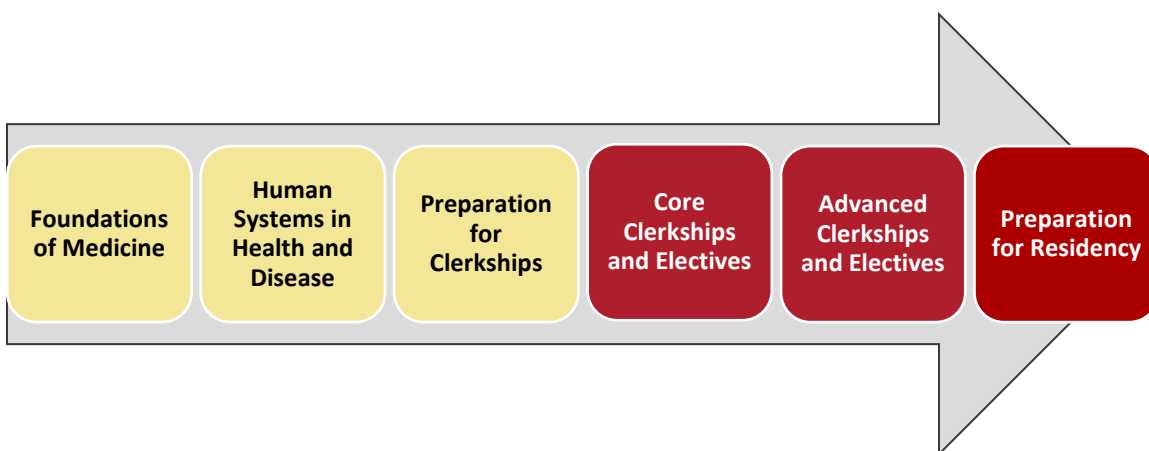


COLLEGE of MEDICINE



BMS 6030

Foundations of Medicine 2: Molecules to Mechanisms



Except for changes that substantially affect implementation of the evaluation (grading) system, this syllabus is a guide for the course and is subject to change with advance notice

Table of Contents

Table of Contents	2
Faculty and Staff	3
Course Directors	3
Faculty	3
Course Support.....	3
Overview	4
Course Goals	4
Professionalism.....	4
Course Objectives mapped to Education Program Objectives (EPO).....	5
Course Format	7
Senior Mentor Program (participation required for Medical Students)	8
Self-directed Learning.....	8
Critical Reading/Critical Analysis of Literature Assignment (aka Journal Club).....	9
Course Content	9
Grading System.....	11
Assessment Methods.....	11
Grading for Medical Students	11
Pre-clerkship course grading policy – Year 1:	14
Pre-clerkship course remediation policy – Year 1:.....	14
Grading for BRIDGE Students (Graduate Program Class of 2025).....	15
Course Evaluation.....	16
Detailed Schedule - AY2025-2026.....	17
Policies	19
Americans with Disabilities Act.....	19
Academic Honor Code.....	19
Attendance Policy	19
Academic Success.....	20
Confidential campus resources:.....	20
Clinical Learning Center (CLC) Specific Absence Policy.....	21
CLC scheduled activities.....	21
Objective Structured Clinical Examination (OSCE)	21
Professional Attire	21
FSU COM Education Program Objectives	23
FSU Career Portfolio and Canvas Submissions	24

Faculty and Staff

Course Directors

Cathy Levenson, Ph.D.
Professor, Biomedical Sciences
Office: 2350-E
Phone: 644-5781
Email: cathy.levenson@med.fsu.edu

Antonia Nemec, Ph.D.
Assistant Professor, Biomedical Sciences
Office: 2350-M
Phone: 644-0498
Email: antonia.nemec@med.fsu.edu

Clinical Skills Director

Charles Fleischer, M.D.
Associate Professor, Family Medicine and Rural Health
Office: 3210-B
Phone: 644-0523
Email: charles.fleischer@med.fsu.edu

Director, Senior Mentor Program

Lisa Granville, MD
Professor, Geriatrics
Office: 4304
Phone: 644-2365
Email : lisa.granville@med.fsu.edu

Director, Clinical Learning Center (CLC)

Debra Danforth, D.N.P., APRN
Professor, Clinical Sciences
Office: G129-M
Phone: 645-7123
Email: debra.danforth@med.fsu.edu

Faculty

Nighat Ahmed, MD
Shawn Akhavan, MD
Sarah Alvarez, MD
Suzanne Baker, MS
Pradeep Bhide, PhD
Joedrecka Brown-Speights, MD
Robert Campbell, MD
Rhonda Collins, EdD
Russell Copelan, MD
Tyra Dark, PhD
Jose Diaz, MD, PhD
Ransome Eke, MD/PhD
Nicole Ennis, PhD
Charles Fleischer, MD
Kerwyn Flowers, DO
Joe Gabriel, PhD
Melodie Gardner, MLIS
Mary Gerend, PhD
Rob Glueckauf, PhD

Lisa Granville, MD
Tracey Hellgren, MD
Donna Hill, MD
Shermeeka Hogans-Mathews, MD
Heidi Kinsell, PhD
Cathy Levenson, PhD
Timothy Megraw, PhD
Michael Nair-Collins, PhD
Antonia Nemec, PhD
Richard Nowakowski, PhD
Kenneth O'Dell, MD
Mike Overton, PhD
Nora Pepper, MD
Scott Pickett, PhD
Stephen Quintero, MD
Laura Reid Marks, PhD
Raed Rizkallah, PhD
Kelly Rodrigue, PharmD

Cesar Rodriguez, MD
Robyn Rosasco, MSLIS
Casey Rust, MD
George Rust, MD, MPH
Stephen Sandroni, MD
Mark Saunders, MD
Geneva Scott-King, APRN, DNP
Anthony Speights, MD
Niharika Suchak, MD
Michael Sweeney, MD
Phillip Treadwell, PharmD
Debra Wagner, MD
Yanchang Wang, PhD
Mary Watson, MD
Robert Watson, MD
Tana Welch, PhD
Martin Wood, EdD
Yuying Wu, PhD

Course Support

curriculum.support@med.fsu.edu

Curriculum Coordinators:

Cesar Arango

Office: Suite 2200-M
Phone: 645-2905

Jen Brear

Office: Suite 2200-N
Phone: 645-9745

CLC@med.fsu.edu

CLC Program Coordinator

Office: G129-N
Phone: 645-9236

Overview

Course Goals

Foundations of Medicine 2: Molecules to Mechanisms complements **Foundations of Medicine 1: Organization and Structure** – to provide a foundation of core concepts, knowledge and vocabulary of basic, behavioral and clinical science as well as the fundamental skills of the physical exam and medical interviewing on which to build throughout the pre-clerkship curriculum. COM mission-based domains are underscored in specific objectives that address important issues in geriatric, rural and other underserved populations, such as the factors that impact medication dosage and effectiveness in elderly patients. Curricular themes such as cultural issues, ethics, and public health are developed as essential components in case studies – for example, attitudes, access, and consequences of dietary choices across the lifespan, beginning prior to conception and continuing through old age – and in clinical encounters with standardized patients. Students completing **Molecules to Mechanisms** will have a solid foundation of cellular and molecular principles in health and disease and awareness of their impact on individuals, families, society, and the health care system.

Professionalism

Medicine is a Profession, which means it entails unique responsibilities and obligations as well as unique privileges. “**Professional identity formation**” is an objective as important as learning the sounds and anatomy of the heart, but requires a different set of learning skills. Important among those are **reflection, self- and peer assessment, deliberate practice, and learning for mastery** (not grades).

Core Attributes of Medical Professionalism

FSU COM Educational Program Objective 5: Professional Identity Formation

Demonstrate a commitment to personal and professional growth and to carrying out professional responsibilities with integrity, adherence to ethical principles and codes of conduct, and respect for differences in values, beliefs and experiences in all interactions.

Medical professionalism is a cornerstone of the practice of medicine, embodying the values, behaviors, and responsibilities that are essential to building and maintaining trust between physicians, patients, and society. As a medical student and future physician, understanding and demonstrating professionalism is vital to your personal development.

