COURSE SYLLABUS

I. Rotation Description
Student will develop a basic understanding of common orthopedic conditions/injuries, diagnose common orthopedic conditions/injuries by examination and/or radiographic means, develop skills to stabilize/refer common orthopedic injuries and distinguish among elective, non-emergent and emergent scenarios dealing with orthopedic trauma and when to appropriately refer.

II. Rotation Goals
a. Read an orthopedic x-ray (bony anatomy, fracture location/pattern, displacement/angulation, etc.)
b. Perform a good shoulder and knee exam
c. Administer basic shoulder and knee injections
d. Perform basic suturing skills and principles
e. Describe basic orthopedic principles and corresponding treatments (both surgical and non-surgical) for:
   1. carpal tunnel syndrome
   2. hip fractures
   3. ankle fractures
   4. wrist/forearm fractures
   5. growth plate injuries
   6. rotator cuff tears
   7. meniscus/ACL tears
   8. management of arthritis (hip, knee and shoulder)
   9. common orthopedic emergencies (open fractures, dislocations, compartment syndrome, etc).
III. Rotation Design
The Orthopedics rotation occurs in the hospital setting in the operating room and in an office setting.

IV. Credits
4 week course = 4 credit hours

V. Suggested Textbook and References
a. The Journal of the American Academy of Orthopaedic Surgeons (JAAOS)
b. Physical Examination of the Spine and Extremities (Hoppenfeld)
c. Surgical Exposures in Orthopaedics (Hoppenfeld, deBoer)
d. Skeletal Trauma (Browner, Jupiter, et al.)
e. Green's Operative Hand Surgery
f. Textbook of Arthroscopy (Miller, Cole)
g. Campbell's Operative Orthopedics (Canale, Beatty), 11th e
   1. carpal tunnel syndrome – pgs.4285-4298
   2. hip fractures – 3237-3286
   3. ankle fractures – 3086-3117
   4. wrist/forearm fractures – 3441-3453,3425-3441
   5. growth plate injuries – 1533-153
   6. rotator cuff tears – 2614-2624, 2965-2966
   7. meniscal and ACL tears – 2421-2432, 2823-2845, 2496-252
   8. arthroplasty of hip, knee and shoulder – 312-466, 241-300, 483-524

VI. Course Grading/Requirements for Successful Completion of the Orthopedics 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.