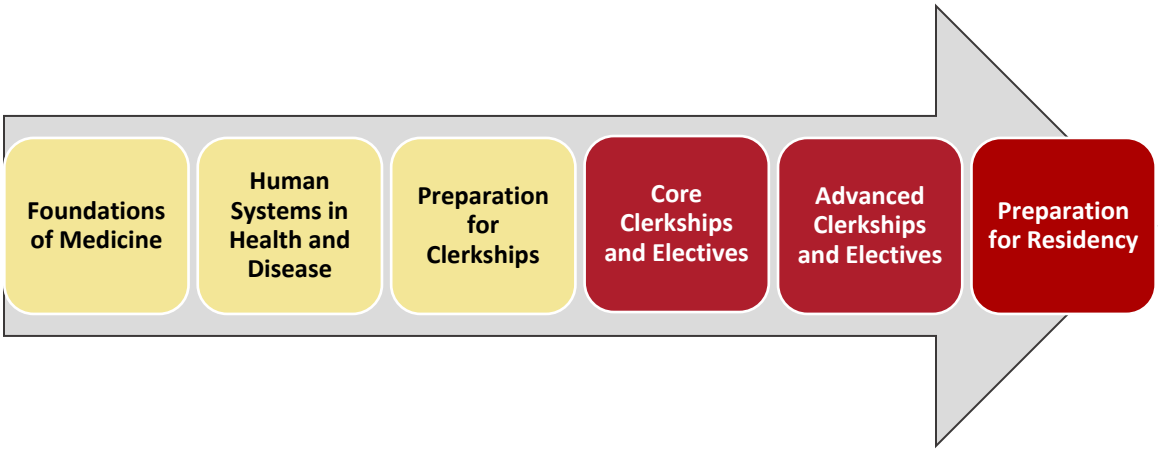
MEDICINE



BMS 6030
Foundations of Medicine 2: Molecules to Mechanisms

Florida State University
College of Medicine

Table of Contents

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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 preclerkship 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.

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.	2.2	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.	2.2	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.	2.2	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.	2.2	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.	2.2	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.	2.2	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.	2.2	Quizzes and NBME CAS exams
FOM2 8	Describe the general principles of pharmacology including pharmacokinetics and pharmacodynamics.	2. 2	Quizzes and NBME CAS exams
FOM2 9	Describe the process of drug development and approval including the prescription process.	2.2, 2.3	Quizzes and NBME CAS exams
FOM2 10	Discuss the core concepts of bioethics and their application in clinical practice	5.3	Quizzes and NBME CAS exams
FOM2 11	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.	6.4	Quizzes and NBME CAS exams
FOM2 12	Demonstrate the application of clinical decision making,	1.5, 2.1	Quizzes

	interpretation and use of evidence-based data in writing prescriptions.		
FOM2 13	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.	2.1, 2.3, 2.4	Quizzes and NBME CAS exams; Biostatistics problem set; Critical analysis of literature assignment; PICO assignment
FOM2 14	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.	1.2	CLC checklist
FOM2 15	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.	4.1	Senior Mentor Program; CLC checklist
FOM2 16	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	4.2	CLC checklist
FOM2 17	Describe the basic physical properties and imaging characteristics of ultrasound, and identify opportunities, advantages, and limitations for its point-of-care use	2.3	Quizzes
FOM2 18	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	3.1, 9.1, 9.6	Quizzes
FOM2 19	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.	3.1, 3.2, 8.2	Mid-semester self-evaluation; Observation by faculty and advisors
FOM2 20	Work effectively as part of a team.	4.2, 4.3	Team quiz peer evaluation; Senior Mentor Program

Detailed learning objectives are provided for each session in the course.

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 (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 (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 and Telemedicine; 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 learning the physical exam in the **Foundations of Medicine 1: Organization and Structure** course. Students will 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. **For AY2023-2024, these visits will all be in person with the use of remote connection as needed**, acknowledging that this population continues to be among those most at risk for all COVID-19 variants. 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 9/22, 10/20 and 11/21**. The appropriate assignment forms are found on Canvas (the University Learning Management System). **Note, the first Senior Mentor visit occurs and the first assignment is due during Foundations of Medicine 2, no later than September 22, 2023**.

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

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).

Two essential Professional behaviors that will become a part of your everyday life are founded on respect for patients:

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, friends, or others that 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.

