CAMPBELL UNIVERSITY

Jerry M. Wallace
School of Osteopathic Medicine

SIMULATION MEDICINE (SIM)

OMED 770

COURSE SYLLABUS

Rotation Co-Directors:

Amanda W. Lee, PA-C
Director of Simulation Education
Phone: (910) 893-7061
Email: awlee@campbell.edu

David Tolentino, DO
Associate Dean of Clinical Affairs
Phone: (910) 893-1772
Email: tolentino@campbell.edu

Tiffany Lowe Clayton, DO, DABOM, MHPE
Director of Clinical Site Engagement and Development
Phone: (910) 893-5211
Email: lowepayne@campbell.edu

Teaching Faculty:

Dr. Robert Agnello
Email: agnello@campbell.edu

Dusty Barbour, EMT-P
Email: dbarbour@campbell.edu

Dr. Amanda Baright
Email: abaright@campbell.edu

Dr. Barbara Bethea
Email: bethea@campbell.edu

Dr. Kaitlin Bowers
Email: kbowers@campbell.edu

Dr. Bonnie Brenseke
Email: brenseke@campbell.edu

Dr. Anthony Bruno
Email: anthonybruno61@yahoo.com

Dr. James Cappola
Email: cappola@campbell.edu

Dr. Albino Chiodo
Email: achiodo@capefearvalley.com

Dr. Cathy Daniels
Email: cdaniels@campbell.edu

Dr. Phillip Deal
Email: pdeal@campbell.edu

Dr. Michelle deBlaquiere
Email: michellelangaker@gmail.com

Dr. Craig Fowler
Email: fowlerc@campbell.edu

Dr. Morgan Hawkins
Email: hawkinslmorgan@gmail.com

Dr. Kelly Holder
Email: kholder@campbell.edu

Dr. Brianne Holmes
Email: bholmes@campbell.edu

Dr. Christine Khandelwal
Email: ckhandelwal@campbell.edu

Dr. Lori Langdon
Email: llangdon@campbell.edu

Dr. Robert Larson
Email: rlarson@campbell.edu

Dr. Ashraf Mikhail
Email: amikhail@campbell.edu

Dr. Bonnie Page
Email: bonnieacorey@gmail.com

Dr. Nicholas Pennings
Email: pennings@campbell.edu

Dr. Jennifer Pensado
Email: jpensado@campbell.edu

Dr. Balichand Permashwar
Email: bpermashwar@campbell.edu

Dr. Sigal Peter-Wohl
Email: speterwohl@gmail.com

Dr. Jim Powers
Email: jpowers@campbell.edu

Dr. Briana Promutico
Email: promutico@campbell.edu

Dr. Varshaben Songara
Email: vsong@capefearvalley.com

Dr. Chris Stewart
Email: stewartc@campbell.edu

Dr. Robert Thiele
Email: rthiele@campbell.edu

Samantha Turnipseed
Email: norelli@campbell.edu

Dr. Prabhakar Vaidya
Email: vaidya@campbell.edu

Dr. Heather Weber
Email: hweber@campbell.edu

Credit/Week: 2.5/Week

Duration:4 weeks

Course Instructors: Per Clinical Rotation

Prerequisite: Successful Completion of 2nd Year

Start/End Dates: Per rotation schedule

Type of Experience: OSCEs, SDLs, skills stations and simulation activities

Course Overview:

This rotation is a response to the national trend for an increasing role of using high-fidelity patient simulation to perform invasive medical procedures and simulate patient experiences in a safe environment. The goal is to apply leading edge technology and educational theory to enhance student education and patient care. Additionally, the students will gain increased exposure to the processes and procedures they may experience on clinical rotations and upon entering residency.

Course Description:

Through the use of resources of CUSOM's Simulation Center, students have the opportunity to participate in virtual adult and pediatric simulation exercises through experiential learning, including the use of high-fidelity simulators and standardized patients. In this safe learning environment, students learn and apply many of the common clinical skills, hands-on procedures, and techniques for patient care they will experience in their upcoming clinical rotations. Participation in controlled scenarios ultimately improves patient care and critical thinking, thereby reducing medical errors. During this rotation, students have additional exposure to peer-to-peer interaction, facilitator-led instruction, mentoring, and teaching modules.

Textbook Requirements:

Required and recommended textbooks are listed below and on Blackboard.

Educational Materials:

Educational materials covered in class or in the simulation lab can be obtained via Blackboard. Instructors reserve the right to modify the course content as needed. All changes will be communicated, and additional lecture material may be posted on Blackboard.

Recommended Textbook(s)

1. The Clinical Medicine Consult 2020, C.G. Weber
2. Cecil Essentials Textbook of Medicine, Andreoli and Carpenter
3. Textbook of Family Medicine, Rakel
4. Comprehensive Gynecology, Katz
5. Nelson's Textbook of Pediatrics Essentials, Kleigman

Supplementary Resources:

1. www.uptodate.com , UpToDate, Inc., 2025

Osteopathic Resources:

1. Foundations of Osteopathic Medicine, AACOM, 3rd Edition, 2011

Grading:

Satisfactory/Fail

SATISFACTORY: Successful completion of all skills stations, OSCEs, simulation activities, and pass all SDLs by end of rotation (July 12, 2025 @ 12pm) -- (at or above 70% unless otherwise specified per SDL module).

