



# Edward Via College of Osteopathic Medicine

MED 8080/MED 8085

Clinical Obstetrics and Gynecology and Modules  
Academic Year 2019 - 2020

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## ROTATION SYLLABUS

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### **I. Rotation Description**

Obstetrics and Gynecology is the medical specialty concerned with the reproductive health and medical needs of adolescents and women. The specialty encompasses preventive health, reproductive health, maternal care and surgery for women of all ages. Obstetricians and gynecologists develop enduring relationships with their patients and deliver medical care that may include adolescent gynecology, infertility, endocrinology, and health maintenance during pregnancy, treatment of medical problems in pregnancy, operative gynecology and gynecological oncology. The diversity of the specialty is apparent in all practice settings and you will appreciate the challenges and thrill during your third year clerkships.

The Department of Obstetrics and Gynecology Department aims to embody competent and compassionate care and facilitate students' professional growth. The practice of obstetrics and gynecology occurs in the outpatient office setting, labor and delivery unit and in the operating room. Due to the variety of practice

opportunities and formats in obstetrics and gynecology, students should review their [specific site instructions](#) for a more detailed description of their specific practice setting. Regardless of your chosen area of specialty, you will be caring for women. This rotation is designed to best prepare each medical student to develop competence in areas of reproductive and preventive health care for women. The curriculum relies heavily upon the national learning objectives for medical student education outlined by the Association of Professors of Gynecology and Obstetrics.

The curriculum is delivered through structured reading assignments, case modules and lectures, and through the student-preceptor experience. Students are expected to complete their assignments for both obstetrics and gynecology and the longitudinal OMM course.

## II. Course Goals and Objectives

### A. Goals of the Course

Prior to the completion of the rotation, the student should demonstrate knowledge of the following: (adapted from Association of Professors of Obstetrics and Gynecology Medical Student Objectives, ninth edition)

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

### B. Clinical Performance Objectives

While the end-of-rotation exam is derived from the didactic curriculum and objectives described above in the “Clinical Modules – Required Curriculum” section, the end-of-rotation evaluation completed by your preceptor is based on clinical core competencies. These core competencies reflect student performance in 6 key areas: communication, problem solving, clinical skills, medical knowledge, osteopathic medicine and professional and ethical considerations. Your end-of-rotation evaluation from your preceptor will be based directly on your performance in these 6 core competencies as described below.

1. **Communication** - the student should demonstrate the following clinical communication skills:

- a. Effective listening to patient, family, peers, and healthcare team
  - b. Demonstrates compassion and respect in patient communications
  - c. Effective investigation of chief complaint, medical and psychosocial history specific to the rotation
  - d. Considers whole patient: social, spiritual & cultural concerns
  - e. Efficiently prioritizes essential from non-essential information
  - f. Assures patient understands instructions, consents & medications
  - g. Presents cases in an accurate, concise, well organized manner
- 2. Problem Solving** – the student should demonstrate the following problem solving skills:
- a. Identify important questions and separate data in organized fashion organizing positives & negatives
  - b. Discern major from minor patient problems
  - c. Formulate a differential while identifying the most common diagnoses
  - d. Identify indications for & apply findings from the most common radiographic and diagnostic tests
  - e. Identify correct management plan considering contraindications & interaction
- 3. Clinical Skills** - the student should demonstrate the following problem solving skills:
- a. Assesses vital signs & triage patient according to degree of illness
  - b. Perform good auscultatory, palpatory & visual skills
  - c. Perform a thorough physical exam pertinent to the rotation
- 4. Osteopathic Manipulative Medicine** - the student should demonstrate the following skills in regards to osteopathic manipulative medicine
- a. Apply osteopathic manipulative medicine successfully when appropriate
  - b. Perform and document a thorough musculoskeletal exam
  - c. Utilize palpatory skills to accurately discern physical changes that occur with various clinical disorders
  - d. Apply osteopathic manipulative treatments successfully
- 5. Medical Knowledge** – the student should demonstrate the following in regards to medical knowledge
- a. Identify & correlate anatomy, pathology and pathophysiology related to most disease processes
  - b. Demonstrate characteristics of a self-motivated learner including demonstrating interest and enthusiasm about patient cases and research of the literature
  - c. Are thorough & knowledgeable in researching evidence based literature
  - d. Actively seek feedback from preceptor on areas for improvement
  - e. Correlate symptoms & signs with most common disease
- 6. Professional and Ethical Behaviors** - the student should demonstrate the following professional and ethical behaviors and skills:
- a. Is dutiful, arrives on time & stays until all tasks are complete
  - b. Consistently follows through on patient care responsibilities
  - c. Accepts & readily responds to feedback, is not resistant to advice
  - d. Assures professionalism in relationships with patients, staff, & peers
  - e. Displays integrity & honesty in medical ability and documentation
  - f. Acknowledges errors, seeks to correct errors appropriately
  - g. Is well prepared for and seeks to provide high quality patient care
  - h. Identifies the importance to care for underserved populations in a non-judgmental & altruistic manner

### III. Rotation Design

#### A. Educational Modules

Educational modules using lectures, cases, and other forms of delivery are used for third year curriculum. Each student must complete a post-rotation exam to assure that the expected basic content or medical knowledge has been acquired during the rotation. In addition to the experiences received in the clinical training sites, students are expected to read the content of the assigned textbooks and on line materials in order to complete the entire curriculum assigned for the clinical module.

#### B. Formative Evaluation

Student competency based rating forms are used by the preceptor to evaluate each student's clinical skills and the application of medical knowledge in the clinical setting. These forms are only completed by the clinical faculty member or preceptor. Performance on rotations will be evaluated by the primary clinical faculty member precepting the student. VCOM uses a competency based evaluation form which includes the osteopathic core competencies. These competencies evaluated include:

- a. Medical knowledge;
- b. Communication;
- c. Physical exam skills;
- d. Problem solving and clinical decision making;
- e. Professionalism and ethics;
- f. Osteopathic specific competencies; and
- g. Additional VCOM values.