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. 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, *via* Telemedicine, 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.

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. In Quiz Teams, groups of students collaborate to review answers to the Individual Readiness Quiz and answer new challenge questions. And 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.

"**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.

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
- Sterility

Histology

- Endocrine system
- Renal urinary system
- Reproductive system

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
- Patient-centered interviewing, medication reconciliation, therapeutic adherence, patient-specific dosage

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

a. Clinical examination equipment: Each student must purchase and/or have available the following clinical examination equipment: stethoscope with diaphragm, bell and pediatric option, oto/ophthalmoscope, #128 and #512 tuning forks, penlight, reflex hammer, Rosenbaum eye chart

and a sphygmomanometer with pediatric, adult, and large adult sized cuffs. Opportunities to purchase this equipment at a discount will be provided prior to orientation. Bring your examination equipment with you to each CLC session.

b. 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 ≥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 (≥ 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.

NBME exams

There will be a mid-block exam and a final exam 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. **Exams are cumulative across the curriculum**, i.e., main concepts, content and skills from material presented in prior courses may be included in questions. Most written questions are presented in the context of a clinical scenario or problem. The midblock exam contributes 40% and the final exam 60% to the course exam average.

Quizzes

Throughout the course there will be weekly faculty-written quizzes, delivered on Canvas. Students complete the quiz individually (**Individual Readiness Quiz** – 15 questions) during a required, proctored session in 1200. Immediately after, they join an assigned Quiz Team in one of the LC study rooms to complete the **Team Quiz**. The Team quiz includes the questions from the Readiness Quiz plus additional (4-5) "challenge" questions that must be answered through Team collaboration. Each student's quiz score is comprised of their individual Readiness Quiz score (75%) and their Team Quiz score (25%). The end of course quiz average will contribute 3% to the overall course written assessment average. (e.g., exam average = 70.0%, quiz average = 65.0% → course written assessment score = 69.9%). Quizzes provide a structure for students to "keep up" with the pace of the course and allow them to self-assess their learning needs (*EPO 3.1 Practice Based Learning and Improvement*). The Team Quiz prepares students for the collaborative problem-solving needs of modern medicine.

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 **≥ 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 172 points** as described in the table below, including a **minimum of 106 points from the assessment categories**. The final grade of a student who accumulates 172 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)				
End of course written assessment average – includes NBME exams 97% (40% midblock, 60% final) and quizzes (3%)	Overall score of ≥ 75%	100 points	90	100
	Overall score 70-74.9%	90 points		
	Score < 70.0%	0 points		
OSCE	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 = 59)				
Assignments (Minimum total points = 12)				
HPI worksheet	On time submission **Due 8/18 at 11:59 PM**	1 point	2	2
	Evidence of effort	1 point		
Critical reading template	On time submission **Due 10/8 at 11:59 PM**	1 point	2	3
	Evidence of effort and resubmission if requested	2 points		
Senior Mentor visit 1	On-time submission of assignment **9/22 at 11:59 PM**	2 points	7	8
	Satisfactory completion of assignment	4 points		
	Professional behavior (includes timely scheduling and follow through of meeting)	2 points		
Histology exercise: Endocrine	On time submission **Due 8/18 at 11:59 PM**	3 points	7	9
	Evidence of effort and resubmission if requested			
Histology exercise: Renal	On time submission **Due 8/25 at 11:59 PM**	3 points		
	Evidence of effort and resubmission if requested			
Histology exercise: Reproductive	On time submission **Due 10/4 at 11:59 PM**	3 points		
	Evidence of effort and resubmission if requested			
Mid-semester self -evaluation	On time submission **Due 10/5 at 11:59 PM**	1 point each	1	1
Professional Identity Formation (Minimum total points = 47)				
On time arrival, preparedness, and professionalism are expected for ALL required sessions. Includes, but not limited to, all activities at right:	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 (x9): On time	1 point each	9	20
	CS Small groups (x9): Preparation	1 point each	9	
	Basic science small groups (x2): On time and present for entire session	1 point each	2	
	Required large groups (x6): On time and present for entire session	1 point each	6	6
	Quiz attendance (x7)	1 point each	7	7
		TOTAL NON-ASSESSMENT	**66**	**10**
		TOTAL	**172**	**190**