FAIL: Failure to successfully complete all skills stations, OSCEs, simulation activities, and SDLs by end of rotation (July 12, 2025 @ 12pm), unless alternate arrangements have been made with the Course Director(s).

Please refer to the Academic Bulletin regarding CUSOM grading policies and procedures. Failure will be handled in accordance with the policies published in the Academic Bulletin.

Attendance:

Attendance is mandatory for all sessions following the policy in the Academic Bulletin & Clinical Rotation Manual. No discretionary days are allowed.

Honor Code:

The CUSOM Honor Code is based on the fundamental belief that every student is worthy of trust, and trusting a student is an integral component in making them worthy of trust. A full description of the CUSOM Honor Code can be found on the CUSOM website and specific information regarding the honor code can be downloaded from the download area of the honor code section.

Dress Code:

Professional dress is required for all rotations. Please refer to the Academic Bulletin & Clinical Rotation Manual regarding the CUSOM dress code.

Course Specific Instructions: Unless otherwise noted, students should follow the CUSOM dress code. During the simulation rotation, students must wear either professional attire or clean scrubs with a matching top and bottom. Scrubs are acceptable for suturing, simulations, scrubbing/gowning/gloving/OR, central lines, and lumbar punctures. A clean, short, white lab coat with a Campbell University patch is required for Sims 1 and 2, OSCE+, Palliative Care, and Discovery Day. No open-toed shoes or sandals are allowed while in the lab.

Assessments:
Practical skill sessions and examinations will be given according to the schedule (e.g., ACLS and BLS). Completing the required exercise on the scheduled date at the appointed time is mandatory. If there is a conflict, the student must follow the institutional protocols found in the Academic Bulletin & Clinical Rotation Manual.

To avoid disruption, students are not permitted to ask questions during an examination, quiz, or practical unless otherwise indicated by the instructor. If there is a problem with an activity or exercise, the student should make a note, and the course instructors will address it appropriately.

The student must attend and participate in all skills stations and simulation activities including:

1. Prep ACLS
2. ECG
3. Preparation for and execution of Discovery Day: Pathways to Healthcare teaching program
4. *RAD 1 Chest (live virtual session)*
5. *RAD 2 Abd (live virtual session)*
6. *RAD 3 MSK-Neuro (live virtual session)*
7. Scrubbing, Gowning, Gloving, OR orientation
8. Lumbar Puncture
9. Central Line
10. Advanced Suturing
11. *Note Writing (live virtual session)*
12. Ultrasound Training
13. Eye Exam
14. Sim Trauma/Geriatric
15. Sim Pediatric
16. Sim BLS Practice and Test
17. Sim ACLS Practice and Test
18. OBGYN
19. OSCE+
20. Sim MCI
21. Palliative Care
22. Professional Development

23. Opioid Training
24. Summary of Clinical Clerkship
25. Psych
26. Obesity Medicine

The student must also complete and pass all SDLs including:

1. Transducer Orientation, Probe Manipulation, & Image Optimization
2. Ultrasound in Emergency & Critical Care
3. Ultrasound in Obstetrical Emergencies
4. Wound Care
5. Pediatrics
6. ECG online module
7. PFT/EKG placement module
8. Trauma Management
9. OR Instruments
10. Errors in Sterile Technique
11. HeartCode BLS
12. HeartCode ACLS
13. Radiology – MSK/Neuro
14. Radiology – Chest
15. Radiology – Abdominal
16. Ophthalmology
17. OB/GYN modules
18. OSHA and Bloodborne Pathogens
19. HIPAA
20. iPASS
21. Opioid Training
22. Palliative Care
23. Learning resources
24. Summary of Clinical Clerkship
25. ICC (Introduction to Clinical Clerkship)

If any of the above areas receive a failing grade (below 70% or as otherwise specified per SDL module) and/or are not completed on time, retesting of that specific area is required. Arrangements for retesting, when necessary, must be made with the Course Director within 24 hours of notification of results. If required to retest, the maximum possible score achievable for that retest will be 70%.

NOTE – SDLs are due by 7/12/25 at 12:00pm unless otherwise specified (Check Bb)	
SDL 1: Transducer Orientation, Probe Manipulation, & Image Optimization = 10 pts	SDL 14: CHEST Rad = 9 pts
SDL 2: Ultrasound in Emergency & Critical Care = 10 pts	SDL 15: ABD Rad = 8 pts
SDL 3: Ultrasound in Obstetrical Emergencies = 10 pts	SDL 16: Ophthalmology = 4 pts
SDL 4: Wound Care = 4 pts	SDL 17: OB/GYN modules = 30 pts
SDL 5: Pediatrics = 14 pts	SDL 18: OSHA & Bloodborne Pathogens = 15 pts
SDL 6: EKG online module = 320 pts	SDL 19: HIPAA = 15 pts
SDL 7: PFT/EKG Placement module = 10 pts	SDL 20: iPASS = 20 pts
SDL 8: Trauma Management = 6 pts	SDL 21: Opioid Training = 35 pts
SDL 9: OR Instruments = 14 pts	SDL 22: Palliative Care = 5 pts
SDL 10: Errors in Sterile Technique = 35 pts	SDL 23: Learning Resources = 10 pts
SDL 11: HeartCode BLS = 10 pts. If late = 7 points (Due by 5pm the day before you are scheduled to perform hands-on test)	SDL 24: Summary of Clinical Clerkship = 10 pts
SDL 12: HeartCode ACLS = 10 pts. If late = 7 points (Due by 5pm the day before you are scheduled to perform hands-on test)	SDL 25: ICC = 42 pts
SDL 13: MSK/NEURO Rad = 9 pts	

