I. Course Description
The Foundations of Clinical Medicine (FCM) II and Health System Sciences course provides a comprehensive curriculum designed to assist students in improving their mastery of core fundamental concepts in the areas of physician-patient communication, health systems sciences, and the business of medicine. The content is delivered online and is self-paced.
II. Course Design

A. Educational Modules
Online educational modules and other formats of delivery are used. Each student must complete all designated components of each module to assure the expected basic content has been acquired during the course. Students should plan to spend approximately 2 hours to complete each module.

B. Formative Evaluation
The COMSAE Phase 2 exam serves as the comprehensive medical knowledge exam to measure cumulative medical knowledge gained in the OMS 3 year. A passing score on COMLEX Level 1 is a prerequisite for taking COMSAE Phase 2. Demonstrating competency in comprehensive medical knowledge is required for entering the OMS 4 year. Students who are following an Altered Degree Plan of Study are required to meet with the Associate Dean for Clinical Affairs and CIFSS to determine the approved date of their COMSAE Phase 2 exam.

III. Credits
MED 8006 - 2 credit hours

IV. Course Text

V. Course Grading and Requirements for Successful Completion

A. Course Requirements
The course includes the following components:
• Completion of 11 online modules covering selected topics in Health Systems Sciences. Submission of the final series transcript (that shows all of the required modules as complete) to Canvas is due by 5 PM, Sunday, January 10, 2021.
  o Accessing the modules requires creating a free account on the American Medical Association website at: https://ama-assn.org.
    ➢ To create a new account:
      ▪ Click “Sign in” in the top right corner.
      ▪ Click “Create free account” in the dropdown.
      ▪ Follow the directions to set up your account.
    ➢ To access modules:
      ▪ Click https://edhub.ama-assn.org/health-systems-science
      ▪ Click “Browse All Modules”. The required modules and a few more will be listed. Click on the module you need to complete.
      ▪ Click on the “Module” button to begin.
      ▪ You will know that you have received credit for the module when you see the green box to the right of the course name under the list of courses and when you can download the certificate.
    ➢ To complete quizzes:
      ▪ Upon completion of the module, you must complete the quiz and the evaluation. You may have to go back to the list of modules and click on the module name to access the quiz.
    ➢ To submit the final series transcript that shows all of the required modules as
completed:

- Download the final series transcript into Canvas at: https://canvas.vcom.edu/login/ldap and save with the following file title format: Last Name, First Name_Final. For example: Jones, John_Final.

- Prepare for COMLEX Level 2 CE and sit for COMSAE Phase 2
- Attendance at the Class of 2021 Clinician Symposium at the student’s home campus during the End-of-Year testing week

B. Grading

FCM II and the Health Systems Science and the Business of Medicine is a Pass/Fail course. Students must complete all course requirements to pass the course. The following requirements must be met to pass the course:

<table>
<thead>
<tr>
<th>Course Item</th>
<th>Grade Required</th>
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<tbody>
<tr>
<td>11 AMA Health System Science Learning Series Modules</td>
<td>• 80% on higher on each module quiz</td>
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<tr>
<td></td>
<td>• Submission of the final series transcript</td>
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<td>that shows all required modules as complete</td>
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<tr>
<td>Prepare for COMLEX Level 2 CE and sit for COMSAE Phase 2 per home campus schedule</td>
<td>Pass</td>
</tr>
<tr>
<td>Attend the Clinical Symposium at home campus during</td>
<td>Pass</td>
</tr>
<tr>
<td>the end-of-year-testing week</td>
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C. Failure of the Course

Students who fail the course will be referred to the Promotion 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.

If a student fails to upload the AMA Health System Science Learning Series final series transcript into Canvas and/or fails to sit for COMSAE Phase 2 or attend the Clinical Symposium as scheduled, the student will receive an “F” grade for the course and will be brought before the Promotion Board. If the student is allowed to repeat the course, all components of the course must be repeated. In this case, the “F” grade remains the permanent grade for the initial course and the student will receive a new grade for the repeated course. The grade will be recorded in a manner that designates that it is a repeated rotation (eg. R-pass).

VI. Academic Expectations

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

VII. 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 at: http://www.vcom.edu/handbooks/catalog/index.html

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* at: [http://www.vcom.edu/handbooks/catalog/index.html](http://www.vcom.edu/handbooks/catalog/index.html)

VIII. Syllabus and Rotation Schedule
Please use this syllabus as a guide, paying particular attention to the learning objectives as an outline of what you are expected to know for each topic/module. Refer to the rotation calendar for specific dates of exams.

The faculty of the course will make every effort to adhere to the syllabus and rotation schedule; however, the Office of Clinical Affairs reserves the right to make changes to the syllabus; including changes to examinations, quizzes, modules, homework or other assignments; and/or the schedule with as much advance notice as possible. These changes will be communicated to the students in writing via Canvas or email.

IX. Health Systems Science Modules
Providing high quality, cost-effective health care not only requires clinical knowledge and skills, but is also dependent on physicians understanding the system in which health services are delivered. Gonzalo, Starr, and Borken define Health Systems Sciences as “…principles, methods, and practice of improving quality, outcomes, and costs of health care delivery for patients and populations within systems of medical care.” Examples of concepts that impact health are population health management, social determinants of health, health systems improvement, teamwork, and health care policy and reform.

