



# Phase I Medical Student Handbook

Class of 2027

## **Table of Contents**

General Information: Curriculum Overview	
Phase I Core Faculty	6
Phase I Course Descriptions	6
Phase I Curriculum Design	11
Phase I Policy on Attendance at Required Activities	12
Assessment in Phase I	13
Remediation in Phase I	15
Completion of Online Phase I Evaluations	16
Copyright and Course Materials	17
Student Wellness	17
Learning Environment, Mistreatment, and Professional Behavior	18
Academic Accommodations	19
Academic Integrity	20
Undocumented Student Support Statement	20
Undergraduate Medical Education Administration and Services	21
Learning Strategies	24
Suggestions for Effective Notetaking	25

### **General Information: Curriculum Overview**

The integrated undergraduate medical education curriculum at the University of New Mexico School of Medicine (UNM SOM) is designed to prepare students with the essential knowledge, skills, and attitudes necessary to provide effective, compassionate health care within a rapidly evolving health care environment. The UNM SOM competencies and objectives guide student learning as well as curriculum design and innovation. The structure of the curriculum reflects the shift in emphasis from solely learning facts to learning skills you will need to be an effective lifelong learner.

Current educational initiatives are aimed at fostering the integration of foundational medical sciences and clinical medicine, early exposure to patients and communities to enhance teaching and learning, progressive development of clinical reasoning skills, emphasizing professional identity formation, and attention to personal and professional wellness.

The School of Medicine curriculum is comprised of three phases:

Phase I: The 23-month preclinical phase guides each medical student for success in the clinical clerkships of Phase II and on the USMLE Step 1 exam. Foundational science content is organized into organ system blocks, allowing the integration of normal structure and function with pathophysiology. Intersessions occur throughout Phase I and are called WISE weeks. WISE weeks focus on student Wellness, content Integration, Step I preparation and Education about learning and test-taking strategies. Clinical reasoning and clinical skills (Doctoring) are taught in longitudinal courses that integrate with the relevant foundational science. A practical immersion experience (PIE) and continuity clinic are opportunities to apply foundational science, clinical reasoning, and clinical skills to patient care. Professional identity formation begins within the context of the longitudinal courses, continuity clinic, and PIE.

**Phase II**: The 12-month clinical clerkship phase prepares students for residency and for success on the USMLE Step 2 exam. It is comprised of seven required clinical clerkships: Family Medicine, Internal Medicine, Neurology, Obstetrics and Gynecology, Pediatrics, Psychiatry and Surgery. Each of the clerkships, along with the ongoing Doctoring course, support learning in patient care, teamwork, and professional identity formation.

**Phase III:** The final 12 months include clinical and non-clinical electives, a required sub-internship, ICU rotation, and ambulatory and community-based clinical experiences.

#### MISE 3 June Phase II Block 1 June Vacation Step 2 Study Cardiovascular, Pulmonary, 2/15-5/30 May **NOITAUDARD** Transitions May Continuity Clinic Phase II Block 7 4/1-6/14 Step 1 Study 3/31 - 5/9 Doctoring 1B / Learning Communities Apr Apr Vacation Clinical Reasoning 2 ССО MIZE 2 Vacation Mar Mar Doctoring 2B/Learning Communities Phase II Block 6 2/26 - 3/22 Infectious Disease 2/17 - 3/21 Heme **CLASS OF 2027 CURRICULUM MAP** Continuity Clinic Feb Feb 2/12-2/23 Š MISE 4 Phase II Block 5 Reproduction, Endocrinology Human Sexuality, Pathology and Tissue Morphology 1/6 - 2/7 1/8-2/9 Jan Jan Vacation Phase III Vacation Vacation Dec Doctoring Dec Microbiology & Immunology 0 S C 11/20 - 12/21 Nervous systems, special senses, behavioral health Phase II Block 4 Doctoring 2A / Learning Communities 10/14 - 12/20 Š Nov Doctoring 1A / Learning Communities MISE 7 Clinical Reasoning 3 Continuity Clinic Molecular Foundations of Medicine 10/9 - 11/10 Clinical Reasoning 1 ö Oct Phase II Block 3 Vacation Sept GI, Nutrition, Metabolism Sept 8/26 - 10/4 Clinical Morphology Vacation 8/7 - 10/6 Doctoring С S О August August Vacation Phase II Block 2 MISE J Practical Immersion Experience 7/8 - 8/16 Health of NM SCHOOL OF MEDICINE July Ju 6T/L - LT/L Orientation 2023 - 2024 2024 - 2025 202-2026 Z0Z -9Z0Z