Student competency is judged on clinical skill performance. Each skill is rated as to how often the student performs the skill appropriately (i.e. unacceptable, below expectation, meets expectation, above expectation, exceptional).

#### C. Logging Patient Encounters and Procedures

Students are required to maintain a log to identify the procedures performed and the number of essential patient encounters in the CREDO application. All students must review these logs with their preceptors prior to the end of the rotation period, as required by the final preceptor evaluation form. Students are encouraged to periodically review their CREDO entries with their preceptor during the rotation period.

### IV. Credits

5 credit hours

### V. Course Texts

#### A. Required Textbooks

- American College of Obstetricians and Gynecologists, et al. (2014). *Beckmann and Ling's obstetrics and gynecology* (8<sup>th</sup> ed.). Philadelphia, PA: Lippincott Williams and Wilkins. ISBN-13 978-1496353092. Available in electronic format on the VCOM Library
- Kuchera, M. & Kuchera, W. (1994). *Osteopathic considerations in systemic dysfunction* (Rev 2<sup>nd</sup> ed.). Dayton, OH: Greyden Press. ISBN: 978-1570741548
- American Osteopathic Association, & Chila, A. *Foundations of osteopathic medicine* (3rd ed.). Baltimore, MD: Lippincott Williams & Wilkins. ISBN: 978-0781766715  
Available in electronic format on the VCOM Library – on LWV Osteopathic Medicine Collection

#### B. Recommended Textbooks

- Case book: Gala, R.B. & Diallo, A.O. (Eds.). (2010). *The obstetrics and gynecology work-up*. Baltimore, MD: Lippincott, Williams and Wilkins.

- [APGO Case book](#) - The Association of Professors of Gynecology and Obstetrics has developed multiple case summaries based on the APGO Medical Student learning objectives. These cases can enhance the reading and discussion of the VCOM medical student learning objectives.

## VI. Course Grading and Requirements for Successful Completion

### A. Requirements

- Attendance according to VCOM and preceptor requirements as defined in the [College Catalog and Student Handbook](#).
- Completion and submission of the clinical curriculum

In addition to the learning experience in the clinical site, the clinical curriculum consists of the reading assignments and learning objectives that are included in this syllabus and clinical case modules that are derived from some, but not all, of the learning objectives. Student's success as a physician will depend upon the learning skills they develop during this core rotation, as guided by this syllabus and clinical case modules. National boards, residency in-training examinations, and specialty board examinations require ever increasing sophistication in student's ability to apply and manipulate medical knowledge to the clinical context.

The clinical case modules were developed by VCOM Discipline Chairs and are intended to provide an OMS 3 student with a clinical, patient-centered approach to the learning content of this rotation. The modules should not be approached as rote learning, but should provide structured, clinically-focused learning from the evidence base for this rotation. To submit the clinical case modules follow the link for your campus below:

- Auburn Campus:  
[https://virginiatech.qualtrics.com/jfe/form/SV\\_aeLA40PqwxObCzr](https://virginiatech.qualtrics.com/jfe/form/SV_aeLA40PqwxObCzr)
- Carolinas Campus:  
[https://virginiatech.qualtrics.com/jfe/form/SV\\_eysxk8fZQdIUhjn](https://virginiatech.qualtrics.com/jfe/form/SV_eysxk8fZQdIUhjn)
- Virginia Campus:  
[https://virginiatech.qualtrics.com/jfe/form/SV\\_bOUIvnWVaY3DJYx](https://virginiatech.qualtrics.com/jfe/form/SV_bOUIvnWVaY3DJYx)

The content of the end-of-rotation exams will be based upon the learning objectives and reading assignments in this syllabus and the clinical case modules and their associated references.

- Completing the online fetal monitoring course.
  - East Tennessee State University has created a self-guided [Electronic Fetal Monitoring Course](#). The course should require 2 hours of your time and teaches you the basic interpretation of fetal monitoring strips. Please work through the module. Additionally, you may complete quizzes and case scenarios if you desire.
- Logging Patient Encounters and Procedures in CREDO:
  - Students are required to log all patient encounters and procedures into the CREDO application. All students must review these logs with their preceptors prior to the end of the rotation period, as required by the final preceptor evaluation form. Students are encouraged to periodically review their CREDO entries with their preceptor during the rotation period. These reviews should stimulate discussions about cases and learning objectives, as well as identify curriculum areas the student may still need to complete. CREDO can be accessed at: <https://credo.education/>

- Rotation Evaluations:
  - Student Site Evaluation: Students must complete and submit at the end of rotation. See the VCOM website at: <http://intranet.vcom.edu/clinical/Login/index.cfm?fuseaction=LoginInfo&LoginPage=ViewStudentSchedule> to access the evaluation form.
  - Third-Year Preceptor Evaluation: It is the student's responsibility to ensure that all clinical evaluation forms are completed and submitted online or turned in to the Site Coordinator or the Clinical Affairs Office at the completion of each rotation. Students should inform the Clinical Affairs Office of any difficulty in obtaining an evaluation by the preceptor at the end of that rotation. See the VCOM website at: [www.vcom.edu/academics/clinical-forms](http://www.vcom.edu/academics/clinical-forms) to access the evaluation form.
  - Mid-Rotation Evaluation: The mid-rotation evaluation form is not required but highly recommended. See the VCOM website at: [www.vcom.edu/academics/clinical-forms](http://www.vcom.edu/academics/clinical-forms) to access the mid-rotation evaluation form.
- Successful completion of the end-of-rotation written exam. The end-of-rotation exam questions will be derived directly from the specific objectives presented in each of the below modules.