Across the 4-year curriculum you will be continuously evaluated according to these core attributes of Medical Professionalism:

- **Commitment to Professional Behavior and Ethical Practice**
Adherence to ethical principles, such as beneficence, nonmaleficence, justice, and respect for autonomy.
Examples: Maintaining confidentiality by avoiding discussing patient cases in public areas, even in CLC. Taking responsibility for personal lapses in Professionalism, and taking steps to address them, incorporating feedback.
- **Accountability**
Medical professionals are accountable to their patients, peers, society, and the profession itself.
Examples: Engaging responsibly with the FSUCOM curriculum, including demonstrating effort when preparing for required learning sessions or completing assignments. Arriving on time to required sessions, completing assignments by deadlines, and seeking feedback to improve your performance.
- **Honesty and Integrity**
Acting with honesty, transparency, and moral courage, even in challenging situations.
Examples: Acknowledging when you do not understand instead of pretending you do, seeking help when needed, crediting the contributions of others, and reporting lapses when appropriate.
- **Compassion and Respect for Others**
Treating patients, colleagues, and team members with dignity, empathy, and cultural sensitivity.
Examples: Actively listening during team discussions, valuing diverse perspectives, values and beliefs, being aware of bias in self and others, and avoiding disruptive behaviors like silencing your phone during classes and meetings.
- **Excellence, Self-discovery, and Personal Well-Being**
A commitment to lifelong learning and the pursuit of the highest standards in medical knowledge, clinical skills, and patient care.
Examples: Taking the initiative to go beyond required readings by exploring additional resources to deepen your understanding of challenging topics, applying metacognitive approaches to self-evaluate learning.

Why Professionalism Matters

Professionalism fosters trust, ensures accountability, and enhances the quality of care delivered to patients. It also strengthens the medical profession's role in society.

Throughout your medical education and career, you will encounter situations that challenge and refine your understanding of professionalism. These experiences are opportunities to practice and internalize these values as part of your journey toward becoming a competent and compassionate physician.

Confidentiality:

Patients — including Standardized Patients — deserve to be treated with respect. Respect for patients includes keeping all patient information confidential. Patient information may be shared with other health care professionals that have a legitimate, professional “need to know,” or with specific family members or others **who have permission from the patient** for access to the information.

Be especially conscious about discussions of patients in public places. Even when patient names are not used, the discussion may reveal the patient's identity to others who overhear the discussion. Rather than risk a violation of patient confidentiality, discuss patients only in a private setting and only with individuals who have a legitimate need to know. Be careful to keep all patient notes, reports and materials confidential. Patient records, should be returned to faculty, destroyed, or kept in a secure place.

Similarly, your classmates deserve to be treated with respect. Information learned about your classmates and their families while in class is considered confidential. You are not free to disclose this material to others without the specific consent of the person.

Violation of confidentiality may result in a [Report of Concern for Unprofessional Behavior](#) and may be referred to the Student Evaluation and Promotion Committee (SEPC). Egregious unprofessional behavior of any variety may result in suspension of the student, a failing grade for the course, and/or referral to SEPC for consideration of dismissal.

Team work:

Another essential aspect of medical Professionalism is Team work. Modern Medicine is a team activity requiring constant interactions of numerous members of the health care team and collaborative decision-making. Team work is about more than simply working well with others. **A Team practices both individual and mutual responsibility and accountability.** Over the semester you will be assigned to a number of groups. Small groups work with a pair of clinical and behavioral science faculty each week to develop knowledge, skills, and attitudes essential to your professional development. Other groups work together to solve problems and cases.

“Groups become teams when team members develop trust and feel free to voice opinions and work with classmates to solve complex problems.” (Winter, et al. 2021 in [Resilient Pedagogy](#), Creative Commons license). When a group of students collaborates to solve a problem or answer a difficult or ambiguous question, all students benefit. Peers are often better at understanding another learner's difficulty than a content expert would be. Sharing our knowledge with others solidifies and often improves our own understanding of complex material.

Professional Attire:

Medical students, faculty and staff are all ambassadors and representatives of the College of Medicine and of the medical profession. Appearance and behavior should at all times demonstrate respect for the profession and for our patients as well as attention to safety. The needs of patients must always come first, and any barriers to meeting those needs (including attire, appearance and grooming) must be removed.

Professional attire should be worn in settings where students interact with people from outside the COM, and particularly when interacting with Standardized Patients (SPs) in the CLC, on a “house visit,” or when in a preceptor's office or clinic, a hospital or nursing facility. Professional attire should also be worn when patients, guests, or visitors are present in large or small group sessions.

[Specific standards for professional attire](#) are detailed at the end of this document and can always be found on the course Canvas site.

Course Objectives mapped to [Education Program Objectives \(EPO\)](#)

	Course Objectives	EPOs	Means of Assessment
FOM2 1	Describe the normal structure and function of the basic cell and tissue types including mechanisms of communication, excitable properties of membranes, receptor ligand binding, second messenger cascades, and response to injury.	2	Formative quizzes and NBME CAS exams
FOM2 2	Identify, describe and distinguish tissue and cell types using photomicrographs and by virtual microscopy: endocrine, urinary, and reproductive systems.	2	Formative quizzes and NBME CAS exams

FOM2 3	Describe the cellular structures and biochemical and nutritional processes responsible for the regulation of cellular metabolism, including the regulation of energy production, utilization, and storage.	2	Formative quizzes and NBME CAS exams
FOM2 4	Describe the molecular structures and processes responsible for DNA synthesis and proliferation, gene expression, protein synthesis, inheritance of traits, mutations, chromosomal disorders, and DNA repair.	2	Formative quizzes and NBME CAS exams; Genetics problem set
FOM2 5	Describe the consequences of cellular abnormalities caused by inborn errors of metabolism and other genetic disorders, structural defects, nutrient imbalances.	2	Formative quizzes and NBME CAS exams
FOM2 6	Describe the basic characteristics of microbial pathogens and the basic cellular mechanisms through which they impact normal cell structure and function and lead to clinical consequences.	2	Formative quizzes and NBME CAS exams
FOM2 7	Describe the normal structure and function of the autonomic nervous system (ANS) and how drugs affect this system.	2	Formative quizzes and NBME CAS exams
FOM2 8	Describe the general principles of pharmacology including pharmacokinetics and pharmacodynamics.	2	Formative quizzes and NBME CAS exams
FOM2 9	Describe the process of drug development and approval including the prescription process.	2	Formative quizzes and NBME CAS exams
FOM2 10	Discuss the core concepts of bioethics and their application in clinical practice	5	Formative quizzes and NBME CAS exams
FOM2 11	Describe the features, strengths, and weaknesses of health care insurance and systems and their impact on patient participation and outcomes.	6	Formative quizzes and NBME CAS exams
FOM2 12	Discuss essential concepts related to medical errors and adverse events, factors that contribute to medication error, and the roles of patient and healthcare providers to eliminate medication errors.	6	Formative quizzes and NBME CAS exams; Medical error module
FOM2 13	Demonstrate the application of clinical decision making, interpretation and use of evidence-based data in writing prescriptions.	2	Formative quizzes
FOM2 14	Demonstrate an understanding of biostatistics and epidemiology concepts and their application in health care, the ability to interpret and appraise the validity of study design and results in the medical literature, and the ability to apply these skills in a systematic approach to clinical problem solving.	2	Formative quizzes and NBME CAS exams; Biostatistics problem set; Critical analysis of literature assignment
FOM2 15	Demonstrate the ability to organize and conduct a medical encounter using the biopsychosocial model of health and illness, by eliciting an accurate patient-centered medical history and performing a physical exam to support clinical reasoning.	1	CLC checklist
FOM2 16	Demonstrate effective communication with patients including culturally and linguistically appropriate interviewing skills, culturally appropriate verbal and non-verbal behaviors that promote building rapport and trust, and accurate and communicate diagnostic information and reasoning with appropriate vocabulary and concepts; associate communication strategies with particular tasks.	4	Senior Mentor Program; CLC checklist; Telehealth orientation
FOM2 17	Demonstrate the ability to concisely present an accurate, comprehensive medical history including chief complaint, history of present illness, past medical history, social history, and family history	4	CLC checklist
FOM2 18	Describe the basic physical properties and imaging characteristics of ultrasound, and identify opportunities, advantages, and limitations	2	Formative quizzes

	for its point-of-care use		
FOM2 19	Identify social determinants of health and their relationship to health and wellness for underserved populations, and discuss the impact of patient and physician culture on health disparities	7	Formative quizzes
FOM2 20	Engage in self-evaluation and reflection, including related to cultural, moral, and ethical issues encountered in patient care, to identify biases, develop self-awareness of knowledge, skill and emotional limitations, set and achieve learning and improvement goals.	3	Mid-semester self-evaluation; Observation by faculty and advisors
FOM2 21	Work effectively as part of a team.	4	Senior Mentor Program

Detailed learning objectives are provided for each session in the course. Exam questions are mapped to these learning objectives.

Course Format

Foundations of Medicine 2: Molecules to Mechanisms provides a foundation in five fundamental areas of biomedicine (cell biology and molecular mechanisms, cell signaling and homeostatic control, microbiology, autonomic nervous system, and general principles of pharmacology) as well as important concepts of social and behavioral science, including biostatistics and epidemiology, social determinants of health, and health systems. Clinical skills for gathering information through the medical interview are added to the physical exam skills developed during **Foundations of Medicine 1: Organization and Structure**. The course emphasizes **engaged** and **active learning** through a variety of individual, interactive large group, and case-based small group learning activities as well as standardized patient encounters in the Clinical Learning Center. Formative on-line assessment materials emphasize the development of thinking skills through analysis of data and cases, including biostatistics and epidemiology, and NBME/USMLE-type questions. Students are expected to self-assess their learning needs and set goals to address them with the aid of faculty and their learning groups.