Simulation Medicine Student Learning Objectives

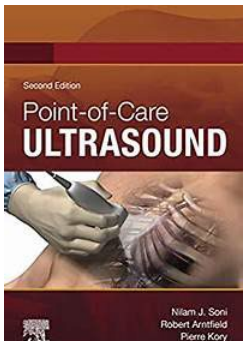
Skill	Objectives
Advanced Suturing	**Prior to Session** 1. Review Suturing Handout on Blackboard 2. Watch Suturing and Hand Tying Videos on Blackboard
	At the conclusion of this session, students should be able to 1. Demonstrate proper technique use of suture instruments 2. Practice simple interrupted suturing 3. Demonstrate proper placement of 4 simple interrupted sutures 4. Practice running subcuticular suturing 5. Review one and two hand surgical knot tying 6. Demonstrate proper execution of 4 one-hand knots 7. Demonstrate proper execution of 4 two-handed knots
Lumbar Puncture	**Prior to session** Review the PowerPoint and check sheet posted on Blackboard View the following video: Lumbar Puncture Video http://www.nejm.org/doi/full/10.1056/NEJMvcm054952
	At the conclusion student should be able to 1. Identify pertinent anatomical structures for lumbar puncture (LP) 2. Discuss indications, contraindications, and complications of lumbar puncture 3. Demonstrate the process of performing a lumbar puncture
Central Line	**Prior to session** Review the PowerPoint posted on BlackBoard View the following video: Central Line placement http://www.nejm.org/doi/full/10.1056/NEJMvcm055053
	At the conclusion student should be able to 1. Identify pertinent anatomical structures for central line placement 2. Discuss indications, contraindications, and complications of central line placement 3. Demonstrate the process of placing a central line

Skill	Objectives
Palliative Care	**Students will be able to work as an interprofessional team to** 1. Provide anticipatory guidance to family about the final hours of life for the patient, ensuring culturally appropriate discussions based on patient and family preferences. 2. Assess the needs for symptom management in the final hours of life using both your physical examination and FLACC tool for the following: a. respiratory distress b. secretion management, c. pain management 3. Conduct conversations using the SPIKES tool with families about myths of medications to use for symptom management at the end-of-life. 4. Provide anticipatory guidance with family about bereavement and grief support.
Professional Development	**At the conclusion of this session, students should be able to** 1. Identify elements that will help clinical learners form a professional identity 2. Describe professionalism as it applies to a clinical learning environment 3. Describe best ways to incorporate themselves into rotations 4. Describe some common mistakes that medical students on rotation make that can negatively affect their evaluations 5. Form professional habits appropriate for physicians 6. Reflect on how the transition to clinical years will affect their personal stress, wellbeing, and self-care
Scrubbing/Gowning/ Gloving/OR Orientation	**Prior to session** 1. Review video for Scrubbing, Gowning, Gloving
	At the conclusion of this session students should be able to 1. Demonstrate proficiency in scrub technique 2. Demonstrate proficiency in independent gowning and gloving of self 3. Demonstrate proficiency in maintaining sterile technique during session 4. Demonstrate proficiency in OR traffic patterns 5. Demonstrate proficiency in changing a contaminated glove 6. Demonstrate proper removal of contaminated gown and gloves 7. Demonstrate dispensing sterile supplies on a sterile field 8. Prep a patient in the OR 9. Drape patient for procedure 10. Maintain sterile field while draping 11. Demonstrate OR etiquette 12. Define roles in the OR
Prep ACLS	**At the conclusion of this session, students should be able to** 1. Demonstrate an understanding of all ECG rhythms needed to successfully complete ACLS based on the 2020 guidelines under the instruction of an AHA ACLS Instructor **2.** Demonstrate an understanding of all Pharmacology needed to successfully complete ACLS based on the 2020 guidelines under the instruction of an AHA ACLS Instructor

Skill	Objectives
Eye training	**Prior to Session** 1. Eye SDL 2. The Clinical Medicine Consult 2020: www.clinicalmedconsult.com Chapter: Ophthalmology, Sections: Exam, Pupils, Fundus, External Eye, Eyelid, Various S & S, Trauma, Dry Eye, Red Eye
	At the conclusion of this session, students should be able to 1. Review proper use of the ophthalmoscope 2. Demonstrate identification of normal and abnormal findings related to fundoscopic examination 3. Review basic slit lamp operation
Note/Order Writing	**Prior to Session** Review what has been posted on BlackBoard The Clinical Medicine Consult 2020. www.clinicalmedconsult.com Chapter: Standard Orders & Notes; Concentrate on Rounds, Standard Admission Orders, Daily Rounds for Trainees, CCU Admission Orders, The ICU Note, Hospital Discharge Summary, Avoiding Malpractice risks in the patient handoff, HANDOFF mnemonic, SIGNOUT mnemonic
	At the conclusion of this session, students should be able to 1. Review the basic components of SOAP notes 2. Write ICU notes compared to SOAP notes 3. Write ICU Orders 4. Write Admit Orders 5. Identify the Components of Discharge Summary
ECG	**At the conclusion of this session, students should be able to:** 1. Summarize elements of an ECG 2. Demonstrate a standardized method for ECG interpretation 3. Interpret ECGs in case presentation format 4. Formulate appropriate management plans for patients portrayed in the cases
RAD 1 Chest	**Prior to Session** Completion of correlating SDL
	At the conclusion of this session, students should be able to 1. Demonstrate reading of basic chest radiographs aloud to peers in a systematic way with assistance from a radiologist