## B. Grading

Students must pass both the "module" and "rotation" portions of the course. All rotations have a clinical rotation grade and clinical modules/exam grade. Failure to submit all of the Ob-case module files using the Qualtrics link provided above **by no later than 5 PM on the last day of the rotation** will result in a **deduction of 5 points from your end-of-rotation exam score.**

Clinical Grading Scale and GPAs						
OMS 3 End-of-Rotation Exam Grades			OMS 3 AND OMS 4 Clinical Rotation Grades		Other Grades	
A	90-100	4.0	H	Honors	IP	In Progress
B+	85-89	3.5	HP	High Pass	INC	Incomplete
B	80-84	3.0	P	Pass	CP	Conditional Pass
C+	75-79	2.5	F	Fail	R	Repeat
C	70-74	2.0			Au	Audit
F	<70	0.0				

## C. Remediation

Students who fail one or more rotations or one or more end-of-rotation exams twice will be referred to the Promotion Board. If a student fails the professionalism and ethics portion of the evaluation he or she may be removed from the rotation and referred to the Professionalism and Ethics Standards Board. No grade will be changed unless the Office of Clinical Affairs certifies to the Registrar, in writing, that an error occurred or that the remediation results in a grade change.

- **Failure of an End-of-Rotation Exam**

Students must pass each end of rotation exam with a C (70%) or better to receive a passing grade for the clinical medical knowledge module. Students who fail an end of rotation exam but pass the clinical rotation evaluation component have a second opportunity to pass the exam within 28 days of notification. If the student passes the remediation exam, the remediated exam grade will be the grade recorded on the transcript and be GPA accountable. If the student fails the end of rotation exam a second time, the student will receive an "F" grade for the rotation and will be brought before the Promotion Board. If the student is allowed to repeat the rotation, all components of the rotation must be repeated. In this case, the "F" grade remains the permanent grade for the initial rotation and the student will receive a new grade for the

repeated rotation. The grade will be recorded in a manner that designates that it is a repeated rotation (eg. R-pass).

- **Failure of a Rotation**

If a student fails the clinical rotation evaluation the student will receive an “F” grade for the rotation and will be brought before the Promotion Board. If the student is allowed to repeat the rotation, all components of the rotation must be repeated. In this case, the “F” grade remains the permanent grade for the initial rotation and the student will receive a new grade for the repeated rotation. The grade will be recorded in a manner that designates that it is a repeated rotation (eg. R-pass).

- **Failure to Make Academic Progress**

Repeated poor or failing performance in a specific competency area on the evaluation form across more than one rotation may also be a reason for a required remediation at the discretion of the Associate Dean for Clinical Affairs in consultation with the clinical chair, the preceptor, and the Promotion Board. In general, rotations should show a progression of improvement in clinical performance. Those students who receive a mere “Pass” on multiple rotations and/or maintain a “CP” on one or more rotations after final grades are received, will be counseled about overall performance and may be required to complete an additional rotation at the end of the year. Any additional curriculum or required remediation will be based on the performance measure. In general, rotations should show a progression of improvement in performance. Those students who continually score in the "unsatisfactory" category or repeated "performs some of the time, but needs improvement" consistently and do not improve over time or who fail one or more rotations may be deemed as not making academic progress and, as a result, may be referred to the Promotion Board and be required to complete additional curriculum. Multiple rotation failures may result in dismissal.

Poor ratings on the clinical rotation evaluation in the professional and ethical areas of the assessment are addressed by the Associate Dean for Clinical Affairs. The Associate Dean may design a remediation appropriate to correct the behavior or if needed may refer the student to the Professionalism and Ethics Board. In the case of repeated concerns in a professional and/or ethical area, the Associate Dean for Clinical Affairs may refer the student to the Campus Dean for a Behavioral Board or Promotion Board hearing. The Campus Dean will act upon this referral depending on the severity and the area of the performance measure. Poor ratings in this area will include comments as to the exact nature of the rating. Repeated poor or failing performance in a specific competency area on the evaluation form across more than one rotation may also be a reason for a required remediation at the discretion of the Associate Dean for Clinical Affairs in consultation with the clinical chair and the preceptor, and the Promotion Board. In general, rotations should show a progression of improvement in clinical performance.

## **VII. Academic Expectations**

Grading policies, academic progress, and graduation requirements may be found in the [College Catalog and Student Handbook](#).

### **A. Attendance**

Attendance for all clinical rotation days is mandatory. The clinical site will determine the assigned days and hours to be worked within the rotation period. Students are required to attend any orientation the clinical site sets as mandatory prior to any rotation or the clinical year. The orientation sessions vary by site and are required to maintain assignment to the site. Although the clinical site determines the assigned days and hours to be worked, VCOM has established the following guidelines:

- 4 week rotations may not be less than 20, eight hour days for a total of a minimum of 160 hours and often average 180 hours or greater.

- Students may be required to work up to 24 days in a 4-week period or 25 days in a 1-month rotation, including call and weekends at the discretion of the clinical site.
- If the clinical site requires longer daily hours or shift work, the student may complete the required hours in less than 20 days with the following specifications:
  - Students should not work greater than an average of 12 out of every 14 days
  - Student should not work more than 12 hours daily, exclusive of on-call assignments.
  - If on-call hours are required, the student should not be on duty for greater than 30 continuous hours.
  - Students may be required to work weekends but in general should have 2 weekends per month free and an average of 2 of 7 days per week free.

It should be noted that preceptors will have final determination of the distribution of hours, which may vary from this policy but should not in general be less than 160 hours for a 4 week rotation. The institution's DSME and assigned clinical faculty determine clinical duty hours. Students are responsible to the assigned clinical faculty and are expected to comply with the general rules and regulations established by the assigned clinical faculty, and/or the core hospital(s), or facility associated with the rotation.

The average student clinical day begins at 7 am and ends at 7 pm. Students are expected to work if their assigned clinical faculty is working. Some rotations assign students to shifts and in such cases the student may be required to work evening or night hours. If on-call hours are required, the student must take the call; however, the student should not be on duty for greater than 30 continuous hours. Students may be required to work weekends, but in general should have two weekends per month free and two of seven days per week free. Student holidays are determined by the clinical site and follow those of other students and/or residents from the clinical site. Students must be prompt and on time for the clinical rotation.