Large Group Sessions (1200) (some required, and attendance encouraged for all other sessions)

Formal lectures are limited in favor of interactive large group sessions. This learner-centered model uses the principles of active learning, where students consolidate their understanding and identify gaps in understanding as a session evolves, by answering questions and solving problems individually and through peer discussion, with immediate input of faculty expertise. Pre-class preparation primes students for learning with basic didactic material presented through [OnlineMedEd](#) including assigned videos with companion notes, formative questions, and challenge cases as well as additional interactive modules, self-assessment exercises, and textbook and journal readings. Interactive large group sessions apply and extend that knowledge through clinical case-based inquiry. **Success depends on student engagement, preparation, and trust in the safe environment we maintain** to encourage students to be curious and even to take intellectual risks. **The emphasis is on developing integrated basic and behavioral science concepts in a clinical context.** Whenever possible, real patients will be present to share their stories, demonstrate signs of their disease, and provide the real-world context that goes beyond the classroom. Whenever patients are present, we ask that students dress professionally and close their phones and other mobile devices as demonstration of respect for these wonderful patients who are willing to help us learn.

Small Group Sessions (LCs) (attendance required)

Small group exercises are case- and/or problem-oriented. Some sessions pattern thinking through **progressive disclosure**, others focus on **concept development** through guided engagement with data, while others employ the Jigsaw paradigm to focus on discovering **similarities and differences** of presentations or aspects of disease – the basis of differential diagnosis. Small group exercises are designed for **engaged and active learning** and emphasize reasoning, hypothesis formation, and hypothesis testing. The groups evaluate cases in terms of stated objectives and define additional learning objectives they will need to resolve. In Jigsaw exercises each small group (5-6) of students is assigned a case presentation to discuss and form an hypothesis. Typical questions to be resolved may include: *What explains the presentation? What may be the cause? What more do we need or want to know? How do we acquire and interpret needed information? What are the options/priorities for treatment and management?* Then the small groups re-mix such that each member of each new group “owns” a different case or aspect of a case, which he/she then “teaches” to the new group. In all small group exercises, **all members of the group share responsibility for analyzing and explaining the clinical presentations.** The value of small group exercises is not always the “answer,” but the **reasoning** behind it. Emphasis is placed on **making thinking transparent.** Basic and clinical science faculty will be present to ask helpful questions if your group is “stuck” and to encourage your curiosity. During small group exercises, you are free to use any resources (unless otherwise instructed). At the end of each small group exercise, you will be expected to review the complete cases and create a summary in your own words of the “take home” points of the cases considered as a group. **Summarizing and paraphrasing in your own words is a powerful learning tool.**

Clinical Learning Sessions (CLC; attendance required)

Throughout the course learners will develop their clinical skills and clinical reasoning during individual SP encounters in the CLC. Learning to talk to the patient lays the foundation for performing the physical exam you began to learn in **Foundations of Medicine**. In **Foundations of Medicine 2** students develop an understanding of the organization, content and performance of the medical interview. Emphasis is placed on communication skills using the biopsychosocial model of health and illness and patient-centeredness across the lifespan. Students experience the essential integration of basic, behavioral and clinical science knowledge and concepts in the successful patient encounter.

Senior Mentor Program (participation required for Medical Students)

Through participation in the **Senior Mentors Home Visits Program**, students learn about the biopsychosocial perspective of aging and develop skills in active listening and history taking. The activities and assignments of the Program occur throughout the Fall semester of Year 1 and contribute to the grade of both Fall courses: **Foundations of Medicine 2: Molecules to Mechanisms** and **Host-Defense**. The Senior Mentor Program pairs two (2) medical students with an independently-living older person in the community. Working as a team, the students visit with the assigned Senior Mentor 3 times during the semester. All visits will be in person, unless illness such as COVID-19 or other immediate health concern of one of the Senior Mentors requires use of a remote connection. In this event, contact [Dr. Granville](#) to confirm the change in advance. Each visit is associated with a set of objectives that develop an understanding of the importance of knowing a patient first as a person and how information on background, education, work history, belief systems, values, and personal needs contributes to that understanding. Following each visit, both team members complete and submit the appropriate assignment form. Completed assignments are discussed in small groups. **Students are responsible to schedule their visits with their Senior Mentors to allow adequate time to complete and submit these written assignments no later than 11:59 PM on the following due dates: 9/19, 10/17, and 11/21, 2025.** The appropriate assignment forms are found on Canvas (the University Learning Management System). **Note, the first Senior Mentor visit occurs September 1-19 and the first assignment is due during Foundations of Medicine 2, no later than September 19, 2025.**

Activity	Completion Date
Visit 1	September 1-19, 2025
Visit 1 log submission deadline	September 19, 2025; 11:59PM
Visit 2	October 1-17, 2025
Visit 2 log submission deadline	October 17, 2025; 11:59PM
Visit 3	November 1-21, 2025
Visit 3 log submission deadline	November 21, 2025; 11:59PM

Self-directed Learning

Time has been included on the pre-clerkship calendar for **self-directed learning**. While independent study time focuses on achieving the learning objectives of courses, completing assignments and activities, and preparing for assessments, self-directed learning (SDL) focuses on the **process of learning** and the **development of broader, deep learning skills and habits**. For SDL, students take the initiative to identify their learning needs, formulate goals, identify resources, select and implement learning strategies, and evaluate the outcomes. These are the skills of life-long-learning that are essential for all physicians, given the rapidly evolving nature of medical knowledge and advancements in health care.

Continual self-reflection on how you learn develops your critical thinking and problem-solving skills and prepares you to adapt to new information and new situations. Essential to that process is feedback. **Seek** and recognize feedback in its many forms – from faculty, advisors, mentors, and peers – and incorporate it in your reflection and in making adjustments to your learning strategies. The weekly **Formative Self-assessments** should be part of your SDL process – not just to identify knowledge gaps, but to reflect on the effectiveness of your learning strategies.

Documentation of your SDL activities will be housed in your **FSU Career Portfolio**. (see [instructions for Career Portfolio](#) at the end of this document) You may make as many additions to your Career Portfolio as you wish, but at least once during each course there will be a SDL submission link on Canvas (for instructions see [Submitting to a Career Portfolio Canvas assignment](#)) through which you will receive feedback on your SDL. (see [Suggestions for SDL](#))

According to the LCME standards (Element 6.3): Self-directed learning involves ALL of the following:

- medical students' **self-assessment** of learning needs
- **independent** identification, analysis, and synthesis of relevant information
- **appraisal of the credibility** of information sources; and
- **feedback** on these skills from faculty and/or staff.

The Curriculum Committee requires that PICO assignments are a component of courses throughout the pre-clerkship curriculum, beginning in Host-Defense. In these assignments you directly apply SDL skills to evidence-based, clinical decision making, related to a topic of personal interest, related to the content of each course.

Critical Reading/Critical Analysis of Literature Assignment (aka Journal Club)

Each course in the fall and spring semesters of the pre-clerkship curriculum includes one or more large or small group sessions related to the interpretation of primary literature. Prior to each of these required sessions, each student reads the assigned paper and completes and submits the guided reading template posted on Canvas. This guided reading template – which reflects the organization of the *New England Journal of Medicine Quick Takes* format – helps develop student skills that are critical for interpreting primary literature necessary for practicing Evidence-based Medicine and for keeping up with important biomedical research. Completion of the template by all students prior to the session assures readiness for meaningful in-class analysis and discussion.

