I. Rotation Description
Students will develop understanding and knowledge in the recognition and management of medical, surgical, and behavioral problems of infants, children and adolescents in the hospital setting. To take on primary responsibility of the patient and function as a team player with residents, attendings, nurses, ancillary staff and all others involved in the care of the patient, including the coordination of care of your patient during hospitalization and in planning for discharge.

II. Rotation Goals
a. Provide patient care that is compassionate, appropriate and effective for the treatment of health problems.
b. Independently collect both focused and comprehensive, developmentally appropriate patient histories
c. Independently perform both focused and comprehensive, developmentally appropriate physical examinations
d. Synthesize information to formulate a differential and primary diagnosis
e. Develop a prioritized and inclusive problem list
f. Identify the reason for the patient’s admission
g. Summarize interval patient information and rationale for ongoing clinical management
h. Recognize patient requiring immediate attention by supervising physician
i. Suggest appropriate diagnostic tests for the patient’s chief completing and other medical problems
j. Modify the primary diagnosis based upon interpretation of diagnostic studies
k. Demonstrate family-centered approach to patient care (e.g., incorporating patient and family perspectives into the management plan)
l. Develop a prioritized management plan with the health care team and describe a rationale for the clinical plan
m. Identify patient discharge needs and include in the daily plan
n. Manage time effectively in completing patient care tasks
o. Identify relevant clinical information necessary for patient-care exchanges
p. Reassess patients continuously (e.g., when assuming care, throughout the day and throughout the hospital course)
q. Formulate appropriate orders
r. Demonstrate the appropriate utilization of consultants, including social workers, nutritionists and physical therapists during hospitalization
s. Prepare prescriptions
t. Practice appropriate infection control measures while caring for patients
u. Recognize how clinical uncertainty affects patient care

III. Rotation Design
The Pediatrics AI rotation occurs in pediatric and community hospitals involved in the inpatient care of pediatric patients.

IV. Credits
4 week course = 4 credit hours

V. Suggested Textbook and References
a. www.clippcases.org
   CLIPP: Computer-Assisted Learning in Pediatrics Projects. Requires registration. Passwords will be created automatically for anyone with a vcom.vt.edu email address.
c. Nelson Textbook of Pediatrics, 18th edition (available online in VCOM library)

VI. Course Grading/Requirements for Successful Completion of the Pediatrics AI 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.
VIII. Curriculum
   a. Describe sufficient knowledge to provide patient care with appropriate supervision
   b. Describe the epidemiology, pathophysiology and clinical findings of common pediatric conditions that require hospitalization
   c. Describe the diagnostic evaluation and management of hospitalized patients with the following conditions:
      1. Abdominal pain or distention
      2. Altered mental status (e.g., irritability, lethargy, seizure)
      3. Fluid, electrolyte and acid-base disturbances
      4. Fever (including immunocompromised patients)
      5. Musculoskeletal pain or swelling
      6. Respiratory distress
   d. Describe how age and development influence clinical findings and epidemiology of common pediatric conditions
   e. Identify criteria for admission and discharge from hospital
   f. Recognize variations in common laboratory findings and vital signs, e.g.
      1. Heart rate, respiratory rate and blood pressure
      2. BUN and creatinine
      3. Cerebrospinal fluid
      4. Complete blood count and differential
      5. Chest x-ray
   g. Describe the signs and symptoms that suggest deterioration (including signs of shock and respiratory failure) or improvement of a patient’s clinical condition
   h. Describe the impact of chronic illness of a patient’s clinical findings and management
   i. Describe principles of pain assessment and management
   j. List drugs of choice and rationale for their use in common pediatric illnesses
   k. Calculate doses of medication based on age, weight, body surface area and diagnosis
   l. Identify contraindications to therapeutic drug use in children of different ages and/or diagnoses
   m. Calculate fluid and electrolyte requirements for children based on weight, caloric expenditure, diagnosis and fluid status
   n. Describe the elements of informed consent
   o. Describe the indications, contraindications, risks and benefits of the following procedures:
      1. Arterial puncture
      2. Intravenous catheter insertion
      3. Lumbar puncture
      4. Nasogastric tube insertion
      5. Urethral catheterization
      6. Venipuncture
   p. List the indications for emergency vascular access
   q. Recognize opportunities for preventive services in hospitalized patients