Students are expected to arrive on time to all clinical rotations. If a student is late, he or she must notify the site coordinator and the preceptor prior to or at the time they are scheduled arrive. Students must have a reason for being late such as illness or vehicle issues and it is not anticipated that this would occur more than one occasion AND it is important the student call in prior to being late. Repeated tardiness is considered as unprofessional behavior and is a reason for dismissal from a rotation. Students with repeated tardiness will be referred to the PESB. Tardiness is defined as more than 5 minutes after the scheduled time the preceptor designates as the expected arrival time.

The Office of Clinical Affairs requires that the medical student complete and submit an Excused Absence Clinical Rotations Approval form for any time "away" from clinical rotations. Forms are available at: [www.vcom.edu/academics/clinical-forms](http://www.vcom.edu/academics/clinical-forms). The student must have this form signed by their preceptor and others designated on the form to obtain an excused absence and must be provided to the DSME and the Office of Clinical Affairs through the site coordinator. The form must be completed prior to the beginning of the leave. If an emergency does not allow the student to submit this prior to the absence, the "Excused Absence Clinical Rotations Approval" form must be submitted as soon as the student is physically able to complete the form. In addition to completion of the form, students must contact the Department of Clinical Affairs, the Site Coordinator, and the preceptor's office by 8:30 AM of the day they will be absent due to an illness or emergency. No excused absence will be granted after the fact, except in emergencies as verified by the Associate Dean for Clinical Affairs.

Regardless of an excused absence, students must still complete a minimum of 160 hours for a 4 week rotation in order to pass the rotation. Any time missed must be remediated during the course of the rotation for credit to be issued. Students may remediate up to four missed days or 48 hours missed

during any rotation period by working on normal days off. OMS 3 students who have any unexcused absences will be referred to the PESB.

## VIII. Professionalism and Ethics

It is advised that students review and adhere to all behavioral policies including attendance, plagiarism, dress code, and other aspects of professionalism. Behavioral policies may be found in the [College Catalog and Student Handbook](#).

### A. VCOM Honor Code

The VCOM Honor Code is based on the fundamental belief that every student is worthy of trust and that trusting a student is an integral component in making them worthy of trust. Consistent with honor code policy, by beginning this exam, I certify that I have neither given nor received any unauthorized assistance on this assignment, where “unauthorized assistance” is as defined by the Honor Code Committee. By beginning and submitting this exam, I am confirming adherence to the VCOM Honor Code. A full description of the VCOM Honor Code can be found in the [College Catalog and Student Handbook](#).

## IX. Pre-requisites to a Successful Clerkship

Please ensure that you are familiar with these four review topics prior to beginning your obstetrics and gynecology clerkship.

### 1. Female Reproductive Physiology

**Online PowerPoint Presentation:** [Female Reproductive Physiology](#)

#### Learning Objectives:

- i. Review female reproductive physiology including:
  - a. Hypothalamic-pituitary-ovarian axis
  - b. Follicular and luteal phases of menstrual cycle
  - c. Proliferative and secretory phases of the endometrium

### 2. Intrapartum Fetal Surveillance

**Reading Assignment:** Beckmann, pp 98-111

**Online Fetal Monitoring Course:** Tennessee State University has created a self-guided [Electronic Fetal Monitoring Course](#). The course should require 2 hours of your time and teaches you the basic interpretation of fetal monitoring strips. Please work through the module. Additionally, you may complete quizzes and case scenarios if you desire.

#### Learning Objectives:

- i. Learn to interpret basic EFM patterns using a systematic approach
- ii. Learn to use standardized terminology to appropriately document the patterns
- iii. Learn to properly manage the clinical situations represented by the EFM pattern

### 3. Obstetrics and Gynecologic History and Exam

**Reading Assignment:** Beckmann, pp 1-13

**Online PowerPoint Presentation:** [Women’s Health History](#)

#### Learning Objectives:

- i. Perform a thorough obstetric-gynecologic history as a portion of a general medical history
- ii. Interact with the patient to gain her confidence and to develop an appreciation of the effect of her age, racial and cultural background, and economic status on her health
- iii. Communicate the results of the obstetric-gynecologic and general medical history by well-organized written and oral reports
- iv. Interact with the patient to gain her confidence and cooperation, and assure her comfort and modesty

- v. Perform a painless obstetric-gynecologic examination as part of a woman's general medical examination
- vi. Communicate the relevant results of the examination in well-organized written oral reports
- vii. Educate the patient regarding breast self-examination

#### 4. Embryology and Pelvic Anatomy

**Reading Assignment:** Beckmann, pp 29-41

**Online PowerPoint Presentation:** [Comprehensive Review of the Female Reproductive System Anatomy by Dr. Danielson](#)

**Learning Objective:**

- i. Review pelvic anatomy, with a particular focus on surgical pelvic anatomy in preparation for clinical surgical experiences.
- ii. Describe basic development of early human embryo as it relates to reproductive anatomy.

### X. Obstetric Curriculum

In addition to the topics below with reading references and learning objectives, students must also complete the assigned clinical cases. The content of the end-of-rotation exams will be based upon the learning objectives and reading assignments in this syllabus and the clinical case modules and their associated references. To submit the clinical case modules follow the link for your campus below:

- Auburn Campus: [https://virginiatech.qualtrics.com/jfe/form/SV\\_aeLA40PqwxObCzr](https://virginiatech.qualtrics.com/jfe/form/SV_aeLA40PqwxObCzr)
- Carolinas Campus: [https://virginiatech.qualtrics.com/jfe/form/SV\\_eyxk8fZQdIUhjn](https://virginiatech.qualtrics.com/jfe/form/SV_eyxk8fZQdIUhjn)
- Virginia Campus: [https://virginiatech.qualtrics.com/jfe/form/SV\\_bOUIvnWVaY3DJYx](https://virginiatech.qualtrics.com/jfe/form/SV_bOUIvnWVaY3DJYx)

#### 5. Maternal-Fetal Physiology

**Reading Assignment:** Beckmann, pp 43-55

**On-line PowerPoint Presentation:**

- [Fetal and Neonatal Circulation, Dr. Danielson](#)
- [Physiology of Pregnancy, Dr. Reilly](#)

