatment.</p> <p>4. Uterine Rupture: Risk factors, clinical manifestations, management.</p> <p>5. Fetal vessel rupture: clinical picture, diagnosis and treatment.</p>
<b>10</b>	Complications of Labor and Delivery	<p>1. Preterm labor and tocolysis.</p> <p>2. Be familiar with different classes of tocolytics.</p> <p>3. Preterm and Premature Rupture of Membranes: Definition, diagnosis and management.</p> <p>4. Failure to progress and the partogram.</p> <p>5. Malpresentation and malposition.</p> <p>Obstetric emergencies: Fetal bradycardia, shoulder dystocia, seizure, maternal hypotension and fetal bradycardia.</p>
<b>11</b>	Fetal Complications of Pregnancy	<p>1. Small for Gestational Age (SGA): Causes, diagnosis and follow up, and management.</p> <p>2. Large for gestational age and Fetal Macrosomia: risk factors, screening and diagnosis, and management.</p> <p>3. Poly- and Oligohydramnios: causes, implications, diagnosis, and management.</p> <p>4. Fetal demise.</p> <p>5. Postterm pregnancy: Causes, diagnosis and treatment.</p>
<b>12</b>	Rh System and Fetal Anemia	<p>1. Listing causes of immune and nonimmune hydrops fetalis.</p> <p>2. Approach to the unsensitized Rh negative patient.</p> <p>3. Approach to the sensitized Rh negative patient.</p> <p>4. Indications for RhoGAM.</p> <p>5. Ultrasound follow up of fetal anemia, and determination of severity.</p>
<b>13</b>	Multiple Gestation	<p>1. Epidemiology and pathogenesis.</p> <p>2. Diagnostic features including Ultrasound findings.</p> <p>3. Complications and delivery precautions.</p> <p>4. Overview of Twin-to-twin transfusion syndrome.</p> <p>5. Special consideration in the case of Mo-Mo twins.</p>
<b>14</b>	Hypertension (HTN) and Pregnancy	<p>1. Overview of hypertensive states of pregnancy.</p> <p>2. Criteria for diagnosis of Gestational HTN, Preeclampsia and Eclampsia.</p> <p>3. Maternal and fetal complications of Preeclampsia.</p> <p>4. Management of Preeclampsia according to gestational age.</p> <p>5. Management of Eclampsia.</p> <p>6. Chronic HTN in pregnancy.</p>
<b>15</b>	Diabetes (DM) During Pregnancy	<p>1. Gestational DM (GDM) vs. Pregestational DM.</p> <p>2. Screening and diagnostic evaluation.</p> <p>3. Treatment and follow up of diabetes during pregnancy.</p> <p>4. Fetal and maternal complications of DM.</p>
<b>16</b>	Infectious Diseases in Pregnancy	<p>1. Overview of Urinary Tract Infections in pregnancy.</p> <p>2. Discussion of bacterial vaginosis and group B</p>

		streptococcus in pregnancy. 3. Chorioamnionitis: Definition, diagnosis and management. 4. Discussion of infections that affect the fetus: HSV, VZV, Parvovirus, CMV, Rubella, Toxoplasmosis.
17	Other Medical Complications of Pregnancy	1. Overview of Hyperemesis Gravidarum. 2. Implications and management of Seizure disorder in pregnancy. 3. Cardiac diseases in pregnancy. 4. Considerations of maternal renal disease. 5. Coagulation disorders during pregnancy. 6. Hypo- and Hyperthyroidism in pregnancy. 7. Systemic Lupus Erythematosus in pregnancy. 8. Maternal substance abuse.
18	Postpartum Care and Complications	1. Normal Puerperium: Anatomic and physiological changes. 2. Routine postpartum care and breast feeding. 3. Postpartum Hemorrhage (PPH): Causes, stepwise approach to management. 4. Overview of Endomyometritis. 5. Dealing with wound complications. 6. Discussion of Mastitis. 7. Postpartum depression and blues.
<b>Part II: Gynecology</b>		
19	Benign Disorders of the Lower Genital Tract	1. Congenital anomalies of the vulva & vagina: Labial fusion, Imperforate hymen, Transverse vaginal septum, Vaginal atresia & vaginal agenesis. 2. Benign Epithelial Disorders of the Vulva & Vagina: Lichen sclerosis, Lichen Planus, Lichen simplex chronicus, squamous cell hyperplasia, vulvar psoriasis & vaginal adenosis. 3. Benign cysts & tumors of the vulva & vagina: Epidermal inclusion cysts, sebaceous cysts, apocrine sweat gland cysts, skene's glands cysts, bartholin's duct cyst & abscess & gartner's duct cysts. 4. Benign solid tumors of the vulva & vagina: Lipomas, hemangiomas & urethral caruncles. 5. Benign cervical lesions: congenital anomalies, cervical cysts, cervical polyps, cervical fibroids & cervical stenosis.
20	Benign Disorders of the Upper Genital Tract	1. Anatomic anomalies of the uterus (Arcuate, septate, bicornuate, unicornuate, didelphys): pathogenesis, epidemiology, clinical manifestations & treatment. 2. Uterine leiomyomas (fibroids): pathogenesis, epidemiology, risk factors, clinical manifestations, diagnostic evaluation & follow up. 3. Endometrial polyps: pathogenesis, epidemiology, clinical manifestations & treatment.