During some courses, Journal Clubs will take place in small groups. When scheduled as a small group, individual students will be assigned to lead the discussion, and all students will be assessed on their preparation and participation

Suggestions for Self-directed Learning

Documenting your SDL activities can take many different forms – from a defining a succinct goal and strategy to attain it to a detailed, comprehensive analysis and reflection on your approach to learning. You should select the approach that best contributes to your self-awareness, development of a **mastery mindset**, and personal growth. Here are just a few ideas and examples you may consider or adapt:

- Keep a **“learning journal”** – what you did, sequence of activities, time spent on each, thoughts on effectiveness, etc.
- **Reflect on the successes and challenges** of your learning week/month/course (e.g., time management, content retention, mastering/integrating concepts)
- Keep a **list of questions, ideas, or wish to know “more”** about topics presented in class. Schedule a given amount of time (e.g., 30 minutes) each week to explore one or more of those questions and write up a brief summary, reflecting on how it relates to your course work. The questions can be almost anything. Share this summary with your faculty, academic advisor, or study group.
- Pursue a **personal interest** – e.g., history of medicine, career goal (what increases/decreases the chance of matching in X?), a challenging (“wicked”) social problem impacting health and/or health care (e.g., climate change, social media, misinformation, gun violence, racism)
- **Identify feedback** you’ve received (source – peer, faculty, self-assessment, exam) **and how you used/will use it to improve**
- Consistently employ a new or changed strategy (e.g., concept mapping, flashcards, pre-class preparation, forced recall, app reminder to change topics, prioritized sleep, etc.) for a specific time (2 weeks, 4 weeks, 1 course) and **evaluate the outcomes** (strengths, weaknesses)
- Focus on retention of content (e.g., from previous courses): strategy, time spent, outcome, identification of continued areas of weakness
- Use AI (e.g., ChatGPT, CoPilot, Claude, Genesis, etc.) to write your own practice questions on a topic, then **identify and correct any misinformation, missing or misleading information**. Write your own rationales for correct/incorrect responses BEFORE you ask AI to provide them – or compare your rationales with those from AI. Note: if using AI to generate practice question, be sure to get advice on prompt engineering and best practices. AI is a powerful and extremely useful tool, it depends on rigorous human guidance and validation. Learning from a flawed question or explanation is not justification for knowledge gaps or exam errors.

Course Content

Content sequence in Molecules to Mechanisms:

Throughout the course, students begin to develop their clinical skill set with a focus on the medical interview and taking and documenting a medical history. **Biostatistics, study design, evidence-based medicine, and critical reading of literature are taught throughout the course.**

Biochemistry, Cell Biology and Molecular Mechanisms

- Cell types, organelles, and structure
- DNA, inheritance, and human genetics
- Biochemical regulation and nutritional implications of protein, glucose and fat metabolism and storage
- Patient-centered interviewing, genetic screening and counseling

Cell Signaling and Homeostatic Control

- Receptor – ligand interaction
- Homeostatic control of arterial blood pressure, water balance, and body temperature

- Cellular response to injury

Microbiology

- Bacterial, viral and fungal structure and replication
- Gram positive, Gram negative and Gram indeterminate bacteria
- Microbial detection methods and sterility

Histology

- Endocrine, Renal-Urinary, and Reproductive systems

Autonomic Nervous System

- ANS subdivisions
- Neurotransmitters: cholinergics and adrenergics

General Principles of Pharmacology

- Pharmacokinetics, absorption, distribution, excretion, drug metabolism, changes with age
- Pharmacodynamics, agonists and antagonists, potency and efficacy, dose – response
- Drug development and evaluation
- Medication reconciliation, therapeutic adherence, patient-specific dosage

Biostatistics and Epidemiology

- Distributions of data
- Measures of association: risk, NNT
- Principles of testing and screening: sensitivity, specificity, predictive values
- Study design and interpretation

Medical Ethics and Health Equity

- Principles of biomedical ethics and medical professionalism
- Social determinants of health and health disparities

Required Materials (All required texts are available as ebooks through COM library [page](#))

[OnLineMedEd](#) – individual subscription provided by the COM (log in with your COM email address)

Basic and Clinical Pharmacology (Katzung)

Bates Guide to Physical Examination and History Taking

Behavioral Science in Medicine (Fadem)

Histology: A Text and Atlas With Correlated Cell and Molecular Biology (Ross)

Medical Biochemistry: An Illustrated Review (Panini)

Physiology (Costanzo)

Resolving Ethical Dilemmas: A Guide for Clinicians (Lo)

Robbins and Cotran Pathologic Basis of Disease (Kumar)

Sherris Medical Microbiology (Ryan)

Smith's Patient-Centered Interviewing: An Evidence-Based Method (Fortin)

Thompson & Thompson Genetics in Medicine (Nussbaum)

Additional required readings will be assigned from a variety of sources. These readings will be provided to you and posted on Canvas when possible.

Additional materials required for clinical sessions

- Clinical examination equipment: Each student must purchase and/or have available the following clinical examination equipment: stethoscope with diaphragm, bell and pediatric option. Opportunities to purchase this equipment at a discount will be provided prior to orientation. Bring your examination equipment with you to each CLC session.
- Also bring the following to each session in the CLC:
 - A watch capable of measuring seconds
 - A pen for writing (blue or black ink)
 - The student's personal mobile device loaded with the appropriate medical software/applications.

Grading System

Assessment Methods

Written assessments

Multiple choice and other question formats are used to assess both content knowledge and application skill (ability to solve problems, demonstration of clinical reasoning, interpretation of images and laboratory results, etc.). Questions may be drawn from material presented in any activity or assignment, from assigned readings and videos, and from CLC sessions.

Students must score a cumulative written assessment of $\geq 70.0\%$ ([see Grading below](#)) to pass the written assessment component of the course. Students with a written assessment score below 70.0% risk failing **Foundations of Medicine 2: Molecules to Mechanisms** and being referred to the Student Evaluation and Promotions Committee. A student who achieves an overall passing score ($\geq 70.0\%$) but has demonstrated a significant deficit in one or more content areas will be required to develop and complete a Performance Improvement Plan in consultation with the course directors. The purpose of the Plan is to assure the student has the requisite knowledge base to succeed in subsequent courses in the curriculum.

Customized NBME exams

There will be two (2) exams comprised of questions from the NBME (National Board of Medical Examiners) question bank. The questions on the customized NBME exams will be selected by course faculty as appropriate assessment of course learning objectives. Most written questions are presented in the context of a clinical scenario or problem. Each of the two exams (Exam 1 and Exam 2) contributes 50% to the course exam average. Exam 2 will focus on material presented after Exam 1. However, **exams are cumulative across the curriculum**, i.e., main concepts, content and skills from material presented in prior courses may be included in questions

Formative Self-assessments

Throughout the course there will be faculty-written quizzes, delivered on Canvas over weekends. These formative tools are “assessments for learning” that allow students to self-assess mastery of the material and their own learning needs and to assume responsibility for their own learning ([EPO 3 Practice Based Learning and Improvement](#)). Therefore, students should approach the quiz in the same way as any other assessment and should complete it without using any references (peers, notes, videos, websites, ChatGPT, etc.). **Completion of the formative self-assessments is optional; however, > 75% of students reported last year that weekly completion of the quiz was helpful in keeping them up to date in the course.**

Clinical skills exams

Formative and summative assessment of clinical skills occurs periodically throughout the pre-clerkship phase. OSCEs are skills-based examinations conducted in the CLC to assess the student’s ability to demonstrate clinical skills and behaviors. OSCEs typically consist of several “stations.” Each station will require the student to demonstrate one or more clinical skills/behaviors that will be assessed by a trained observer using established performance criteria for that assessment. The OSCE will provide students with feedback on their ability to perform an organized medical interview.

Students must score $\geq 80\%$ on the OSCE in order to pass the course in which the OSCE occurs. Students who do not achieve a score of 80% or higher on the OSCE must remediate these clinical skills. An OSCE remediation plan must be determined prior to the beginning of the next semester. An OSCE is part of the final assessment for **Foundations of Medicine 2: Molecules to Mechanisms**. It will emphasize the medical interview and history. Students scoring below 80% who are unable to successfully remediate these deficits before the end of the course will receive a grade of “Fail” for **Foundations of Medicine 2: Molecules to Mechanisms** and be referred to the Student Evaluation and Promotions Committee.

Grading for Medical Students

The FSU COM has adopted a pass/fail grading system which is used in the curriculum for the first and second years (see [Student Handbook](#)). To achieve a grade of Pass in BMS 6030 (**Foundations of Medicine 2: Molecules to Mechanisms**) a student must earn **a minimum of 179 points** as described in the table below, including a **minimum of 106 points from the assessments category**. The final grade of a student who accumulates 179 total points but has not achieved the minimum required number of points in any non-assessment category will be at the discretion of the course directors following discussion and any required remedial action.