Skill	Objectives
RAD 2 Abdomen	**Prior to Session** Completion of correlating SDL
	At the conclusion of this session, students should be able to 1. Demonstrate reading of basic abdominal radiographs aloud to peers in a systematic way with assistance from a radiologist
RAD 3 MSK and Neuro	**Prior to Session** Completion of correlating SDL
	At the conclusion of this session, students should be able to 1. Demonstrate reading of basic musculoskeletal and neurological radiographs aloud to peers in a systematic way with assistance from a radiologist
OSCE +	**Prior to Session** 1. SDLs for Radiology
	At the conclusion of this session, students should be able to 1. Demonstrate obtaining an accurate history and physical 2. Demonstrate accurate documentation of a history and physical in a SOAP format for the medical record 3. Demonstrate accurate interpretation of EKG, labs, and/or radiographs 4. Demonstrate accurate documentation of interpretation of EKG, labs, and/or radiographs in a SOAP format for the medical record 5. Demonstrate an efficient and accurate verbal report to an attending, including interpretation of EKG, labs, and radiographs in front of peers 6. Demonstrate development of an assessment and plan for patient 7. Demonstrate accurate documentation of an assessment and plan in a SOAP format 8. Demonstrate accurate writing of prescriptions 9. Demonstrate teamwork 10. Demonstrate professionalism during rounds 11. Demonstrate engagement in collegial discussion of medical problems and treatment plans 12. Demonstrate ability to clearly communicate a plan of care with patients 13. Discuss integration of OMM techniques into simulated patient care 14. Properly discuss OMM techniques appropriate to clinical case 15. Properly document OMM in the medical record

Skill	Objectives
Sim 1-2	**Prior to Session** • Review SDL 8 (Trauma Management) • Students must complete Pediatric SDL – Pediatric Drugs and IV Fluid Management
	Expectations • Team leader introduces all team members to any family and then discusses their roles • Discuss appropriate use of Personal Protective Equipment (PPE) • Identify and obtain relevant history • Perform a physical exam, explaining physical findings throughout the case • Identify primary condition of the patient • Verbally prioritize interventions and assign tasks • Perform tasks and verbalize completion to team leader and scribe • Demonstrate professionalism throughout the SIM • Demonstrate effective communication throughout SIM, which is Direct, Effective, Accurate, Therapeutic, and Confidential • Demonstrate effective teamwork • Demonstrate team debriefing post encounter with faculty support **Case Specific** • Order appropriate laboratory or radiographic testing • Appropriately interpret tests that have been ordered • Initiate appropriate interventions • Reassess after intervention has been completed
Sim MCI	**Prior to Session** Review PowerPoints on Blackboard
	At the conclusion of this session, students should be able to 1. Understand the adult START triage algorithm 2. Understand the pediatric START triage algorithm 3. Understand scene set-up and organization in a multi-casualty incident 4. Understand types of EMS training and transportation options 5. Be confident in their ability to take part in a multi-casualty incident
Peds	**At the conclusion of this session, students should be able to** 1. Understand calculations for medication dosing and IV fluid orders that are weight based, mg/kg, for treating common pediatric diseases 2. Learn about choking and drowning prevention, practice choking first aid 3. Review the current well child schedule including vaccinations 4. Learn the American Academy of Pediatrics well child schedule and developmental milestones

Skill	Objectives
OB/GYN	**Prior to Session** Labor: https://www.youtube.com/watch?v=8xz1Jbs972U C-Section: https://www.youtube.com/watch?v=8ZzwNcVYEjY Vaginal Birth: https://www.youtube.com/watch?v=C0QIAZJ_CuE Written Info on Pelvic Exam: https://stanfordmedicine25.stanford.edu/the25/PelvicExam.html Breast & Pelvic Exam: https://www.youtube.com/playlist?list=PLE6bR3gooUQuggWs08pg8MMgqJ91iQewf Pelvic Anatomy: https://youtu.be/YvOu7GUEsRg?si=Vl5dx4VObiEWAAWi **Skill Station** • Student will perform a simulated vaginal delivery • Student will be able to identify fetal positioning and cervical dilation • Student will perform a simulated pelvic exam • Student will perform laparoscopy training exercises **At the conclusion of this session, students should be able to** • Competently identify fetal positioning and cervical dilation • Competently delver a simulated baby • Competently perform a pelvic exam • Competently perform simulated laparoscopic training exercises
Point of Care Ultrasound	**Prior to Session** Soni, N. et al (2020). Point-of-Care Ultrasound **Link to eBook is provided in Ultrasound Folder* Chapter 8: Lung & Pleural Ultrasound Technique Chapter 9: Lung Ultrasound Interpretation Chapter 10: Pleura and Diaphragm Chapter 11: Lung and Pleural Procedures Chapter 12: Dyspnea and Pulmonary Embolism Chapter 22: Hypotension and Shock Chapter 33: Trauma Ultrasound Chapter 36: Central Venous Access Chapter 37: Peripheral Venous Access  Point of Care Ultrasound – Trauma W. Robert Leeper, Chapter 41, 350-358.e1Saunders, 2015 _____ **At the conclusion of this session, students should be able to** 1. Understand the key points for the FAST ultrasound exam 2. Look for fluid collections (RUQ, LUQ, Pelvis) 3. Evaluate for pericardial effusion 4. Review the key points for the BLUE and CLUE protocols 5. Recognize key points with the RUSH and SHOCK protocols 6. Discuss the use of ultrasound in central venous access procedures