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 and QUIZZES	Date	Time
QUIZZES (**NOTE DAY AND TIME**)	Tuesday 8/23	1-2:30 PM
	Tuesday 8/30	1-2:30 PM
	Tuesday 9/6	1-2:30 PM
	Tuesday 9/20	1-2:30 PM
	Tuesday 9/27	1-2:30 PM
	Tuesday 10/4	1-2:30 PM
	Tuesday 10/11	1-2:30 PM
Summarization small groups	Tuesday, August 15	9-10:20 AM 10:30-11:50 AM
History of present illness small group	Tuesday, August 22	
Past medical history small group	Tuesday, August 29	
Social history and family history small group	Tuesday, September 5	
Expanded history in chronic illness small groups	Tuesday, September 12	
Wellness: Resilience small groups	Tuesday, September 19	
Senior Mentor Visit 1 small groups	Tuesday, September 26	
Patient presentation	Wednesday, August 16	2-2:50 PM
Health equity 2	Friday, August 18	1-2:20 PM
Genetics practice problems small group	Friday, September 1	1-1:50 PM
DNA damage & repair cases small group	Wednesday, September 6	1-1:50 PM
Pharmacology tutorial	Friday, September 15	1-2:50PM
Pharmacology ANS group activity	Friday, September 22	1-2:50 PM
Microbiology in class activity	Friday, September 29	1-2:20 PM
Mindfulness combined small groups/hybrid	Tuesday, October 3	10-11:30 AM
Evidence based medicine 2	Friday, October 6	2-2:50 PM
Journal Club	Monday, October 10	1-2:50 PM
Midsemester SG performance review small groups	Tuesday, October 11	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 18	11:59 PM
HPI worksheet	Friday, August 18	11:59 PM
Histology exercise: Renal	Friday, August 25	11:59 PM
Senior Mentor #1	Friday, September 22	11:59 PM
Histology exercise: Reproductive	Friday, October 4	11:59 PM
Critical reading template	Sunday, October 8	11:59 PM
Mid-semester performance self -evaluation	Thursday, October 5	11:59 PM

Notes:

1. An end of course written assessment score between 70.0% and 74.9% (90 points) is considered a "marginal" pass. Students in this category are encouraged to consult the academic counselors in Student Affairs as well as the course faculty for advice on study and test-taking skills. **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 required to
    a. Contact the course directors within 24 hours, and
    b. Meet with the course directors. Students may be asked to complete a Performance Improvement Program, the purpose of which is to assist the student in developing the skills and habits necessary to succeed in the curriculum as well as to address specific performance deficits.
3. Any Team Quiz with answers not consistent with the student's Group submission earns 0 points.
4. 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).

5. 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.
6. A score **≥ 80%** on the **Foundations of Medicine 2: Molecules to Mechanisms OSCE** is required to pass the course. A score of ≥ 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.
7. Satisfactory completion and timely submission of all assignments, including Senior Mentor home visits, as determined by the course directors.
8. Timely completion of the post-course evaluation.

Pre-clerkship course grading policy – Year 1:

Course written assessment score:

- The course **exam average** is comprised of 40% midblock + 60% final.
- The course **written assessment score** = 97% exam average + 3% quiz average
- Pass = ≥ 70.0%; Written assessment scores are recorded to 1 decimal place and are not rounded.

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

- If the course written assessment score is ≥ 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 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 ≥ 70.0%. The grade will convert to **Pass** or **Fail** based on the remediation exam score.
- If the student has IRs in 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 3 M1 courses, the IR grades will convert to Fail, and the student will be referred to the SEPC for consideration of 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
≥ 70.0%	≥ 80%	S	S	Pass
≥ 70.0%	**< 80%**	S	S	IR
	≥ 80%	**US**	S	IR

	≥ 80%	S	**US**	**IR or Fail**
	≥ 80%	**US**	**US**	**IR or Fail**
	< 80%	S	**US**	**IR or Fail**
	< 80%	**US**	S	**IR or Fail**
< 70.0%	≥ 80%	S	S	IR
< 70.0%	**< 80%**	S	S	**IR or Fail**
	≥ 80%	**US**	S	**IR or Fail**
	≥ 80%	S	**US**	**IR or Fail**
	≥ 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 (≥ 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 by taking a customized NBME exam that covers the entire content of the course. 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 AY2023-2024 is:

Week (2024)	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
5/6-5/10	SCP Session 1 – OR – study for remediation (3 weeks)				
5/13-5/17					
5/20-5/24					
5/27-5/31	SCP Session 2– OR – study for remediation (3 weeks)				
6/3-6/7					
6/10-6/14					
6/17-6/21	Study for remediation (4 weeks)				
6/24-6/28					
7/1-7/5					
7/8-7/12					
7/15-7/19	Foundations 1		Foundations 2		Host-Defense
7/22-7/26	Cardiovascular-Pulmonary		Renal-Endocrine		

Faculty will be available throughout the 10 week study period to advise on and participate in remediation activities, including:

- **Student development of a specific plan for learning and monitoring progress (EPO 3.2)**
- 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 (≥ 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.

Grading for BRIDGE Students (Graduate Program Class of 2024)

BRIDGE students will be held to the same requirements listed above. In addition, they will be assigned a letter grade (A, B+, B, C+,C, D 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 (≥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 4, 2024).

Grading Scheme for BRIDGE Students: Foundations of Medicine 2

A = ≥ 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 on Monday of the last full week of a course and must be completed within 14 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 - AY2023-2024

Week 1	**Clinical skills**: eliciting patient stories; patient-centered interview Steps 1-5 **Biochemistry**: Metabolism – glycolysis, TCA cycle, ATP synthesis, gluconeogenesis, glycogen, lipids, sphingolipids **Histology**: module 7 – endocrine system **Social and behavioral science**: foundations of bioethics, health equity **Small group**: patient story summarization
Week 2	**Quiz 1** – Individual and Team **Clinical skills**: the medical encounter, history of present illness; patient-centered interview Steps 1-6 **Histology**: module 8 – renal-urinary system **Biochemistry**: metabolism - amino acids; nutrition, metabolism and diabetes **Cell biology**: membranes, organelles, cytoskeleton, epithelium, muscle **Small group**: HPI
Week 3	**Quiz 2** – Individual and Team **Clinical skills**: history of present illness; patient-centered interview Steps 1-6 **Cell biology**: nucleic acids, DNA replication, damage and repair, transcription, translation and post-translational modifications **Genetics**: modes of inheritance, population genetics, chromosomal disorders **Small group**: PMH
Week 4 (Labor Day)	**Quiz 3** – Individual and Team **Clinical skills**: past medical history, social history, and family history **Biochemistry**: DNA damage & repair cases **Small group**: social history and family history
Week 5	**Midblock exam** **Clinical skills**: FOSCE **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 **Small group**: expanded history in chronic illness
Week 6	**Quiz 4** – Individual and Team **Clinical skills**: ultrasound practice **Pharmacology**: autonomic nervous system, cholinergics, adrenergics, prescription writing, drug development. **Physiology**: nerve-muscle signaling, body temperature **Small group**: building personal resilience
Week 7	**Quiz 5** – Individual and Team **Clinical skills**: **OSCE problem oriented history** **Microbiology**: bacterial structure, bacterial genetics, fungi, gram positive, negative, and indeterminate bacteria, parasites, viruses, microbial detection methods, sterilization **Small group**: Senior mentor visit 1 reports
Week 8	**Quiz 6** – Individual and Team **Clinical skills**: problem focused encounter **Pharmacology**: medical errors **Biostatistics**: clinical testing, study design, evidence-based medicine, hypothesis testing **Histology**: module 9 – reproductive system **Small group**: mindfulness
Week 9	**Quiz 7** – Individual and Team **Biostatistics**: critical analysis of literature **Small group**: self-evaluation and mid-semester performance review **Final exam**

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

To receive academic accommodations, a student:

1) must register with and provide documentation to the Office of Accessibility Services (OAS);
2) must provide a letter from OAS to the instructor indicating the need for accommodation and what type; and
3) should communicate with the instructor, as needed, to discuss recommended accommodations. A request for a meeting may be initiated by the student or the instructor.

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 Serviceshttp://disabilitycenter.fsu.edu/
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).