Category	Criteria for points	Points	MINIMUM REQUIRED	MAXIMUM POSSIBLE
ASSESSMENTS (Minimum total points required = 106)				
	Overall score of $\geq 75\%$	100 points	90	100

End of course NBME exam average (50% Exam 1, 50% Exam 2)	Overall score 70-74.9%	90 points		
	Score < 70.0%	0 points		
OSCE (10/1-2)	Satisfactory performance	20 points	16	20
	Satisfactorily remediated performance	16 points		
	Failed remediation	0 points		
TOTAL ASSESSMENT			106	120
NON-ASSESSMENT CATEGORIES (Minimum total points required = 73)				
Assignments (Minimum total points = 35)				
HPI worksheet	On time submission Due 8/22 at 11:59 PM	1 point	2	2
	Evidence of effort	1 point		
Self-directed learning: Plans and progress	On time submission Due 9/7 at 11:59 PM	1 point	1	1
Pharmacology problem set	On time submission Due 9/18 at 11:59 PM	1 point	1	1
ANS problem set	On time submission Due 9/23 at 11:59 PM	1 point	1	1
Critical reading template	On time submission Due 10/11 at 11:59 PM	1 point	1	1
	Evidence of effort and resubmission if requested	RUBRIC	13	26
Senior Mentor visit 1	On-time submission of assignment 9/19 at 11:59 PM	2 points	7	8
	Satisfactory completion of assignment	4 points		
	Professional behavior (includes timely scheduling and follow through of meeting with Senior)	2 points		
Histology exercise: Endocrine	On time submission Due 8/22 at 11:59 PM	1 point	7	9
	Evidence of effort and resubmission if requested	2 points		
Histology exercise: Renal	On time submission Due 8/29 at 11:59 PM	1 point		
	Evidence of effort and resubmission if requested	2 points		
Histology exercise: Reproductive	On time submission Due 10/5 at 11:59 PM	1 point		
	Evidence of effort and resubmission if requested	2 points		
Evidence-based medicine problem set	On time submission Due 10/9 at 11:59 PM	1 point	1	1
Mid-semester self -evaluation	On time submission Due 10/9 at 11:59 PM	1 point each	1	1
Professional Identity Formation (Minimum total points = 38)				
On time arrival, preparedness, and professionalism are expected for ALL required sessions. Includes, but not limited to, all activities at night:	General professionalism: Includes appropriate attire and behaviors not covered below	-1 point/event		
	CLC (x7): On time	1 point each	7	14
	CLC (x7): Evidence of preparation	1 point each	7	
	CS Small groups (x8): On time	1 point each	8	17
	CS Small groups (x8): Preparation	1 point each	8	
	Basic science small groups (x1): On time and present for entire session	1 point each	1	
	Required large groups (x7): On time and present for entire session	1 point each	7	7
TOTAL NON-ASSESSMENT			73	89
TOTAL			179	209

For your convenience – here is a table of the date and time for all **REQUIRED large and small group sessions and quizzes**. **MARK YOUR CALENDARS.**

Required LARGE and SMALL GROUPS	Date	Time
Summarization small groups	Tuesday, August 19	9:00-10:20 AM OR 10:30-11:50 AM
History of present illness small group	Tuesday, August 26	
Past medical history small group	Tuesday, September 2	
Social history and family history small group	Tuesday, September 9	

Expanded history in chronic illness small groups	Tuesday, September 16	
Wellness: Resilience small groups	Tuesday, September 23	
Senior Mentor Visit 1 small groups	Tuesday, September 30	
Introduction to the course	Monday, August 18	1-1:50 PM
Health ethics and equity 1	Thursday, August 21	1-2:50 PM
Health ethics and equity 2	Friday, August 22	1-2:20 PM
Genetics practice problems small group	Tuesday, August 26	2-2:50 PM
Sphingolipids with patient presentation	Monday, September 8	1-1:50 PM
Introduction to Telemedicine	Tuesday, October 7	10-11:30 AM
Evidence based medicine 2	Thursday, October 9	1-2:50 PM
Critical reading of literature	Monday, October 13	1-2:50 PM
Midsemester SG performance review small groups	Tuesday, October 14	8-9:50 AM 10-11:50 AM

For your convenience, here is a table of the due dates and times for all assignment submissions. **You are encouraged to add alerts to your calendar to assure you don't miss these deadlines or confuse the times.**

Assignment	Due date	Time due
Histology exercise: Endocrine	Friday, August 22	11:59 PM
HPI worksheet	Friday, August 22	11:59 PM
Histology exercise: Renal	Friday, August 29	11:59 PM
Self-directed learning: Plans and progress	Sunday, September 7	11:59 PM
Pharmacology problem set	Thursday, September 18	11:59 PM
Senior Mentor #1 log submission	Friday, September 19	11:59 PM
ANS problem set	Tuesday, September 23	11:59 PM
Histology exercise: Reproductive	Sunday, October 5	11:59 PM
Evidence-based medicine problem set	Thursday, October 9	11:59 PM
Mid-semester performance self-evaluation	Thursday, October 9	11:59 PM
Critical reading template	Saturday, October 11	11:59 PM
Qualtrics End of course evaluation	Sunday, October 19	5:00 PM

Notes:

1. An end of course written assessment score between 70.0% and 74.9% (90 points) is considered a "marginal" pass. **An end of course assessment < 70.0% (0 points) will receive a grade of fail*** (see [Grading Policy](#) below), which will require remediation or repetition of the course, as proposed by the course directors and determined by decision of the Student Evaluation and Promotion Committee.
2. A student whose performance is < 70.0% (below passing) on any individual exam during the course is encouraged to consult the academic counselors in Student Affairs as well as the course faculty for advice on study and test-taking skills.
3. Punctuality (on time attendance), professional behavior, and satisfactory preparation and participation are required for all CLC sessions, small groups, patient and panel presentations, Senior Mentor, and all other required activities as determined by the course directors and clinical skills directors. Failure to meet these expectations may result in a designation of Unsatisfactory Professionalism and failure of the course.
 - A student who is unable to attend or will be late for a reason beyond their control, must contact the Clinical Skills Course Director (morning sessions - charles.fleischer@med.fsu.edu) or Course Director (afternoon sessions - antonia.nemec@med.fsu.edu) as early as possible.
 - Unexcused absence from an activity may require remediation as determined by the course directors. Multiple unexcused absences may result in a [Report of Concern for Unprofessional Behavior](#) and referral of the student to the Student Evaluation and Promotions Committee.
 - A repeat lapse in professionalism following a warning will be considered **Unsatisfactory Professionalism**, and will result in a course grade of IR or F (see [Grading Policy](#) below).
4. Demonstration of the attitudes and behaviors of Medical Professionalism is expected at all times and in all aspects of the course, including adherence to the Honor Code in all course activities, adherence to safety protocols and behaviors, and observation of the dress code. Professionalism concerns may generate a [Report of Concern for Unprofessional Behavior](#).
5. A score $\geq 80\%$ on the **Foundations of Medicine 2: Molecules to Mechanisms OSCE** is required to pass the course. A score of $\geq 80\%$ on the original assessment earns 20 points. Students who score < 80% but successfully remediate the performance prior to the last day of the course earn 16 points. Students who are unable to successfully remediate prior to the last day of the course will earn 0 points and receive a grade of fail for **Foundations of Medicine 2: Molecules to Mechanisms** (see [Grading Policy](#) below), and will be referred to the Student Evaluation and Promotion Committee.

6. Satisfactory completion and timely submission of all assignments, including Senior Mentor home visits and log submission and self-directed learning documentation, as determined by the course directors.
7. **Timely completion of the post-course evaluation no later than 5 PM ET, October 19, 2025.**

Pre-clerkship course grading policy – Year 1:

Course written assessment score:

- The course **exam average** is comprised of 50% Exam 1 and 50% Exam 2.
- Pass = $\geq 70.0\%$; NBME exam scores are integers (rounded by NBME). **The exam average is recorded to 1 decimal place and is not rounded.**

Course grade: Pass, Fail, IR – All grades are determined by the course directors

- If the course written assessment score (exams and summative quiz) are **both** $\geq 70.0\%$ **and** all other aspects of the course have been satisfactorily completed as per the Specifications Grading table for the course, a grade of **Pass** will be recorded.
- If the course assessment score is $< 70.0\%$ **and** all other aspects of the course have been satisfactorily completed, a temporary grade of **IR** will be recorded.
- For an M1 course, a student **may** be allowed to attempt to remediate the temporary IR grade for no more than two (2) courses according to the [policy](#) below, if recommended by the course director AND approved by the Student Evaluation and Promotion Committee (SEPC). A passing performance on the remediation exam is $\geq 70.0\%$. The grade will convert to **Pass** or **Fail** based on the remediation exam score.
- If the student has IRs in two (2) M1 courses, **and** the SEPC recommends repeating Year 1, the student **may not** take the remediation exams, and the IR grades will convert to Fail.
- If a student has IR grades in three (3) M1 courses, the IR grades will convert to Fail, and the student will be referred to the SEPC for consideration of **either** repeating the year or dismissal.

In courses that include an OSCE:

- If the OSCE score is $< 80\%$, **and** the course written assessment score is Pass (*see above*) a temporary grade of **IR** will be recorded and the student may be allowed to remediate the clinical performance as determined by the Clinical Skills Directors.

In courses that include Preceptorship (M1 Spring, M2 Fall)

- If the performance in the Preceptorship is Unsatisfactory (US), as determined by the Director of Pre-clerkship Preceptorships, **and** the course written assessment score is Pass, a temporary grade of **IR** will be recorded and the student may be allowed to remediate the deficit as determined by the Director of Pre-clerkship Preceptorships.

