COURSE SYLLABUS

I. Rotation Description
The clinical rotation in Reproductive Endocrinology and Infertility will involve direct participation in the care of patients in the ambulatory clinic, outpatient ultrasound suites, operating room and inpatient hospital services. The student will gain experience in the management of both routine and complicated post-operative patients and will also assist in surgical procedures, including assisted reproduction and ultrasound procedures. Didactic sessions including lectures, journal club, chapter reviews, and research meetings may supplement the core clinical experience.

II. Rotation Goals
The medical student will acquire and demonstrate knowledge about core areas in reproductive endocrinology and infertility, including:

a. The basic principles of hormone action including:
   i. Changes in the hypothalamic-pituitary-ovarian axis and target organs in puberty
   ii. Normal sequence of pubertal events and ages at which changes occur
   iii. Normal hormonal changes in menopause and perimenopause
b. Laboratory assessment of reproductive hormones
c. The epidemiology, pathophysiology, usual presentation and means of diagnosis as well as common treatment methods for the following areas encountered in reproductive medicine:
   i. Androgen excess and hirsutism
   ii. Androgen deficiency in women
   iii. Polycystic ovary syndrome
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iv. Recurrent pregnancy loss
v. Menopause, including premature ovarian failure
vi. Endocrine aspects of female obesity
vii. Endometriosis
viii. Uterine diseases including abnormal uterine bleeding
ix. Osteopenia and osteoporosis
d. Pharmacologic actions of medications frequently used in reproductive medicine including clomiphene, letrozole, metformin and gonadotrophins with or without GnRH agonists or antagonists, dopamine agonists, thyroid hormones, hormone replacement including selective estrogen receptor modulators (SERMs) and oral contraceptives
e. Familiarity with the usual presentation, evaluation and common treatment methods for the following disorders:
   i. Disorders of sexual development
   ii. Disorders of puberty and amenorrhea
   iii. Disorders of the hypothalamic system
   iv. Disorders of the adrenal gland and the thyroid gland
f. Familiarity with the evaluation and management of an infertile couple including:
   i. Male infertility
   ii. Tubal disorders
   iii. Uterine disorders
   iv. Ovulatory disorders, ovulation induction for anovulation and unexplained infertility
   v. Assisted reproductive technology, clinical and laboratory aspects
   vi. Fertility preservation in cancer and reproductive aging

III. Rotation Design
The rotation in Reproductive Endocrinology will involve direct participation in the care of patients in the operating room, outpatient office setting and inpatient hospital.

IV. Credits
4 week course = 4 credit hours (MED 8400, MED 8410, MED 8420 or MED 8430)

V. Suggested Textbook and References

VI. Course Grading/Requirements for Successful Completion of the Reproductive Endocrinology Rotation
a. Attendance according to VCOM and preceptor requirements
b. Preceptor Evaluation at end-of-rotation

Grading policies, academic progress, and graduation requirements may be found in the College Catalog and Student Handbook at: http://www.vcom.vt.edu/catalog/.

VII. Clinical Performance Objectives
The end-of-rotation evaluation for this rotation will be completed by your preceptor and 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.

a. Communication - the student should demonstrate the following clinical communication skills:
   1. Effective listening to patient, family, peers, and healthcare team
   2. Demonstrates compassion and respect in patient communications
   3. Effective investigation of chief complaint, medical and psychosocial history specific to the rotation
   4. Considers whole patient: social, spiritual & cultural concerns
   5. Efficiently prioritizes essential from non-essential information
   6. Assures patient understands instructions, consents & medications
   7. Presents cases in an accurate, concise, well organized manner

b. Problem Solving – the student should demonstrate the following problem solving skills:
   1. Identify important questions and separate data in organized fashion organizing positives & negatives
   2. Discern major from minor patient problems
   3. Formulate a differential while identifying the most common diagnoses
   4. Identify indications for & apply findings from the most common radiographic and diagnostic tests
   5. Identify correct management plan considering contraindications & interactions

c. Clinical Skills - the student should demonstrate the following problem solving skills:
   1. Assesses vital signs & triage patient according to degree of illness
   2. Perform good auscultory, palpatory & visual skills
   3. Perform a thorough physical exam pertinent to the rotation

d. Osteopathic Manipulative Medicine - the student should demonstrate the following skills in regards to osteopathic manipulative medicine:
   1. Apply osteopathic manipulative medicine successfully when appropriate
   2. Perform and document a thorough musculoskeletal exam
   3. Utilize palpatory skills to accurately discern physical changes that occur with various clinical disorders
   4. Apply osteopathic manipulative treatments successfully

e. Medical Knowledge – the student should demonstrate the following in regards to medical knowledge:
   1. Identify & correlate anatomy, pathology and pathophysiology related to most disease processes
   2. Demonstrate characteristics of a self-motivated learner including demonstrating interest and enthusiasm about patient cases and research of the literature
   3. Are thorough & knowledgeable in researching evidence based literature
   4. Actively seek feedback from preceptor on areas for improvement
   5. Correlate symptoms & signs with most common diseases

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

g. Osteopathic Manipulative Medicine Components
   Students must be familiar with the OMM didactic and workshop requirements for their OMS-4 year as described in the Osteopathic Manipulative Medicine website.