**Learning Objectives:**

- i. Discuss the maternal physiologic anatomic changes associated with pregnancy
- ii. Describe the physiologic functions of the placenta and fetus
- iii. Discuss the effect of pregnancy on common diagnostic studies

#### 6. Preconception Care/Antepartum Care

##### A. Preconception Care

**Reading Assignment:** Beckmann, pp 56-85

**Learning Objectives:**

- i. Describe how certain medical conditions affect pregnancy
- ii. Describe how pregnancy affects certain medical conditions
- iii. Assess a patient's genetic risk as well as father's genetic risk with regard to pregnancy
- iv. Describe genetic screening options in pregnancy
- v. Recall the risk associated in pregnancy in advanced maternal age
- vi. Counsel patients regarding nutrition and exercise
- vii. Assess a patient's medications, immunization and environmental hazard in pregnancy

##### B. Antepartum Care

**Reading Assignment:** Beckmann, pp 56-85

**Learning Objectives:**

- i. Diagnose pregnancy
- ii. Determine gestational age
- iii. Describe appropriate diagnostic studies and their timing for a normal pregnancy

- iv. Assess risk factors for pregnancy complications
- v. List the nutritional needs of pregnant women
- vi. Identify the adverse effects of drugs and the environment on pregnancy
- vii. Discuss answers to commonly asked questions concerning pregnancy, labor and delivery
- viii. Describe approaches to assessing the following:
  - a. Fetal well-being
  - b. Fetal growth
  - c. Amniotic Fluid volume
  - d. Fetal lung maturity

## 7. Intrapartum Care

**Reading Assignment:** Beckmann, pp 86-97

### Learning Objectives:

- i. Differentiate between the signs and symptoms of true and false labor
- ii. Perform initial assessment of laboring patient
- iii. Describe the four stages of labor and recognize common abnormalities
- iv. Explain pain management approaches during labor
- v. Describe methods of monitoring the mother and the fetus
- vi. Describe the steps of a vaginal delivery
- vii. List indications for operative delivery

## 8. Postpartum Care

### A. Normal Postpartum Physiology and Care

**Reading Assignment:** Beckmann, pp 120-126

**On-line PowerPoint Presentation:** [Postpartum Care](#)

#### Learning Objectives:

- i. Describe maternal physiologic changes of the postpartum period
- ii. Describe normal postpartum care
- iii. Describe appropriate postpartum patient counseling
- iv. Describe appropriate postpartum contraception
- v. Classify the categories of perineal repair

### B. Postpartum Hemorrhage

**Reading Assignment:** Beckmann, pp 127-133

**On-line PowerPoint Presentation:** [Postpartum Care](#)

#### Learning Objectives:

- i. List risk factors for postpartum hemorrhage
- ii. Describe differential diagnosis of postpartum hemorrhage
- iii. Describe the immediate management of the patient with postpartum hemorrhage, including:
  - a. Inspection for lacerations
  - b. Use of uterine contractile agents
  - c. Management of volume loss
  - d. Management of coagulopathy

### C. Postpartum Infection

**Reading Assignment:** Beckmann, pp 122

**On-line PowerPoint Presentation:** [Postpartum Care](#)

#### Learning Objectives:

- i. List the risk factors for postpartum infection
- ii. List common postpartum infections

- iii. Describe evaluation and management of the patient with postpartum infection

## 9. Complications of Pregnancy

### A. Ectopic Pregnancy

**Reading Assignment:** Beckmann, pp 167-173; 252-255

**Learning Objectives:**

- i. Develop a differential diagnosis of first trimester bleeding
- ii. Perform a physical exam to assess for acute abdomen
- iii. List risk factors for ectopic pregnancy
- iv. Discuss diagnostic protocols for ectopic pregnancy
- v. Describe treatment options for patients with ectopic pregnancy

### B. Spontaneous Abortion

**Reading Assignment:** Beckmann, pp 173-176

**Learning Objectives:**

- i. Develop a differential diagnosis for first trimester vaginal bleeding
- ii. Differentiate the types of spontaneous abortion. (incomplete, inevitable, threatened, missed, complete)
- iii. Define recurrent abortion
- iv. List the complications of spontaneous abortion
- v. Identify the causes and complications of septic abortion
- vi. Counsel a patient following a spontaneous abortion

### C. Medical and Surgical Conditions in Pregnancy

**Reading Assignment:** Beckmann, pp 177-218

**Learning Objectives:**

- i. Identify the following medical and surgical conditions in pregnancy and discuss the potential impact of the conditions on the gravid patient and the fetus/newborn, as well as the impact of pregnancy (if any) on each conditions and appropriate evaluation
  - a. Anemia
  - b. Urinary tract disorders
  - c. Hypertension
  - d. Infectious diseases
  - e. Cardiac disease
  - f. Respiratory disorders
  - g. Surgical abdomen

### D. Pre-eclampsia-Eclampsia Syndrome

**Reading Assignment:** Beckmann, pp 191-199

**Learning Objectives:**

- i. Classify the types of hypertension in pregnancy
- ii. Describe the pathophysiology of preeclampsia-eclampsia
- iii. List risk factors for preeclampsia
- iv. Recognize the signs and symptoms to diagnose preeclampsia-eclampsia
- v. Explain the management of a patient with preeclampsia-eclampsia
- vi. List the maternal and fetal complications associated with preeclampsia-eclampsia
- vii. Explain the diagnosis and management of HELLP syndrome

## E. Gestational and Pre-Gestational Diabetes

**Reading Assignment:** Beckmann, pp 191-199

**Learning Objectives:**

- i. Describe the incidence and risk factors for gestational diabetes
- ii. Define gestational and pre-gestational diabetes
- iii. Describe the protocol for screening for and diagnosing gestational diabetes
- iv. Describe the management and monitoring of gestational and pre-gestational diabetes in pregnancy