In all cases of Unsatisfactory Professionalism, the recorded grade will be **either IR or Fail**, depending on the nature of the Professionalism concern – **irrespective of the grade in the other categories**. (Professionalism includes timely completion of all assignments and responsiveness to communication from course directors.)

In any course in which the student's performance merits a grade of IR in 2 or more of the above categories (written assessment score, OSCE, Preceptorship, Professionalism), a grade of Fail may be awarded, and the student will be referred to the SEPC. (see table below)

Written assessment	OSCE	Preceptorship	Professionalism	Course Grade
$\geq 70.0\%$	$\geq 80\%$	S	S	Pass
$\geq 70.0\%$	< 80%	S	S	IR
	$\geq 80\%$	US	S	IR
	$\geq 80\%$	S	US	IR or Fail
	$\geq 80\%$	US	US	IR or Fail
	< 80%	S	US	IR or Fail
	< 80%	US	S	IR or Fail
< 70.0%	$\geq 80\%$	S	S	IR
< 70.0%	< 80%	S	S	IR or Fail
	$\geq 80\%$	US	S	IR or Fail
	$\geq 80\%$	S	US	IR or Fail
	$\geq 80\%$	US	US	Fail
	< 80%	US	US	Fail

Pre-clerkship course remediation policy – Year 1:

A student who has completed all components of an M1 course (activities, assignments, and assessments) but does not achieve a passing score ($\geq 70.0\%$ as defined above) may, upon approval of the SEPC, attempt to remediate the exam grade to Pass in no more than 2 courses in the following way:

- For an exam score < 70.0% by taking a customized NBME exam that covers the entire content of the course.
- For a summative quiz score < 70.0%, (Foundations of Medicine 1) by taking a faculty written exam that covers the content included on the summative quizzes. Quiz content remediation will occur prior to the end of the course.
- For an OSCE score < 80.0% - remediation as determined by the Clinical Skills Director

The remediation exam for each course will be given at the COM on a specified date, published at the beginning of the Academic Year. **A student who is unable to take the remediation exam on the specified day for any reason other than illness or required military service will not be allowed to attempt remediation by exam, and will be required join the next year cohort and retake the course.** In this case, a grade of Fail will be recorded.

The schedule for AY2025-2026 is:

Week (2026)	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
5/4-5/8	SCP Session 1 – OR – study for remediation exam(s) (3 weeks)				
5/11-5/15					
5/18-5/22					
5/25-5/29	SCP Session 2– OR – study for remediation exam(s) (3 weeks)				
6/1-6/5					
6/8-6/12					
6/15-6/19	Study for remediation exam(s) (5 weeks)				
6/22-6/26					
6/29-7/3					
7/5-7/10					
7/13-7/17					
7/20-7/24	Foundations 1		Foundations 2		Host-Defense
7/27-7/31	Cardiovascular-Pulmonary		Renal-Endocrine		

Faculty will be available throughout the 11 week study period to advise on and participate in remediation activities, including:

- **Student development of a specific plan for learning and monitoring progress (EPO 3)**
- Scheduled faculty Office Hours

Resources and materials available may include:

- Review of course content on Canvas
- Review of content through OnlineMedEd; customized scheduling tool
- Faculty written quizzes and practice tests on Canvas
- Faculty developed on-line modules on Canvas
- For students remediating Foundations of Medicine 1, access to view cadaver prosections and laboratory with permission of the course director

Assessment:

- A passing score ($\geq 70.0\%$) on a customized NBME exam (questions selected by the course directors and with a difficulty approximately equivalent to the original course exam(s))
- A student who scores < 70.0% on the assessment will receive a grade of Fail for the course and be referred to the SEPC for consideration of either repeat of M1 or dismissal.

Grading for BRIDGE Students (Graduate Program Class of 2026)

BRIDGE students will be held to the same requirements listed above. In addition, they will be assigned a letter grade (A, B+, B, B-, C, or F) according to the scale below, based on the average of all written and practical exams. Note, students in the BRIDGE program must achieve a grade of B- or better ($\geq 70.0\%$) in all required courses to remain in the [program](#). **Grades of C may be remediated, at the discretion of the Course Directors in consultation with the Director of the Bridge Program and with the approval of the Bridge Committee.** Remediation will be comprised of scheduled meetings with faculty and assessment with a customized NBME exam at a date to be determined, prior to the start of the COM Spring break (March 9, 2026).

Grading Scheme for BRIDGE Students: Foundations of Medicine 2

- A = $\geq 87\%$
- B+ = 82 – 86.9%
- B = 76 – 81.9%

B- = 70 – 75.9%

C = 65 – 69.9%

F = < 65%

Course Evaluation

Students are required to complete and submit the post-course evaluation.

- Evaluations are delivered on-line through Qualtrics surveys comprised of radio-button questions and free response text.
- Students will receive an email directly from Qualtrics which allows tracking of completion of the survey INDEPENDENT from survey responses.
- **Survey responses are both anonymous and confidential.** Comments and ratings are shared in aggregate with course directors and the curriculum committee on a need to know basis. No responses are associated with student identity.
- Evaluations are made available no later than Friday prior to the week of the exam and must be completed within 10 days. (Automatic reminders will come from Qualtrics only to those who have not submitted the survey.)
- Failure to complete the survey will be considered Unsatisfactory Professionalism and will result in a grade of IR or Fail (*see table above*).

Additional feedback is encouraged at all times on all components of the course and will assist the course directors in providing timely and continuous quality improvement. Feedback through email or meetings with faculty is always welcome.

Detailed Schedule - AY2025-2026

Week 1	Clinical skills: <ul style="list-style-type: none"> • CLC: Patient-centered interview Steps 1-5 + Summarization – Demonstration • Large and Small group: Eliciting patient stories; patient story summarization Biochemistry and Cell Biology: nucleic acids, DNA replication, damage and repair, transcription, translation, post-translational modifications, enzyme activity and kinetics Histology: module 7 – endocrine system Social and behavioral science: foundations of bioethics, health equity Formative Self-assessment 1
Week 2	Clinical skills: <ul style="list-style-type: none"> • CLC: Patient-centered interview Steps 1-5 + Summarization – Demonstration • Large and Small group: Senior Mentor orientation; HPI Histology: module 8 – renal-urinary system Biochemistry and Cell Biology: cytoskeleton, smooth endoplasmic reticulum, peroxisomes, lysosomes, epithelium, muscle Genetics: modes of inheritance, population genetics, chromosomal disorders Formative Self-assessment 2
Week 3	Clinical skills: <ul style="list-style-type: none"> • CLC: Patient-centered interview Steps 1-5 + HPI - Assessment • Large and Small group: PMH Biochemistry and Cell biology: glucose metabolism, mitochondria, glycolysis, TCA cycle, ATP synthesis, gluconeogenesis, glycogen Formative Self-assessment 3
Week 4 (Labor Day)	Clinical skills: <ul style="list-style-type: none"> • CLC: PMH + SH + FH - Demonstration • Large and Small group: natural history of disease; social history (SH) and family history (FH) Biochemistry: triglycerides, fatty acids, sphingolipids, amino acid metabolism; diabetes, nutrition, diet, Small group: social history and family history Formative Self-assessment 4
Week 5	Exam 1 (Monday) Clinical skills: <ul style="list-style-type: none"> • CLC: FOSCE – problem oriented history • Large and Small group: POC medical apps; expanded history in chronic illness Pharmacology: receptor signaling, membrane transport, administration, absorption and distribution, biotransformation and elimination, dose response, pharmacology across the lifespan, time course, modifying factors, placebos and herbals Formative Self-assessment 5
Week 6	Clinical skills: <ul style="list-style-type: none"> • CLC: aorta and IVC ultrasound • Large and Small group: aorta and IVC ultrasound; wellness and personal resilience, ultrasound practice Pharmacology: autonomic nervous system, cholinergics, adrenergics, prescription writing, drug development. Physiology: nerve-muscle signaling, body temperature Formative Self-assessment 6
Week 7	Clinical skills: <ul style="list-style-type: none"> • CLC: OSCE problem oriented history • Large and Small group: Family life cycle: 65 years and older; Senior mentor visit 1 reports

	<p>Microbiology: bacterial structure, bacterial genetics, fungi, gram positive, negative, and indeterminate bacteria, parasites, viruses, microbial detection methods, sterilization</p> <p>Formative Self-assessment 7</p>
Week 8	<p>Clinical skills:</p> <ul style="list-style-type: none"> • CLC: problem focused encounter – Demonstration • Extended Large group: mindfulness <p>Pharmacology: medical errors</p> <p>Biostatistics: clinical testing, study design, evidence-based medicine, hypothesis testing</p> <p>Histology: module 9 – reproductive system</p> <p>Small group: mindfulness</p> <p>Formative Self-assessment 8</p>
Week 9	<p>Clinical skills:</p> <ul style="list-style-type: none"> • CLC: OSCE make up/remediation • Small group: self-evaluation and mid-semester performance review <p>Biostatistics: critical analysis of literature</p> <p>Exam 2</p>

Policies

Americans with Disabilities Act

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodations for all persons with disabilities in a manner that is consistent with academic standards of the course while empowering the student to meet integral requirements of the course. Candidates for the M.D. degree must be able to fully and promptly perform the essential functions in each of the following categories: Observation, Communication, Motor, Intellectual, and Behavioral/Social. However, it is recognized that degrees of ability vary widely between individuals. Individuals are encouraged to discuss their disabilities with the College of Medicine's [Director of Student Counseling Services](#) and the FSU Office of Accessibility Services to determine whether they might be eligible to receive accommodations needed in order to train and function effectively as a physician.