		<ol style="list-style-type: none"> <li>4. Endometrial hyperplasia: pathogenesis, epidemiology, risk factors, clinical manifestations, diagnostic evaluation.</li> <li>5. Ovarian cysts: pathogenesis, epidemiology, clinical manifestations &amp; treatment.</li> </ol>
<b>21</b>	Endometriosis & Adenomyosis	<ol style="list-style-type: none"> <li>1. pathogenesis, epidemiology, risk factors, clinical manifestations, diagnostic evaluation &amp; differential diagnosis &amp; treatment.</li> </ol>
<b>22</b>	Infections of the Lower Female Reproductive Tract	<ol style="list-style-type: none"> <li>1. urinary tract infections: diagnosis &amp; treatment.</li> <li>2. The external anogenital region: vulvitis.</li> <li>3. Ulcerated lesions: syphilis, genital herpes, chancroid &amp; lymphogranuloma venereum.</li> <li>4. Nonulcerative lesions: human papilloma virus, molluscum contagiosum, phthirus pubis &amp; sarcoptes scabiei.</li> <li>5. Vaginal infections: bacterial vaginosis, yeast infections (candidiasis) &amp; trichomonas vaginalis.</li> <li>6. Infections of the cervix: neisseria gonorrhoea &amp; Chlamydia trachomatis.</li> </ol>
<b>23</b>	Upper Female Reproductive Tract & Systemic Infections	<ol style="list-style-type: none"> <li>1. Endometritis.</li> <li>2. Pelvic inflammatory disease.</li> <li>3. Tubo-ovarian abscess.</li> <li>4. Toxic shock syndrome</li> </ol>
<b>24</b>	Pelvic Organ prolapse	<ol style="list-style-type: none"> <li>1. pathogenesis, epidemiology, risk factors, clinical manifestations, diagnostic evaluation, differential diagnosis &amp; treatment.</li> </ol>
<b>25</b>	Urinary Incontinence	<ol style="list-style-type: none"> <li>1. Epidemiology, anatomy, primary types of incontinence, physical examination &amp; diagnostic evaluation.</li> <li>2. Stress incontinence</li> <li>3. Detrusor overactivity</li> <li>4. Overflow incontinence</li> <li>5. Bypass incontinence</li> <li>6. Functional incontinence</li> </ol>
<b>26</b>	Puberty, the Menstrual Cycle & Menopause	<ol style="list-style-type: none"> <li>1. Puberty: adrenarche, gonadarche, telarche, pubarche, peak growth velocity &amp; menarche.</li> <li>2. Menstrual cycle physiology: follicular phase, ovulation, luteal phase &amp; menstruation.</li> <li>3. Menopause &amp; postmenopause: etiology, diagnosis, pathogenesis, hormone replacement therapy &amp; other additional therapeutic regimens.</li> </ol>
<b>27</b>	Amenorrhea	<ol style="list-style-type: none"> <li>1. Primary amenorrhea: outflow tract anomalies, end-organ disorders, central disorders ( hypothalamic</li> </ol>