The American Medical Association (AMA) created the Health Systems Science Learning Series to help medical students understand the delivery of health care, how health professionals collaborate to deliver care, and how the health system can improve the delivery of health services and patient outcomes. The content in the learning series is included in the NBOME Blueprint that is utilized to develop board exams.

1. **Online Module: What is Health Systems Science?**
   **Reading Assignment:** Chapter 1: What is Health Systems Science? Building an Integrated Vision
   **Learning Objectives:**
   a. Describe why health systems science is an important component of health professional training, critical for successful functioning is the health care system.
   b. Identify the domains of health systems science.
   c. Describe how health systems science synergizes, complements and intersects with basic and clinical sciences.
   d. Explain how the integration of health systems science with basic and clinical sciences can maximize health for patients and society.

2. **Online Module: What to Know about Health Care Delivery Systems**
   **Reading Assignments:** Chapter 3: The Health Care Delivery System
   **Learning Objectives:**
   a. Identify the objectives, structures, processes, and outcomes of the current health care systems in the United States.
   b. Describe the ideal outcomes of health care systems.
   c. Recognize how current health care systems are influenced by payment models and How this impacts patient care and the Triple Aim of better outcomes
      i. improved patient experience,
      ii. lower costs
      iii. better outcomes
iv. and the Quadruple Aim that also works to ensure health care provider wellness and prevent burnout.
d. Examine how improvement strategies, population management, and data analytics can close gaps in health care systems regarding the Triple and Quadruple Aims.

3. **Online Module: How Systems Thinking Applies to Health Care**
   **Reading Assignment:** Chapter 2: Systems Thinking in Health Care: Addressing the Complex Dynamics of Patients and Health Systems
   **Learning Objectives:**
   a. Define systems thinking.
   b. Explain the importance of systems thinking in clinical care.
   c. Identify how a health system fits the definition of a complex system.
   d. List the habits of systems-thinking health professionals and how they can be applied to improve clinical care.

4. **Online Module: Introducing Health Care Policy and Economic**
   **Reading Assignment:** Chapter 14: Health Care Policy and Economics?
   **Learning Objectives:**
   a. Define the core principles of the formation and implementation of health care policy in the United States.
   b. Explain the economic aspects of the U.S. health care system.
   c. Describe how health care professionals, health plans and patients affect health care spending.
   d. Identify central themes of health care reform in the US over the last century and how they relate to the main components of the Affordable Care Act.

5. **Online Module: What are the Components of Value-Based Care?**
   **Reading Assignment:** Chapter 5: Value in Health Care
   **Learning Objectives:**
   a. Explain the concept of value and how it applies to health care.
   b. Summarize the current state of value in U.S. health care.
   c. Describe the essential components of an ideal high-value health care system.
   d. Identify the key barriers to patient-centered, high value care.
   e. List strategies physicians can use to promote high-value care.

6. **Online Module: What are the Social Determinants of Health?**
   **Reading Assignment:** Chapter 12: Structural and Social Determinants of Health
   **Learning Objectives:**
   a. Describe the types of social determinants of health and how each can impact health outcomes.
   b. Explore the relationship between social determinants of health and health disparities.
   c. Identify social determinants of health during clinical encounters.
   d. Describe how physicians and health providers, health systems and communities can address social determinants of health to improve outcomes and health equity.

7. **Online Module: Understanding and Improving Population Health**
   **Reading Assignment:** Chapter 11: Population Health
   **Learning Objectives:**
   a. Identify the basic principles of patient safety.
   b. Explain how medical errors are classified.
c. Describe the elements of full disclosure and apology when addressing those affected by medical errors.

d. Recognize how human factors, systems thinking, and “Just Culture” can improve patient safety.

8. **Online Module: Essentials of Quality Improvement**  
**Reading Assignment:** Chapter 7: Quality Improvement  
**Learning Objectives:**  
a. Define quality improvement.  
b. Identify the types of quality measures and data sources used in health care.  
c. Differentiate four quality improvement methods frequently used in health care.  
d. Describe interventions to address common health care quality issues.  
e. Describe factors contributing to sustainability of improvement efforts.

9. **Online Module: Recognizing a Physician’s Role in Patient Safety**  
**Reading Assignment:** Chapter 6: Patient Safety  
**Learning Objectives:**  
a. Identify the basic principles of patient safety.  
b. Explain how medical errors are classified.  
c. Describe the elements of full disclosure and apology when addressing those affected by medical errors.  
d. Recognize how human factors, systems thinking, and “Just Culture” can improve patient safety.

10. **Online Module: Establishing Essential Leadership Behaviors**  
**Reading Assignment:** Chapter 9: Leadership in Health Care  
**Learning Objectives:**  
a. Identify the factors that make leadership training a priority for physicians.  
b. List the key competencies of health care leadership.  
c. Explain the concept of professional identity formation as it relates to leadership.  
d. Describe pathways to formal leadership roles across multiple health care domains.

11. **Online Module: What Makes Team-based Care Effective**  
**Reading Assignment:** Chapter 8: Principles of Teamwork and Team Science  
**Learning Objectives:**  
a. Describe the importance of teams to patient safety and patient-centered care.  
b. Identify who comprises a team and the hallmarks of effective teams.  
c. Explain the relationship of between teams and interprofessional practice.  
d. Describe the components of collaboration required to create effective teams.