[The Office of Student Counseling Services](#)

Medical Science Research Building, 2301

Phone: (850) 645-6475

Students with disabilities needing academic accommodation should:

- 1) register with and provide documentation to the Office of Accessibility Services (OAS);
- 2) request a letter from Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; and
- 3) meet (in person, via phone, email, skype, zoom, etc.) with each instructor to whom a letter of accommodation was sent to review approved accommodations.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided.

This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

[Office of Accessibility Services](#)

874 Traditions Way

108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

Voice: (850) 644-9566 TDD: (850) 644-8504

oas@fsu.edu

<https://dsst.fsu.edu/oas>

Academic Honor Code

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University [Academic Honor Policy](#))

Attendance Policy

University Attendance Policy:

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

The College of Medicine has detailed attendance policies as they relate to each cohort and events that conflict with course schedules. See [FSUCOM Student Handbook](#) for details of attendance policy, notice of absences and remediation.

Unexcused absence from a scheduled examination or quiz may result in a score of zero (0 %) being assigned for that assessment. Unexcused absence from an activity for which attendance is required (for example, Small Group session) may be considered as an issue of Professionalism. Any unexcused absence may require completion of the Performance Improvement Plan (see Grading section, above).

Academic Success

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Department of Student Support and Transitions to learn more.

Confidential campus resources:

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program

University Center A, Rm. 4100
(850) 644-7161
Available 24/7/365|Office Hours: M-F 8-5
<https://dsst.fsu.edu/vap>

Counseling and Psychological Services (CAPS)

Florida State University's Counseling and Psychological Services (CAPS) primary mission is to address psychological needs and personal concerns, which may interfere with students' academic progress, social development, and emotional well-being. The following in-person and virtual (tele-mental health) services are available to all enrolled students residing in the state of Florida:

1. Individual therapy
2. Group therapy
3. Crisis Intervention
4. Psychoeducational and outreach programming
5. After hours crisis-hotline
6. Access to community providers for specialized treatment

Call 850-644-TALK (8255) for more information on how to initiate services.

Counseling and Psychological Services
250 Askew Student Life Center
942 Learning Way
(850) 644-TALK (8255)
Walk-in and Appointment Hours: M-F 8 am – 4 pm
<https://counseling.fsu.edu/>

University Health Services

Services at UHS) are available to all enrolled students residing in Florida:

The mission of University Health Services (UHS) is to promote and improve the overall health and well-being of FSU students. UHS provides a coordinated continuum of care through prevention, intervention, and treatment. Services include general medical care, priority care, gynecological services, physicals, allergy injection clinic, immunizations, diagnostic imaging, physical therapy, and a medical response unit. The Center for Health Advocacy and Wellness (CHAW) assists students in their academic success through individual, group, and population-based health and wellness initiatives. Topics include wellness, alcohol and other drugs, hazing prevention, nutrition and body image, sexual health, and power based personal violence prevention. For more information, go to uhs.fsu.edu.

University Health Services
Health and Wellness Center
960 Learning Way
Tallahassee, FL 32306
Hours: M-F, 8 am – 4 pm
(850) 644-6230
<https://uhs.fsu.edu/>

Clinical Learning Center (CLC) Specific Absence Policy

CLC scheduled activities

Students with a legitimate reason to miss a scheduled session in the CLC must request an approved absence through the Secure Apps [online link](#). Students with approved absences will be allowed to reschedule or participate in a make-up session. **Unapproved absences may not be rescheduled or made up.** Repeated unapproved absences may result in a failing grade for the course and a [Report of Concern for Unprofessional Behavior](#).

If you know you will be absent from a scheduled CLC session, please complete the absence approval request at least two weeks in advance. For absences that are approved at least two weeks in advance, a change in CLC schedule assignment will be arranged.

One method for addressing a planned and approved absence is to identify a classmate willing to exchange scheduled sessions with you. In this situation, both students (the student with the approved absence and the willing classmate) should send a request via email to the [CLC Team](#) at least two weeks in advance. Students will be notified re: approval of these requests. Please note: Sending a request is NOT equivalent to receiving approval.

Unplanned but excusable absences from CLC sessions are absences due to circumstances *beyond the student's control*. Examples include student illness and/or family death. When such a situation occurs, please contact the [CLC Team](#) **as soon as possible**, to inform her that you will not be present. Then, submit an absence request to Student Affairs through [Student Academics](#). Student Affairs will classify the absence as excused or unexcused.

If the absence qualifies as an "excused" absence, the student must contact the [CLC Team](#) to develop a plan to make up the missed session. These sessions may require the presence of an SP and / or CLC faculty member. Any excused absence will not impact the student's grade.

Unexcused absences generally involve circumstances *within the student's control*. Examples of unexcused absences include the student who forgets about a scheduled CLC session, the student who skips the session to study, and/or any absence where an able student fails to contact Student Affairs and the [CLC Team](#) to inform them that the student will not be present for the session.

If the absence is unexcused, the clinical skills director will discuss the situation with the student. Any further unexcused absences will result in the notification of Student Affairs, a [Report of Concern for Unprofessional Behavior](#), and referral of the student to the Student Evaluation and Promotions Committee. Students with unexcused absence(s) will still be responsible for the missed material in future OSCE's and written examinations.

Objective Structured Clinical Examination (OSCE)

If a student knows he/she will not be able to participate in the OSCE, he/she should complete and submit the appropriate forms to Student Affairs, and, if within 24 hours of the time he/she is scheduled for the OSCE, contact the [CLC Team](#). If the absence is excused by Student Affairs, the student will receive an "I" (incomplete) grade and be required to complete a make-up OSCE at a designated time after the course has ended.

Any excused absence—whether planned or unplanned—will not impact the student's grade.

Any absence that does not qualify as an excused absence per Student Affairs is an unexcused absence. These generally are due to circumstances within the student's control. Examples of unexcused absences include the student who forgets about an OSCE session, the student who skips an OSCE to study for an exam and/or any absence where an able student fails to follow the procedures above if they are not able to participate in the OSCE. **An unexcused absence will result in failure of both the OSCE and the course during which it occurs.**

Professional Attire

Professional attire consists of clothes consistent with community norms for health care providers. The COM CLC simulates the health care environment. Length and fit of all attire is to be in accordance with that acceptable for providers in a professional healthcare environment; oversized, undersized, tight-fitting, seductive, and/or revealing clothing is not acceptable.

Fit

Make sure your clothing fits properly.

Tight fitting clothes may hinder your range of motion and prevent you from reaching, bending, twisting, kneeling or squatting. You need to ensure

you're able to perform any physical exam or patient care activity without limitations. This also applies to loose fitting clothes as they also may interfere with patient care. When it comes to jewelry, wear a minimal amount. Jewelry can harbor microorganisms, contributing to the spread of disease. Large or loose jewelry can also get tangled or pulled on, possibly causing injuries to the patient or the provider.

Exposure and Safety

Make sure you're conscientious about which parts of your clothing, skin, or hair are exposed to the environment and visible to, and/or touching your patients and colleagues.

For example, open-toed shoes are prohibited by OSHA regulations in clinical settings and places like the anatomy lab where bodily fluids or sharp objects may contact one's body. This is also true for hair. If you have long hair, make sure it's pulled back and secured so it won't touch surfaces or the patients. Artificial nails are prohibited by CDC recommendation as they are more likely to harbor gram-negative pathogens, even after handwashing.

Modesty

Make sure you're dressed in a way that maintains appropriate boundaries and makes you, the patient, and staff feel safe.

Aside from work-related exposure described above, clothing that reveals a lot of skin may make your patient uncomfortable for a variety of reasons (culture, religion, values, etc). Clothing that reveals arms, legs, midriff or chest areas may also pose a safety risk for the student in terms of harassment; some patients may erroneously misinterpret revealing clothing as an invitation to flirt or pursue the student.

Presentation

Remember: you are a representative of the FSU COM and the profession.

This means neatly groomed hair, including facial hair, ironed clothing AND white coat. Refrain from using cologne or hygiene products with strong fragrances as they may trigger medical conditions (e.g. asthma, migraines). Nails should be trimmed to not extend past finger's edge to avoid causing pain with palpation and other maneuvers.