		<p>pituitary).</p> <ol style="list-style-type: none"> <li>2. Secondary amenorrhea: anatomic abnormalities, ovarian failure, polycystic ovarian disease, hyperprolactinemia associated amenorrhea, disruption of the hypothalamic-pituitary axis.</li> <li>3. Diagnostic evaluation &amp; treatment.</li> </ol>
<b>28</b>	Abnormalities of the Menstrual Cycle	<ol style="list-style-type: none"> <li>1. Dysmenorrhea: primary dysmenorrhea (diagnosis &amp; treatment), secondary dysmenorrhea (cervical stenosis &amp; pelvic adhesions).</li> <li>2. Premenstrual syndrome &amp; premenstrual dysphoric disorder (pathogenesis &amp; treatment)</li> <li>3. Abnormal uterine bleeding: menorrhagia, hypomenorrhea, metrorrhagia &amp; menometrorrhagia, oligomenorrhea &amp; polymenorrhea.</li> <li>4. Dysfunctional uterine bleeding: diagnosis &amp; treatment.</li> <li>5. Postmenopausal bleeding.</li> </ol>
<b>29</b>	Hirsutism & Virilism	<ol style="list-style-type: none"> <li>1. Normal &amp; pathologic androgen synthesis.</li> <li>2. Adrenal disorders: cushing syndrome &amp; congenital adrenal hyperplasia.</li> <li>3. Functional ovarian disorders: polycystic ovarian syndrome, theca lutein cysts, stromal hyperplasia &amp; hyperthecosis &amp; ovarian tumors.</li> <li>4. Drugs &amp; exogenous hormones</li> <li>5. Idiopathic hirsutism</li> </ol>
<b>30</b>	Contraception & Sterilization	<ol style="list-style-type: none"> <li>1. Natural methods (periodic abstinence, coitus interruptus &amp; lactational amenorrhea)</li> <li>2. Barrier methods &amp; spermicides (condoms, diaphragms &amp; cervical caps)</li> <li>3. Intrauterine devices (method of action, effectiveness, advantages &amp; disadvantages)</li> <li>4. Hormonal contraceptive methods (oral, injectable, vaginal rings).</li> <li>5. Emergency contraception</li> <li>6. Surgical sterilization (tubal sterilization &amp; vasectomy)</li> </ol>
<b>31</b>	Infertility & Assisted Reproductive Technologies	<ol style="list-style-type: none"> <li>1. Female factor: ovulatory, peritoneal/tubal, endometriosis, uterine &amp; cervical factors.</li> <li>2. Male factor: abnormal semen, endocrine disorders, environmental exposures, genetic, sexual dysfunction &amp; structural factors.</li> <li>3. Combined male &amp; female factor.</li> <li>4. Ovulation induction &amp; medications used in the treatment of infertility.</li> <li>5. Advanced reproductive technologies: (IVF, ICSI, PGD)</li> </ol>

<b>32</b>	Neoplastic Disease of the Vulva & Vagina	<ol style="list-style-type: none"> <li>1. Preinvasive neoplastic disease of the vulva (vulvar intraepithelial neoplasia &amp; paget disease of the vulva).</li> <li>2. Cancer of the vulva (diagnosis, staging &amp; treatment)</li> <li>3. Preinvasive disease of the vagina</li> <li>4. Cancer of the vagina (diagnosis, stages &amp; treatment)</li> </ol>
<b>33</b>	Cervical Neoplasia & Cervical Cancer	<ol style="list-style-type: none"> <li>1. Cervical intraepithelial neoplasia (pathogenesis, epidemiology, diagnosis &amp; treatment)</li> <li>2. Cervical cancer: pathophysiology, epidemiology, diagnosis, clinical staging &amp; treatment.</li> </ol>
<b>34</b>	Endometrial Cancer	<ol style="list-style-type: none"> <li>1. Pathogenesis, epidemiology, risk factors, clinical manifestations, diagnostic evaluation, treatment &amp; follow up.</li> </ol>
<b>35</b>	Ovarian & Fallopian Tube Tumors	<ol style="list-style-type: none"> <li>1. Ovarian tumors</li> <li>2. Epithelial tumors</li> <li>3. Germ cell tumors</li> <li>4. Sex cord-stromal tumors</li> <li>5. Cancer of the fallopian tubes.</li> </ol>
<b>36</b>	Gestational Trophoblastic Disease	<ol style="list-style-type: none"> <li>1. Benign gestational trophoblastic disease (complete &amp; partial molar pregnancies)</li> <li>2. Malignant gestational trophoblastic disease: persistent/invasive moles, choriocarcinoma &amp; (PSTT) placental site trophoblastic tumors.</li> </ol>
<b>37</b>	Breast Diseases & Cancer	<ol style="list-style-type: none"> <li>1. Anatomy, physiology &amp; evaluation of breast pain &amp; masses</li> <li>2. Benign breast disease: fibrocystic changes, fibroadenoma, cystosarcoma phyllodes, intraductal papilloma &amp; mammary duct ectasia.</li> <li>3. Malignant breast diseases (invasive &amp; noninvasive carcinoma) diagnosis &amp; treatment</li> </ol>

## VII. Instructional Methods

- a. Lectures
- b. Demos
- c. Tutorials
- d. Case study
- e. Assignments, reports and projects

## VIII. Major Evaluation Dates

Rotation Final Evaluation	End of Rotation Examination (OSCE)
End of Year Final Exam	Written (Multiple Choice Questions)