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

1	**PATIENT CARE: Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health**
1.1	Perform the medical, diagnostic, and surgical procedures considered essential for the entering resident
1.2	Gather, document, and effectively present essential and accurate information about patients and their condition through history-taking, physical examination, and the effective use of the electronic medical record for laboratory data, imaging and other tests
1.3	Organize and prioritize tasks and responsibilities to provide care that is safe, effective, and efficient
1.4	Interpret and effectively apply the results of basic diagnostic studies and tests, and understand the implications and urgency of results.
1.5	Make informed decisions about diagnostic and therapeutic interventions based on up-to-date scientific evidence and clinical judgment, using shared decision making to incorporate patient information and preferences.
1.6	Develop and carry out patient management plans while working effectively as part of an interprofessional team.
2	**KNOWLEDGE FOR PRACTICE: Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care**
2.1	Demonstrate an investigatory and analytic approach to clinical situations
2.2	Apply established and emerging bio-physical scientific principles fundamental to health care for patients and populations
2.3	Apply established and emerging principles of clinical sciences to diagnostic and therapeutic decision-making, clinical problem-solving, and other aspects of evidence-based health care
2.4	Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patients and populations
2.5	Apply principles of social-behavioral sciences to provision of patient care, including assessment of the impact of psychosocial-cultural influences on health, disease, care-seeking, care-compliance, barriers to and attitudes toward care
2.6	Locate, appraise, and assimilate up-to date evidence to guide clinical decisions and inform clinical judgment
3	**PRACTICE-BASED LEARNING AND IMPROVEMENT: Demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning**
3.1	Continuously self-reflect, seek feedback, and identify strengths, deficiencies, and personal biases in one's knowledge and expertise to further improve performance
3.2	Set and pursue personal improvement goals by engaging in learning activities that address one's gaps and limits in knowledge, skills, and attitudes
3.3	Systematically incorporate feedback and implement changes in order to improve performance and patient care
4	**INTERPERSONAL AND COMMUNICATION SKILLS: Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals**
4.1	Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
4.2	Communicate effectively with colleagues, other health professionals, and health related agencies
4.3	Participate in the education of patients, families, students, trainees, peers, and other health professionals
4.4	Demonstrate sensitivity, honesty, and compassion in interpersonal interactions and in difficult conversations, such as those about death, end-of-life, adverse events, bad news, and disclosure of errors
4.5	Maintain comprehensive, timely, and legible medical records
5	**PROFESSIONALISM: Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles and respect for codes of conduct**
5.1	Demonstrate compassion, integrity, and respect for a diverse patient population and for all people, including but not limited to diversity in sex, gender identity, age, culture, race, religion, disabilities, and sexual orientation
5.2	Demonstrate respect for patient privacy and autonomy, placing patient needs above self-interest
5.3	Demonstrate a commitment to ethical principles pertaining to provision or withholding of care, confidentiality, informed consent, and professional boundaries, including compliance with relevant laws, policies, and regulations
5.4	Demonstrate professional accountability
6	**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
6.1	Work effectively in and across various health care delivery settings and systems to coordinate patient care
6.2	Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care
6.3	Participate in advocacy for high quality, optimal and safe patient care systems
6.4	Participate in identifying system errors and potential systems solutions
7	**INTERPROFESSIONAL COLLABORATION: Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care**
7.1	Communicate and collaborate with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust
7.2	Use one's own role and the roles of other health professionals in interprofessional teams in order to provide patient- and population-centered care that is safe, timely, efficient, effective, and equitable
8	**PERSONAL AND PROFESSIONAL DEVELOPMENT: Demonstrate the qualities required to sustain lifelong personal and professional growth**
8.1	Demonstrate a commitment to one's own physical and emotional health, recognizing its impact on professional conduct, patience, empathy, and quality of patient care.
8.2	Manage balance between personal and professional responsibilities, seeking support when necessary
8.3	Demonstrate comfort with ambiguity as part of clinical health care and respond by utilizing appropriate resources to deal with uncertainty
9	**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**
9.1	Describe the social determinants of health, and identify how they create opportunities for and barriers to wellness for underserved populations.
9.2	Identify community resources and the ways physicians can partner with them to improve individual and population health
9.3	Discuss the process and components of community health assessment, and illustrate how it is used to identify health needs of a population and improve population health status
9.4	Describe the key geriatric principles of care, and discuss the impact of health care systems, community agencies, and social supports on the health and well-being of older adult populations
9.5	Describe the social, cultural, and systems factors that are associated with the health status of rural populations.
9.6	Identify and evaluate factors contributing to racial and social justice in medicine, including systems of power, privilege, and oppression, and their impacts on health outcomes. Demonstrate knowledge of the ways intersectionality, implicit and explicit bias relate to clinical decisions and delivery of high quality care.