Suggested clothing

- Slacks or skirt and a collared shirt, blouse, or sweater.
- Length for dress/skirt edge should be no higher than 2" above the top of the knee-cap (patella) as garments move higher during examinations and sitting down.
- Ties may be either required or forbidden in some clinical situations.
- Footwear: dress or closed-toe shoes (no sandals, no open-toe footwear).
- Recommended flat or low heel height (no more than 2").
- Body art should be covered, and visible piercings should be removed while on duty.
 - Ear piercings are allowed but are limited to two per ear. ***This is a common hospital policy that we are following to get you used to it.***
- Neutral tones for nail polish.

Unacceptable attire includes, but is not limited to, the following:

- Jeans of any style or color, denim material or "denim look" material
- Sheer or see-through fabrics
- Gym attire including shorts, leggings, yoga pants, sports bras, tank tops unless otherwise specified for a given activity (see below).

The established "norms" of certain clinical settings may modify these standards for professional attire, but any variations in professional attire must be approved in advance by the student's supervisor.

For curricular activities where guests or patients are present: Expectation is business casual with a white coat on.

On those occasions when students examine each other, you will be informed of the appropriate apparel for that session. Consult your supervisor to clarify expectations for student attire in any ambiguous or new situations.

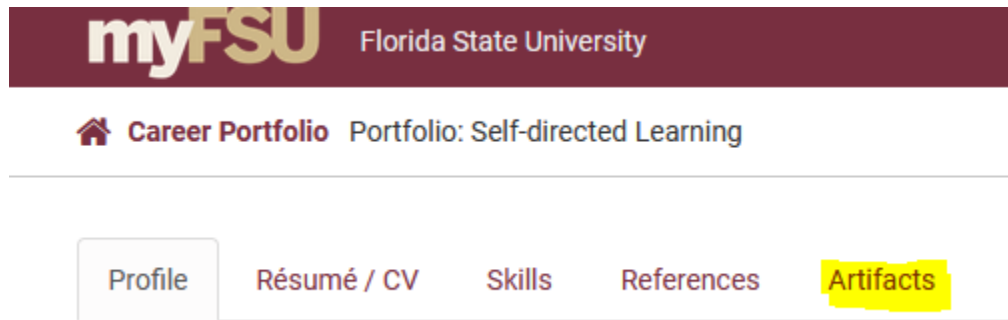
FSU COM Education Program Objectives

EPO 1	<p>PATIENT CARE: Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health</p> <p><i>Performs history and physical, demonstrates clinical reasoning and judgment, and incorporates guidance for health promotion and wellness.</i></p>
EPO 2	<p>KNOWLEDGE FOR PRACTICE: Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences and the application of this knowledge to patient care</p> <p><i>Applies scientific and clinical knowledge to explain the normal and abnormal function of organ systems across the lifespan, mechanisms of disease, and the mechanisms and rationale of clinical diagnostic tests and therapeutic interventions. Applies knowledge of biostatistics and epidemiology to identify health problems and risk factors for patients and populations.</i></p>
EPO 3	<p>PRACTICE-BASED LEARNING AND IMPROVEMENT: Demonstrate reflective practice for life-long learning and improvement of patient care through continuous self-evaluation, evaluation of one's care of patients, and appraisal and assimilation scientific evidence</p> <p><i>Demonstrates reflective practice and commitment to personal growth and improvement. Utilizes information resources to locate and appraise evidence to guide clinical decisions.</i></p>
EPO 4	<p>INTERPERSONAL AND COMMUNICATION SKILLS: Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals</p> <p><i>Communicates effectively with patients, families, health professionals, health agencies, and the public across a wide range of socioeconomic and cultural backgrounds. Manages patient and family values, goals, and preferences. Demonstrates sensitivity, honesty, and compassion in interpersonal interactions, including in difficult situations. Delivers organized and accurate presentations.</i></p>
EPO 5	<p>PROFESSIONAL IDENTITY FORMATION: Demonstrate a commitment to personal and professional growth, and to carrying out professional responsibilities, adherence to ethical principles, and respect for codes of conduct</p> <p><i>Demonstrates professional behavior and respect for all. Acknowledges differences in values and beliefs, and demonstrates willingness to critically analyze one's own personal views. Demonstrates honesty and integrity in all activities. Performs tasks and responsibilities in a timely manner. Takes responsibility for lapses in professionalism. Participates in developmental coaching to develop values, mission, goals, and career exploration.</i></p>
EPO 6	<p>SYSTEMS-BASED PRACTICE: Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care</p> <p><i>Participates in identifying system errors and potential systems solutions. Incorporates considerations of cost awareness and risk-benefit analysis in patient and/or population care. Demonstrates skill in team building and leadership. Identifies key elements for safe and effective transitions of care. Describes how components of a complex health care system are interrelated and how they impact patient care.</i></p>
EPO 7	<p>FSU COM MISSION: Demonstrate knowledge of the structural, systems, and personal contributors to the social determinants of health and health equity, especially in elder, rural, minority and underserved populations</p> <p><i>Identifies social determinants of health and how they create opportunities for and barriers to wellness for underserved populations. Identifies opportunities for physicians to partner with community resources to improve individual and population health. Explains the process of community health assessment to improve population health status. Applies the geriatric principles of care, and identifies the systems and social contributors to the well-being of older adult populations. Identifies the social, cultural, and systems factors associated with the health status of rural populations. Identifies factors contributing to racial and social justice in medicine. Demonstrates knowledge of the ways intersectionality, implicit and explicit bias relate to clinical decisions and quality care.</i></p>

FSU Career Portfolio and Canvas Submissions

All M1 students will create an **FSU Career Portfolio** prior to the start of Fall semester. The portfolio is “yours” and can be used to compile information and documentation of accomplishments so they will be easily accessible when you need them. During M1 and M2, it will be used to document Self-directed learning (SDL) activities and receive feedback on Canvas.

Go to <https://career.fsu.edu/portfolio> and create your Portfolio. **No one has access to your Portfolio unless and until you provide them with the link.** And the access can be “turned off” when you want. You can make multiple portfolios, so it’s recommended that you create one just for your SDL activity.



The **Artifacts** tab will be the most useful for documenting your SDL activities. You can upload documents there in whatever format you choose. At least once during each course, there will be a SDL submission link posted on Canvas (Assignments). The “assignment” is to document your SDL activities and be able to receive feedback from faculty.


Instructions for submitting a Canvas assignment through the Career Portfolio *(can also be found [here](#))*

1. **Upload** your SDL document(s) to the Artifacts tab. (see [Suggestions for SDL](#))
2. Go to the **Home** page.
3. Click on the **Portfolio name**, then click “**Share**.”

Welcome to FSU Career Portfolio

The Career Portfolio is a tool created by The Career Center to present your skills, experiences, and accomplishments to prospective employers, graduate schools, and other organizations. You can reflect on your experiences in a variety of areas, such as jobs/internships, courses, service/volunteer work, membership/activities, and other interests or life experiences.

Preparing students and alumni for the future through planning, reflection, skill development, and portfolio documentation.



Create Portfolio

Portfolios	Created	Last Modified	Shared
Self-directed Learning	July 10, 2024	July 10, 2024	N

Edit

Share

Options

Preview

Download PDF

Delete

FSU Directory Assistance
Questions or Comments

4. **Create an Access Password/Key** – enter one word, no special characters, case sensitive.

Please note that the access key is case sensitive.

Create an Access Password/Key (e.g., accounting)

5. **SAVE.** The Access Password/Key now appears in the box below:

Send Portfolio & View Access Details

In this section you can see which Access Keys have been used and when referred users have accessed your portfolio. Click "send access key" to email a link to your referred user.

metacognition	<input type="button" value="send access key"/>	<input type="button" value="get shareable link"/>	<input type="button" value="0 views"/>	<input type="button" value=""/>
---------------	--	---	--	---------------------------------

6. Click on **"get shareable link"**

Share With Others

<https://apps.its.fsu.edu/CareerPortfolio/public/view/197746/metacognition>

7. **Copy the URL and paste it into the Assignment in Canvas and Submit.**

Self-directed Learning

Due No Due Date **Points** 0 **Submitting** a website url

Submit evidence of your most recent SDL activities. This may take many different forms including, but not limited to:

- reflection on learning strategies and outcomes to date
- analysis of past goals and proposed adjustments
- identification of learning needs, resources, plans to address them
- reflection on feedback received and how it was/will be incorporated
- goals and strategies for current period (i.e., SMART goal - specific, measurable, achievable, relevant, time-bound),
- weekly learning journal
- reflection on self-awareness and personal development

Website URL

Google Drive JoVE LTI Tool Office 365

Copy and paste the link to the web site you'd like to submit for this assignment.

Website URL

Comments...