### Class of 2027 Phase I Calendar

**CURRICULUM YEAR 2023-2024** 

Phase I - Year 1

**Orientation** 

July 17 - 19, 2023

White Coat Ceremony: July 28, 2023

**Health of New Mexico** 

July 20 - 27, 2023

WISE Week 1

July 31 - August 4, 2023

**Doctoring 1A** 

August 7 – January 12, 2024

Clinical Reasoning 1

August 7 – December 21, 2023

**Clinical Morphology** 

August 7 – October 6, 2023

Vacation (Labor Day): September 4

**Molecular Foundations of Medicine** 

October 9 – November 10, 2023

WISE Week 2

November 13-17, 2023

Microbiology and Immunology

November 20 – December 21, 2023

Vacation (Thanksgiving): November 23 – 24, 2023 Vacation (Winter Break): Dec 22, 2023 – Jan 5, 2024

**Doctoring 1B** 

January 17 - June 7, 2024

**Clinical Reasoning 2** 

January 8 - June 14, 2024

Concepts in Pathology and Tissue Morphology

January 8 – February 9, 2024

Vacation (MLK Day): January 15

Quantitative Medicine

February 12 - February 23, 2024

<u>Hematology</u>

February 26 – March 22, 2024 Vacation March 25-29, 2024

Cardiovascular, Pulmonary, Renal

April 1 - June 14, 2024

Vacation: May 27, June 17 - 28, 2024

**Continuity Clinic** 

April 1, 2024 - Mar 28, 2025

**CURRICULUM YEAR 2024-2025** 

Phase I – Year 2

**Doctoring 2A** 

August 26 - December 20, 2024

**Clinical Reasoning 3** 

August 26 - December 20, 2024

WISE Week 3

July 1 - 3, 2024

Vacation: July 4 - 5, 2024

**Practical Immersion Experience** 

July 8 - August 16, 2024

Vacation: August 19 - 23, 2024

Gastrointestinal, Metabolism, Nutrition

August 26 –October 4, 2024

Vacation: Sept 2 (Labor Day); October 7 – 11, 2024

Nervous systems, Special senses, Behavioral health

October 14 - December 20, 2024

Vacation (Thanksgiving): Nov 28 – Nov 29, 2024 Vacation (Winter Break): Dec 23, 2024 – Jan 3, 2025

**Doctoring 2B** 

January 6 - March 14, 2025

<u>Human Sexuality, Reproduction, Endocrinology</u>

January 6 - February 7, 2025

Vacation (MLK Day): January 20, 2025

**WISE Week 4** 

February 10-14, 2025

**Infectious Disease** 

February 17 - March 21, 2025

WISE Week 5

March 24 - March 28 2025

Step 1 Study

March 31 – May 9, 2025 Sit for exam by May 9, 2025

**Doctoring 2C: Transitions** 

May 12 – May 3, 2025 Phase 2 starts June 3, 2025

### Phase I Core Faculty

Phase I Core Faculty collaborate with the Phase I block chairs and teaching faculty to enhance achievement of basic science learning objectives, support and facilitate active learning sessions, ensure integration of content and consistent learning methods throughout the Phase I curriculum, and support student learning in collaboration with the Applied Cognition Program and the block chairs. *Core Faculty: Jens Langsjoen, MD, Kristel Montano, MD, and Deepti Rao, MD.* 