## F. Alloimmunization

**Reading Assignment:** Beckmann, pp 201-208

**Learning Objectives:**

- i. Describe the pathophysiology and diagnosis of alloimmunization
- ii. Describe the use of immunoglobulin prophylaxis during pregnancy for the prevention of alloimmunization
- iii. Discuss the management of a patient with Rh-D sensitization in pregnancy

## G. Multifetal Gestation and Malpresentation

**Reading Assignment:** Beckmann, pp 134-139

**Learning Objectives:**

- i. List the risk factors for multifetal gestation
- ii. Describe the embryology of multifetal gestation
- iii. Describe the diagnosis and management of multifetal gestation
- iv. Describe the potential maternal and fetal complications associated with multifetal gestation

## H. Fetal Death

**Reading Assignment:**

- Prine LW. [Office Management of Early Pregnancy Loss](#)
- Van Dinter MS. [Managing Adverse Birth Outcomes: Helping Parents and Families Cope](#)

**Learning Objectives:**

- i. Describe the common causes of fetal death in each trimester
- ii. Describe the symptoms, physical findings, and diagnostic methods to confirm the diagnosis and etiology of fetal death
- iii. Describe the medical and psychosocial management of a patient diagnosed with a fetal demise

## I. Abnormal Labor

**Reading Assignment:** Beckmann, pp 98-105

**Learning Objectives:**

- i. List abnormal labor patterns
- ii. Describe the causes and methods of evaluating abnormal labor patterns
- iii. List fetal and maternal complications resulting from abnormal labor
- iv. List indications and contraindications for oxytocin administration
- v. Describe indications along with risks and benefits of a trial of labor after cesarean delivery
- vi. Discuss strategies for emergency management of breech presentation, shoulder dystocia and cord prolapse

## **J. Third-Trimester Bleeding**

**Reading Assignment:** Beckmann, pp 152-157; 129

### **Learning Objectives:**

- i. List the causes of third trimester bleeding
- ii. Describe the initial evaluation of a patient with third trimester bleeding
- iii. Differentiate the signs and symptoms of third trimester bleeding
- iv. List the maternal and fetal complications of placenta previa, placental abruption and uterine rupture
- v. Describe the initial evaluation and management plan for acute blood loss

## **K. Preterm Labor**

**Reading Assignment:** Beckmann, pp 147-151

**On-line PowerPoint Presentation:** [Preterm labor](#)

### **Learning Objectives:**

- i. Identify the modifiable and non-modifiable factors and causes for preterm labor
- ii. Describe the signs and symptoms of preterm labor
- iii. Describe the initial management of preterm labor
  - a. Use of tocolytics
  - b. Indications for steroid use
  - c. Indications for antibiotics
- iv. List indication and contraindications of medications used in preterm labor
- v. List the adverse outcomes associated with preterm birth

## **L. Premature Rupture of Membranes**

**Reading Assignment:** Beckmann, pp 158-162

**On-line PowerPoint Presentation:** [Premature Rupture of Membranes](#)

### **Learning Objectives:**

- i. List the history, physical findings and diagnostic methods to confirm rupture of membranes
- ii. Identify risk factors for premature rupture of membranes
- iii. Describe the risks and benefits of expectant management versus immediate delivery, based on gestational age
- iv. Describe the methods to monitor maternal and fetal status during expectant management

## **M. Post Term Pregnancy**

**Reading Assignment:** Beckmann, pp 163-166

### **Learning Objectives:**

- i. Describe normal period of gestation
- ii. List the complications of prolonged gestation
- iii. Describe the evaluation and evidence-based management options for prolonged gestation

## **N. Fetal Growth Abnormalities**

**Reading Assignment:** Beckmann, pp 140-146

### **Learning Objectives:**

- i. Define macrosomia and fetal growth restriction
- ii. Describe etiologies of abnormal growth
- iii. List methods of detection of fetal growth abnormalities
- iv. Describe the management of fetal growth abnormalities
- v. List the associated morbidity and mortality

## O. Obstetric Procedures

**Reading Assignment:** Beckmann, pp 81-105; 118-119

**Learning Objectives:**

- i. Describe each procedure and list the indications and complications of each of the following:
  - a. Ultrasound
  - b. Chorionic villous sampling and amniocentesis
  - c. Induction and augmentation of labor
  - d. Episiotomy
  - e. Spontaneous vaginal delivery
  - f. Vacuum-assisted delivery
  - g. Forceps delivery
  - h. Breech delivery
  - i. Cesarean delivery
  - j. Vaginal birth after Cesarean section
  - k. Newborn circumcision

## XI. Gynecology Curriculum

In addition to the topics below with reading references and learning objectives, students must also complete the assigned clinical cases. The content of the end-of-rotation exams will be based upon the learning objectives and reading assignments in this syllabus and the clinical case modules and their associated references. To submit the clinical case modules follow the link for your campus below:

- Auburn Campus: [https://virginiatech.qualtrics.com/jfe/form/SV\\_aeLA40PqwxObCzr](https://virginiatech.qualtrics.com/jfe/form/SV_aeLA40PqwxObCzr)
- Carolinas Campus: [https://virginiatech.qualtrics.com/jfe/form/SV\\_eysxk8fZQdIUhjn](https://virginiatech.qualtrics.com/jfe/form/SV_eysxk8fZQdIUhjn)
- Virginia Campus: [https://virginiatech.qualtrics.com/jfe/form/SV\\_bOUIvnWVaY3DJYx](https://virginiatech.qualtrics.com/jfe/form/SV_bOUIvnWVaY3DJYx)

### 10. Menstrual Cycle and Vaginal Bleeding

#### A. Normal and Abnormal Bleeding

**Reading Assignment:** Beckmann, pp 321-326; 332-336

**On-line PowerPoint Presentation:** [Menstrual Cycle, A Problem-based Tutorial](#)

**Learning Objectives:**

- i. Define the normal menstrual cycle and describe its endocrinology and physiology
- ii. Define abnormal uterine bleeding
- iii. Describe the pathophysiology and identify etiologies of abnormal uterine bleeding using the PALM-COEIN classifications
- iv. Describe the steps in the evaluation and initial management of abnormal uterine bleeding
- v. Summarize medical and surgical management options for patients with abnormal uterine bleeding