Skill	Objectives
BLS	**At the conclusion of this session, students should be able to** 1. Demonstrate completion of the online modules and written testing according to American Heart Association standards for Basic Life Support Healthcare provider 2. Demonstrate skills testing according to American Heart Association standards for Basic Life Support Healthcare provider
ACLS	**At the conclusion of this session, students should be able to** 1. Demonstrate completion of the online modules and written testing according to American Heart Association standards for Advanced Cardiac Life Support Healthcare provider 2. Demonstrate skills testing according to American Heart Association standards for Advanced Cardiac Life Support Healthcare provider
Discovery Days: Pathways to Healthcare	**Professional Development** Research shows that incorporating professional development through peer teaching enhances medical education. In addition to enhancing clinical knowledge, engaging in peer educating has many benefits for medical students. Teaching is an essential component of the doctor-patient relationship, and exercises in peer-education can enhance communication skills for medical students. Additionally, medical students with a better understanding of teaching principles may become better learners. Sim month includes an opportunity for students to develop teaching and mentorship skills during Discovery Day: Pathways to Healthcare. Blanchard DS. Peer-teaching: an important skill for all medical students and doctors? Perspect Med Educ. 2015 Feb;4(1):6-7. doi: 10.1007/s40037-015-0157-0. PMID: 25605494; PMCID: PMC4348226. Dandavino M, Snell L, Wiseman J. Why medical students should learn how to teach. Med Teach. 2007 Sep;29(6):558-65. doi: 10.1080/01421590701477449. PMID: 17922358.

Skill	Objectives
Obesity Medicine	**At the conclusion of this session, students should be able to** 1. Recognize obesity as a chronic and complex disease 2. Develop a comprehensive care plan in the management of obesity utilizing the four pillars of obesity care 3. Utilize motivational interviewing to support patients in adopting healthy lifestyle changes for weight management. 4. Formulate a treatment plan for obesity that incorporates appropriate pharmacotherapy based on individual patient characteristics. 5. Describe the role of bariatric surgery in the treatment of obesity
Psych	**At the conclusion of this session, students should be able to** 1. Recognize DSM (5) diagnostic categories. 2. Conduct a comprehensive psychiatric evaluation in clinical practice. 3. Develop a differential diagnosis of psychiatric disorders. 4. Select psychotropic medications. 5. Recognize basic ethical principles and examples of unethical behaviors. 6. Obtain informed consent and assess capacity 7. Evaluate suicidal patients and recognize suicide risk factors. 8. Be familiar with risk factors for violent behavior.

Course Objectives

By the end of the course, the learner will

1. Have the ability to perform minor procedures including, but not limited to
   a. Suturing
   b. Ophthalmologic Examination
   c. Patient Care Handoff and Sign-Out
   (EPA 8, 11 & 12; AACOM CC III.3.e.g.k.l.m.r.).
2. Learn and practice basic and advanced cardiac life support protocols to a nationally accepted standard (EPA 10, 13; AACOM CC III.3.h.).
3. Accurately assess electrocardiogram and basic radiographs (EPA 3; AACOM CC III.1.k., III.2.a.).
4. Improve cardiorespiratory physical diagnosis and radiographic interpretation skills (EPA 10; AACOM CC III. 3.d.e.g., lll.6.h.).
5. Practice the skills of
   a. Patient rounding
   b. Oral presentation skills to an attending physician
   c. Accurately document a patient encounter and provide written orders (EPA 1, 2, 3, 4, 5, 6, 7; AACOM CC I.4.a.b.c.e.g.h.i, II.1.b.d.e.f., II.3.a.c.d.e.g, III.1.b.c.d.e.f.g.h.i.j.k, III.2.a.b.c., III.3.a.b., III.4.b.d.e.f.g.h.h.j.k., III.5.a.b.c.d.f.g., III.6.a.d.e., IV.1.a.b.c.d.e.f.g.h.i., IV.2.a.b.c.d.e.f.g.k., IV.3.a., IV.4.a.b.c.d., V.2.a.c.d.e.f.,V.3.a.c.f., V.4.c., VII.5.a.d.e., VIII.8.9.).
6. Refresh, practice, and be exposed to ultrasound skills including
   a. Transducer manipulation and image optimization
   b. FAST and eFAST protocol
   c. BLUE and CLUE protocols
   d. RUSH and SHOCK protocols
   e. Ultrasound in obstetrical emergencies
7. Learn principles of teaching peers and students, gain understanding of medical management (AACOM CC lll.4.b.e.f.g.h.i.j., IV.1.a.b.c.d.e.f.g.h.i.).
8. Enhance skills in self-reflection
9. Review and enhance osteopathic manipulative medicine approaches to care (AACOM CC l.5.a.b.c).