#### B. Uterine Leiomyoma

**Reading Assignment:** Beckmann, pp 402-405

**Learning Objectives:**

- i. Cite the prevalence of uterine leiomyoma
- ii. Identify symptoms and physical findings in patients with uterine leiomyoma
- iii. Describe the diagnostic methods to confirm uterine leiomyomas
- iv. Describe the management options for the treatment of uterine leiomyomas

### **C. Amenorrhea**

**Reading Assignment:** Beckmann, pp 332-336; 327-331

**Learning Objectives:**

- i. Define amenorrhea and oligomenorrhea
- ii. Explain the pathophysiology and identify the etiologies of amenorrhea and oligomenorrhea, including possible nutritional causes
- iii. Describe associated symptoms and physical examination findings of amenorrhea
- iv. Discuss the steps in the evaluation and initial management of amenorrhea and oligomenorrhea
- v. Describe the consequences of untreated amenorrhea and oligomenorrhea

### **D. Premenstrual Syndrome (PMS)/Premenstrual Dysphoric Disorder (PMDD)**

**Reading Assignment:** Beckmann, pp 363-368

**Learning Objectives:**

- i. Identify the criteria for making the diagnosis of PMS and PMDD
- ii. Describe treatment options for PMS and PMDD

## **11. Contraception and Sterilization**

**Reading Assignment:** Beckmann, pp 225-238

**Learning Objectives:**

- i. Describe the physiologic basis of contraception
- ii. Describe the effectiveness of each form of contraception
- iii. Counsel the patient regarding the benefits and risks for each form of contraception
- iv. Cite the financial considerations of the various forms of contraception
- v. Describe the methods of male and female sterilization
- vi. List the risks and benefits of procedures including:
  - a. Potential surgical complications
  - b. Failure rates
  - c. Reversibility

## **12. Vulvar and Vaginal Disease**

**Reading Assignment:** Beckmann, pp 245-249; 379-388

**Learning Objectives:**

- i. Describe normal vaginal appearance and secretions
- ii. Formulate a differential diagnosis for vulvovaginitis
- iii. Interpret a wet mount microscopic examination
- iv. List the evaluation and management of common vulvar problems, including:
  - a. Atrophy
  - b. Dermatological conditions of vulva
  - c. Bartholin's gland disease
  - d. Vulvodynia
  - e. Trauma

## **13. Sexually Transmitted Infections (STI) and Pelvic Inflammatory Disease**

### **A. Sexually Transmitted Infections**

**Reading Assignment:** Beckmann pp 250-261

**Learning Objectives:**

- i. Describe the guidelines for STI screening and partner notification
- ii. Describe STI prevention strategies, including immunization
- iii. List the causative pathogens of common STI's
- iv. Describe the symptoms and physical exam findings associated with common STI's

- v. Discuss the steps in the evaluation and initial management of common STI's
- vi. Review the CDC guidelines for treating the following sexually transmitted infections:
  - a. Bacterial vaginosis
  - b. Chlamydia
  - c. Gonorrhea
  - d. Syphilis
  - e. Chancroid
  - f. Trichomoniasis
  - g. HSV

## **B. Pelvic Inflammatory Disease**

**Reading Assignment:** Beckmann, pp 255-256

### **Learning Objectives:**

- i. Describe the pathophysiology of salpingitis and pelvic inflammatory disease
- ii. Describe the evaluation, diagnostic criteria, and initial management of salpingitis/pelvic inflammatory disease
- iii. Identify the long-term sequelae of salpingitis including tubo-ovarian abscess, chronic salpingitis and pelvic adhesions

## **14. Cervical Disease and Neoplasia**

**Reading Assignment:** Beckmann, pp 389-398

- [New Cervical Cancer Screening Recommendations from the U.S. Preventive Services Task Force and the ACS/ASCCP/ASCP](#)

### **Learning Objectives:**

- i. Describe the pathogenesis of cervical cancer
- ii. Describe the epidemiology and clinical burden of HPV
- iii. List the risks factors for cervical neoplasia and cancer
- iv. List the guidelines for cervical screening
- v. Describe the initial management of a patient with an abnormal Pap test
- vi. Describe the symptoms and physical findings of a patient with cervical cancer

## **15. Pelvic Pain**

### **A. Dysmenorrhea**

**Reading Assignment:** Beckmann, pp 271-281

#### **Learning Objectives:**

- i. Define dysmenorrhea
- ii. Distinguish primary from secondary dysmenorrhea
- iii. Identify the etiologies of dysmenorrhea
- iv. Discuss the steps in the evaluation and management of dysmenorrhea

### **B. Endometriosis**

**Reading Assignment:** Beckmann, pp 271-281

#### **Learning Objectives:**

- i. Describe the theories of the pathogenesis of endometriosis
- ii. List the common sites of endometriosis
- iii. Describe the symptoms and physical exam findings in a patient with endometriosis
- iv. Describe the diagnosis and management options for endometriosis

### **C. Chronic Pelvic Pain**

**Reading Assignment:** Beckmann, pp 281-284

**Learning Objectives:**

- i. Define chronic pelvic pain
- ii. Define prevalence and common etiologies of chronic pelvic pain
- iii. Describe the symptoms and physical exam findings in a patient with chronic pelvic pain
- iv. Discuss the evaluation and management options for chronic pelvic pain
- v. Discuss the psychosocial issues associated with chronic pelvic pain

### **16. Breast Disorders**

**Reading Assignment:** Beckmann, pp 122; 285-294

**Learning Objectives:**

- i. Describe standards of surveillance of an adult woman, including breast self-examination, physical examination and mammography
- ii. Diagnose the approach to a woman with the chief complaint of breast mass, nipple discharge or breast pain
- iii. List history and physical findings that might suggest the following abnormalities:
  - a. Intraductal papilloma
  - b. Fibrocystic changes
  - c. Fibroadenoma
  - d. Carcinoma
  - e. Mastitis
- iv. Demonstrate the performance of a clinical breast examination

### **17. Infertility**

**Reading Assignment:** Beckmann, pp 353-362

**Learning Objectives:**

- i. Define infertility
- ii. List the causes of female and male infertility
- iii. Describe the evaluation and initial management of an infertile couple
- iv. Describe the psychosocial issues associated with infertility
- v. Describe the management options for infertility

### **18. Pelvic Support Defects and Urinary Incontinence**

**Reading Assignment:** Beckmann, pp 262-270

**Learning Objectives:**

- i. Define pelvic support defect and pelvic organ prolapse
- ii. Identify the following elements on physical exam
  - a. Cystocele
  - b. Rectocele
  - c. Vaginal vault prolapse
  - d. Uterine prolapse
- iii. List behavioral, medical and surgical methods to appropriately treat incontinence and pelvic organ prolapse
- iv. Incorporate screening questions to differentiate between types of incontinence when eliciting a patient history
- v. Discuss the difference between stress, urge, and overflow incontinence
- vi. List risk factors for UTI
- vii. Differentiate between the diagnosis and treatment of upper and lower UTI

## 19. Menopause

**Reading Assignment:** Beckmann, pp 345-352

**Learning Objectives:**

- i. Define menopause
- ii. Describe physiologic changes in the hypothalamic-pituitary-ovarian axis associated with perimenopause / menopause
- iii. Describe symptoms and physical exam findings related to perimenopause/menopause
- iv. Discuss management options for patients with perimenopausal/menopausal symptoms
- v. Discuss long-term changes associated with menopause

## 20. Abortion

**Reading Assignment:** Beckmann, pp 167-176

**Learning Objectives:**

- i. List surgical and non-surgical pregnancy termination methods
- ii. Identify potential complications of abortion

## 21. Hirsutism and Virilization

**Reading Assignment:** Beckmann, pp 337-344

**On-line PowerPoint Presentation:** [Hirsutism, Dr. Mulligan](#)

**Learning Objectives:**

- i. Recognize normal variations in secondary sexual characteristics
- ii. Define hirsutism and virilization
- iii. List etiologies including ovarian, adrenal, pituitary and pharmacological
- iv. Describe the steps in the evaluation and initial management options for hirsutism and virilization

## 22. Gynecologic Neoplasia

### A. Cervical Disease and Neoplasia

**Reading Assignment:** Beckmann, pp 389-398

- [New Cervical Cancer Screening Recommendations from the U.S. Preventive Services Task Force and the ACS/ASCCP/ASCP](#)

**Learning Objectives:**

- i. Describe the pathogenesis of cervical cancer
- ii. Describe the epidemiology and clinical burden of HPV
- iii. List the risks factors for cervical neoplasia and cancer
- iv. List the guidelines for cervical screening
- v. Describe the initial management of a patient with an abnormal Pap test
- vi. Describe the symptoms and physical findings of a patient with cervical cancer

### B. Vaginal/Vulvar Cancer

**Reading Assignment:** Beckmann, pp 379-388

**Learning Objectives:**

- i. List risk factors for vulvar neoplasms
- ii. Describe the symptoms and physical examination findings of a patient with vulvar neoplasms
- iii. List indications for vulvar biopsy

### C. Cancer of Uterine Corpus

**Reading Assignment:** Beckmann, pp 406-414

**Learning Objectives:**

- i. List risk factors for endometrial hyperplasia/cancer
- ii. Describe symptoms and physical findings

- iii. Outline the causes of endometrial hyperplasia/cancer
- iv. Describe methods to diagnose endometrial carcinoma
- v. Understand impact of staging on management and prognosis
- vi. Describe management of the patient with endometrial cancer

#### **D. Ovarian and Adnexal Disease**

**Reading Assignment:** Beckmann, pp 415-426

**Learning Objectives:**

- i. Describe the initial management of a patient with an adnexal mass
- ii. Compare the characteristics of:
  - a. Functional cysts
  - b. Benign ovarian neoplasms
  - c. Carcinomas
- iii. List the risks factors and protective factors for ovarian cancer
- iv. Describe the symptoms and physical findings associated with ovarian cancer
- v. Describe the three histologic categories of ovarian neoplasm
  - a. Epithelial
  - b. Gonadal
  - c. Germ Cell
- vi. Understand the impact of staging on management and prognosis

#### **E. Gestational Trophoblastic Disease**

**Reading Assignment:** Beckmann, pp 374-378

**Learning Objectives:**

- i. Describe symptoms and physical examination findings of gestational trophoblastic disease
- ii. Describe diagnostic methods for GTN including molar pregnancy
- iii. List the treatment options and follow-up for GTN including molar pregnancy
- iv. Recognize the difference between molar pregnancy and GTN

### **23. Sexual Assault/Domestic Violence**

**Reading Assignment:** Beckmann, pp 312-319

**Learning Objectives:**

- i. Identify patients at increased risk for sexual assault
- ii. Describe the medical and psychosocial management of a victim of sexual assault
- iii. Cite prevalence and incidence of violence against women, elder abuse and child abuse
- iv. Demonstrate screening methods for domestic violence
- v. Communicate the available resources for a victim of domestic violence including short-term safety

### **24. Sexuality and Modes of Sexual Expression**

**Reading Assignment:** Beckmann, pp 304-311

**Learning Objectives:**

- i. Obtain a sexual history, including sexual function and sexual orientation
- ii. Describe the physiology of the female sexual response
- iii. Describe the common patterns of female sexual dysfunction
  - a. Female arousal disorder
  - b. Female orgasmic disorder
  - c. Genitopelvic pain/penetration disorder
- iv. Identify the physical, psychological and societal impact on female sexual functions

Osteopathic Manipulative Medicine and the Osteopathic approach to clinical cases are covered in the monthly workshops and tested on the OMM end-of-rotation exams. Students are responsible for reviewing the OMM Syllabus and meeting the learning objectives covered in each month's workshop.