Osteopathic Core Competencies

The goals and objectives of the Simulation Medicine rotation have been mapped to the AACOM Osteopathic Core Competencies for Medical Students:

Competency 1: Osteopathic Principles and Practices **(OPP)**
Competency 2: Medical Knowledge **(MK)**
Competency 3: Patient Care **(PC)**
Competency 4: Interpersonal and Communication Skills **(ICS)**
Competency 5: Professionalism **(P)**
Competency 6: Practice-Based Learning and Improvement **(PBLI)**
Competency 7: Systems-Based Practice **(SB)**
Competency 8: Counseling for Health Promotion / Disease Prevention Competencies **(HP)**
Competency 9: Cultural Competencies **(CC)**
Competency 10: Evaluation of Health Sciences Literature Competencies **(HSL)**
Competency 11: Environmental and Occupational Competencies **(OEM)**
Competency 12: Public Health Systems Competencies **(PHS)**
Competency 13: Global Health Competencies **(GH)**
Competency 14: Interprofessional Collaboration Competencies **(IPC)**

A table with a description of each of the AACOM Osteopathic Core Competencies for Medical Students is found at the end of this document for reference.

AACOM Osteopathic Core Competencies for Medical Students

AACOM Osteopathic Core Competencies	**Competency 1: Osteopathic Principles and Practices (OPP)**: 1. Approach the patient with recognition of the entire clinical context, including mind-body, and psychosocial interrelationships 2. Use the relationship between structure and function to promote health 3. Use OPP to perform competent physical, neurologic, and structural examinations incorporating analysis of laboratory and radiology results, diagnostic testing, and physical examination. 4. Diagnose clinical conditions and plan patient care. 5. Perform or recommend OMT as part of a treatment plan. 6. Communicate and document treatment details. 7. Collaborate with OMM specialists and other health care providers to maximize patient treatment and outcomes, as well as to advance osteopathic manipulation research and knowledge. 8. Evaluate the medical evidence concerning the utilization of osteopathic manipulative medicine.
	Competency 2: Medical Knowledge (MK): 1. Articulate basic biomedical science and epidemiological and clinical science principles related to patient presentation. 2. Apply current best practices in osteopathic medicine 3. Physician interventions
	Competency 3: Patient Care (PC): 1. Gather accurate data related to the patient encounter. 2. Develop a differential diagnosis appropriate to the context of the patient setting and findings. 3. Implement essential clinical procedures. 4. Form a patient-centered, interprofessional, evidence-based management plan. 5. Health promotion and disease prevention. 6. Documentation, case presentation, and team communication.
	Competency 4: Interpersonal and Communication Skills (ICS): 1. Establish and maintain the physician-patient relationship. 2. Conduct a patient-centered interview. 3. Demonstrate effective written and electronic communication in dealing with patients and other health care professionals. 4. Work effectively with other health professionals as a member or leader of a health care team.
	Competency 5: Professionalism (P): 1. KNOWLEDGE—Demonstrate knowledge of the behavioral and social sciences that provide the foundation for the professionalism competency, including medical ethics, social accountability and responsibility, and commitment to professional virtues and responsibilities. 2. HUMANISTIC BEHAVIOR—Demonstrate humanistic behavior, including respect, compassion, probity, honesty, and trustworthiness. 3. PRIMACY OF PATIENT NEED—Demonstrate responsiveness to the needs of patients and society that supersedes self-interest. 4. ACCOUNTABILITY—Demonstrate accountability to patients, society, and the profession, including the duty to act in response to the knowledge of professional behavior of others. 5. CONTINUOUS LEARNING—Attain milestones that indicate a commitment to excellence, as, for example, through ongoing professional development as evidence of a commitment to continuous learning.

	6. ETHICS—Demonstrate knowledge of and the ability to apply ethical principles in the practice and research of osteopathic medicine, particularly in the areas of provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices, the conduct of research, and the reporting of research results. 7. CULTURAL COMPETENCY—Demonstrate awareness of and proper attention to issues of culture, religion, age, gender, sexual orientation, and mental and physical disabilities. 8. PROFESSIONAL AND PERSONAL SELF-CARE—Demonstrate understanding that he/she is a representative of the osteopathic profession and is capable of making valuable contributions as a member of this society; lead by example; provide for personal care and well-being by utilizing principles of wellness and disease prevention in the conduct of professional and personal life. 9. HONEST, TRANSPARENT BUSINESS PRACTICES
	Competency 6: Practice-Based Learning and Improvement (PBLI): 1. Describe and apply evidence-based medical principles and practices. Interpret features and meanings of different types of data, quantitative and qualitative, and different types of variables, including nominal, dichotomous, ordinal, continuous, ratio, and proportion. 2. Evaluate the relevance and validity of clinical research. 3. Describe the clinical significance of and apply strategies for integrating research evidence into clinical practice. 4. Clinical evaluate medical information and its sources, and apply such information appropriately to decisions relating to patient care. 5. Describe and apply systematic methods to improve population health.
	Competency 7: System-Based Practice (SB): 1. The candidate must demonstrate understanding of variant health delivery systems and their effect on the practice of a physician and the health care of patients. 2. Demonstrate understanding of how patient care and professional practices affect other health care professionals, health care organizations, and society. 3. Demonstrate knowledge of how different delivery systems influence the utilization of resources and access to care. 4. Identify and utilize effective strategies for assessing patients. 5. Demonstrate knowledge of and the ability to implement safe, effective, timely, patient-centered, equitable systems of care in a team-oriented environment to advance populations' and individual patients' health.
	Competency 8: Counseling for Health Promotion/Disease Prevention Competencies (HP) 1. Coordinate preventive health care across providers. 2. Identify roles for existing providers who provide clinical preventive services. 3. Collaborate within a patient-centered team. 4. Demonstrate an understanding of and commitment to the patient-centered medical home concept of continuous, coordinated, and comprehensive care focused on quality, safety, and enhanced access for all. 5. Apply quantitative epidemiological principles to inform clinical practice with regard to screening and prevention (include limitations of study designs). 6. Identify and use existing sources of health data as well as appropriate prevention guidelines. 7. Describe clinical, ethical, and legal issues which may result from screening (e.g., genetic counseling). 8. Apply criteria used for screening tests, such as sensitivity, specificity, predictive values, bias, safety, cost, and prevalence. 9. Apply periodic health screening guidelines from the U.S. Preventive Services Task Force. 10. Demonstrate preventive health principles by modeling a healthy lifestyle.

	Competency 9: Cultural Competencies (CC) 1. Demonstrate an understanding of the scope of culture and the elements that form and define it. 2. Recognize personal and professional tendencies toward bias and stereotyping and work to counter them. 3. Understand the public health implications of cultural competence in health care. 4. Demonstrate familiarity with basic religious and cultural beliefs that affect patients' understanding of the etiology of their illness and/or the efficacy of their treatment. 5. Assess other health care resources and methods patients use (or used) either in addition to, or instead of, their physician's recommended treatment (e.g., home remedies, traditional healers). 6. Assist the health care team in developing a mutually acceptable, culturally responsive plan for patients. 7. Demonstrate effective communication that takes into consideration the ability to elicit another's perspective, present concerns from another's perspective, refrain from behaviors that cause others to become defensive. 8. Identify and attempt recovery from mistakes in communication. 9. Use interpreters appropriately and effectively. 10. Use the cultural profile and history in the treatment of individual patients and record them appropriately in the medical record. 11. Use the cultural profile and history with individual patients to assess health care needs in the community.
	Competency 10: Evaluation of Health Sciences Literature Competencies (HSL) 1. Utilize current technologies, e.g., websites, online search engines, PDA-based programs, information services, and journals, to locate health science literature. 2. Use appropriate tools to critically appraise health science literature for its validity, reliability, impact, and applicability. 3. Apply critical concepts from statistics, epidemiology, and research design to evaluate health science literature. 4. Judge the statistical and clinical significance of findings in the health science literature. 5. Appropriately apply scientifically valid outcome guidelines and other current standards to patient care. 6. Apply critical concepts from statistics, epidemiology, and research design in the treatment of patients. 7. Recognize personal limitations in evaluating health science literature.
	Competency 11: Environmental and Occupational Competencies (OEM) 1. Provide osteopathic evidence-based clinical evaluation and treatment for injuries and illnesses that are occupationally or environmentally related. 2. Understand the policy framework and major pieces of legislation and regulations related to environmental and occupational health (i.e., regulations essential to works' compensation, accommodation of disabilities, public health, worker safety, and environmental health and safety, etc.) 3. Understand the ethical considerations related to environmental and occupational health. 4. Complete an environmental health history, recognize potential environmental hazards and sentinel illnesses, and make referrals for conditions with environmental etiologies (i.e., the basic mechanisms and pathways of exposure to environmental health hazards, basic prevention and control strategies, the interdisciplinary nature of effective interventions, the role of research, etc.) 5. Demonstrate knowledge and skills relating to fitness and disability to determine whether a worker can safely work and complete required job tasks. 6. Demonstrate knowledge and skills required to recognize, evaluate, and treat exposures to toxins at work or in the general environment (i.e., interpretation of laboratory or environmental monitoring test results, toxico-kinetic data, etc.)

	7. Demonstrate the knowledge and skills necessary to assess and provide control measures if there is risk of an adverse event from exposure to physical, chemical, or biological hazards in the workplace or environment. 8. Identify and address individual and organizational factors in the workplace (i.e., absenteeism, health enhancement, and population health management) in order to optimize the health of the worker, etc.) 9. Demonstrate the knowledge and skills to plan, design, implement, manage, and evaluate occupational and environmental health programs and projects.
	Competency 12: Public Health Systems Competencies (PHS) 1. Apply understanding of the interaction of public health and health care systems in the practice of osteopathic medicine as it affects health promotion and disease prevention. 2. Assess and address the determinants of health and illness factors contributing to health promotion and disease prevention. 3. Assess and address the factors influencing the use of health services. 4. Apply basic public health principles, practices, and sciences to the practice of osteopathic medicine. 5. Recognize differences among public health systems, epidemiological systems, and individual systems in the utilization of resources and in the practice of osteopathic medicine. 6. Recognize the impact of environmental influences on human health. 7. Understand and apply knowledge of cultural differences to improve public health among divergent populations. 8. Understand the role of health policy on populations and individuals.
	Competency 13: Global Health Competencies (GH) 1. Diagnose and manage diseases and/or patient presentations infrequently encountered in the United States. 2. Provide appropriate preventative and post-return care for patients travelling outside the United States. 3. Compare and contrast differing non-U.S. health care systems. 4. Understand the threat of pandemic and/or endemic health events. 5. Analyze the risk/benefit ratio of health care management in countries with differing health delivery systems and resources. 6. Identify and treat individual patients with varying cultural beliefs regarding health, disease, and patient care. 7. Compare and contrast population health and community health in the United States and in other countries. 8. Identify key international organizations involved in global health.
	Competency 14: Interprofessional Collaboration Competencies (IPC) 1. Act with honesty and integrity in relationships with patients, families, and other team members. 2. Respect the dignity and privacy of patients while maintaining confidentiality in the delivery of team-based care. 3. Communicate one's role and responsibilities clearly to patients, families, and other professionals. 4. Explain the roles and responsibilities of other care providers and how the team works together to provide care. 5. Chooses effective communication tools and techniques, including information systems and communication technologies, for facilitating interprofessional discussions and interactions that enhance team function. 6. Give timely, sensitive, instructive feedback to others about their performance on the team, and respond respectfully to feedback from other team members. 7. Engage other health professionals (appropriate to the specific care situation) in shared patient-centered problem solving for effective team-based care.

Entrustable Professional Activities (EPAs)

Entrustable Professional Activities (EPAs) covered:

- EPA 1: Gather a history and perform a physical examination.
- EPA 2: Prioritize a differential diagnosis following a clinical encounter.
- EPA 3: Recommend and interpret common diagnostic and screening tests.
- EPA 4: Enter and discuss orders and prescriptions.
- EPA 5: Document a clinical encounter in the patient record.
- EPA 6: Provide an oral presentation of a clinical encounter.
- EPA 7: Form clinical questions and retrieve evidence to advance patient care.
- EPA 8: Give or receive a patient handover to transition care responsibility
- EPA 10: Recognize a patient requiring urgent or emergent care and initiate evaluation and management
- EPA 11: Document a clinical encounter in the patient record. Give or receive a patient handover to transition care responsibility
- EPA 12: Perform general procedures of a physician
- EPA 13: Identify system failures and contribute to a culture of safety and improvement.

Teaching Physician Responsibilities

1. Orient students to independent module expectations via posted learning objectives.
2. Critique and provide feedback to students on oral and written presentations.
3. Ensure students can demonstrate proficiency in the physical exam and in history taking.
4. Encourage the students to complete assigned materials.
5. Ensure students perform basic procedures as listed in the course objectives.
6. Complete an evaluation on the student when required.
7. Require students to repeat any modules to achieve a minimum level of knowledge in the skill
8. Facilitate any post-simulation debrief sessions using each case's standard written format for debriefing.

Disclaimer: It should be noted that the content of this syllabus may change according to the needs of the course. CUSOM reserves the right to amend the content of this syllabus, and students will be notified of such changes.

Disability Services

Students with documented disabilities may request accommodations by contacting the office of Disability Services located in the Wallace Center. A health condition may rise to the level of a disability if it substantially limits one or more major life functions, one of which is learning. A disability may be temporary or ongoing. Services are often similar to IEP or 504 plans students may have had in high school but can also include support in campus housing,

dining halls, and other University events and services. Appointments can be scheduled through the Disability Services page of the Campbell website, by emailing disabilityservices@campbell.edu or calling (910)-893-7514.

Students with documented disabilities who desire modifications or accommodations must contact the CUSOM Office of Student Affairs.

No accommodations will be made without approval through the University's process. A medical, psychological and/or other diagnosis may rise to the level of a disability if it substantially limits one or more major life functions, one of which is learning. A disability may be temporary or ongoing. Please review the DO Academic Bulletin for more information.

Counseling Services

All Campbell University students are eligible to receive free, confidential counseling in Counseling Services via in-person and virtual consultations, groups, individual sessions, and participate in outreach events. CPHS and CUSOM students are also eligible for services through Behavioral Health at CUSOM. To make an appointment, visit the office located at 233 Leslie Campbell Avenue (brick house beside Memorial Baptist Church and across from Luby Wood Residence Hall), call (910)-814-5709, or request an appointment on the Counseling Services page of the Campbell website. If you are concerned about a fellow student, please complete a Student Care Referral Form on our website.

Campus Pantry

The Campus Pantry is open to students and staff experiencing food insecurity, offering a space for shoppers to choose their food and personal hygiene items. With the main location at the Wallace Center and smaller satellite locations, there are multiple options to shop. Satellite Pantries are located in Counseling Services, Wiggins Memorial Library, Bob Barker Hall and Pat Barker Hall (for residents). Should you or someone you know need this level of support don't hesitate to visit one of our locations. For more information on location hours and frequently asked questions please check our webpage. For assistance and questions, contact Rev. Morgan Pajak at pajak@campbell.edu or (910)-814-4769.

Title IX

Campbell University is committed to equality of educational opportunity. Campbell University does not permit discrimination or harassment in our programs and activities on the basis of race, color, sex, sexual orientation, gender identity or expression, age, religion, ethnicity or national origin, disability, genetic information, protected veteran status, military status and any other characteristic protected by law, except where exemption is appropriate and authorized by law. Students who believe they have been subjected to discrimination or harassment in violation of Title IX should report these concerns immediately to the Title IX coordinator. Title IX prohibits retaliation by any student and/or employee against anyone who reports an alleged Title IX violation. If students, staff, or faculty members believe someone

they know has experienced sexual misconduct, they should promptly report incidents to the Title IX coordinator via the Campbell website.

Safety and Security

The health and safety of our community is of utmost importance. Please familiarize yourself with your classroom and building surroundings, emergency information posters, and make sure you have registered your cell phone number with CU Notify for timely warnings and emergency alerts. For more information visit: Emergency Preparedness.