### **Phase I Course Descriptions**

### **Health of New Mexico (HNM)**

In this 1-week course, students: 1) consider the role of the medical school in New Mexico and in the health of its population, 2) examine the role of clinicians in managing the health of individuals and populations with a focus on the major causes of ill health, 3) learn the complex etiologies of health, wellness and illness with a focus on NM, including the role of social determinants of health and 4) experience the role of partners outside of the medical school in improving health of NM residents. *Block Chair: Felisha Rohan-Minjares, MD* 

### Clinical Morphology (CM)

Clinical Morphology is a 9-week block that overviews normal human anatomy, histology, embryology, and imaging as they relate to clinical practice. The block uses large and small group interactive learning and dissection laboratories to meet its objectives.

Block Chairs: Rebecca Hartley, PhD; Julie Jordan, DPT

### **Molecular Foundations of Medicine (MFM)**

Molecular Foundations of Medicine is a 5-week block that focuses on the molecular, cellular, and genetic foundations of modern medicine. The block reviews fundamentals of molecular and cellular biology, genetics, and basic principles of pharmacology in the context of normal and abnormal cellular function, population genetics, and human disorders. *Block Chairs: Devon Chabot-Richards, MD; Mara Steinkamp, PhD* 

### Microbiology and Immunology (M&I)

Microbiology and Immunology is a 5-week block introducing students to basic immunology and foundational concepts in medical microbiology and infectious diseases in preparation for the organ system-based courses. The course covers the innate and adaptive arms of the immune system, how immunity promotes both health and disease, the basics of bacteriology and virology, with focus on immunity to specific pathogens. *Block Chairs: Judy Cannon, PhD; Michael Mandell, PhD* 

### **Concepts in Pathology and Tissue Morphology (CPTM)**

Concepts in Pathology and Tissue Morphology is a 5-week block introducing fundamental concepts in pathology, histopathology, and neoplasia. Anti-neoplastic pharmacology is introduced, and relevant topics in histology reviewed for emphasis. The second half of the course covers common musculoskeletal pathologies and dermatology. *Block Chairs: Anthony Cretara, MD; Nikifor Konstantinov, MD* 

### **Quantitative Medicine (QM)**

A 2-week course that applies the principles of epidemiology, study design, Evidence Based Practice, and biostatistics to health care data and research. Using active learning modalities in the classroom, these basic principles of epidemiology and biostatistics are applied to clinically relevant scenarios. The course utilizes an Evidence Based Practice framework to inform decisions for optimal patient care. *Block Chairs: Jens Langsjoen, MD; Jonathan Eldredge, PhD* 

### **Hematology (Heme)**

Hematology is a 4-week block that overviews basic principles of hematology and hemostasis. This course builds on concepts established during MFM, CPTM and M&I in the consideration of the diseases of the circulating elements of blood. *Block Chairs: Evelyn Lockhart, MD MScBMC; Nicole Deshmukh, MD* 

### Cardiovascular, Pulmonary, Renal (CVPR)

Cardiovascular, Pulmonary, Renal is an 11-week block that provides a foundation in the basic sciences of the three organ systems as well as problem-solving skills related to these disciplines. Included in this block are relevant topics in physiology, pharmacology, and pathology. *Block Chairs: Patrick Rendón, MD; Rebecca Hartley, PhD* 

### Gastrointestinal, Nutrition, Metabolism (GINM)

Gastrointestinal, Nutrition, Metabolism is a 6-week block that examines the principal biological features of the gastrointestinal (GI) tract, the pathophysiology associated with certain disorders of this system, fundamental concepts of nutrition in maintaining and restoring patient health, and metabolic events that regulate energy production and energy balance. *Block Chair: Patrick Rendón, MD; Biochemistry Lead: Meilian Liu, PhD* 

### Nervous Systems, Special Senses, Behavioral Health (NS3BH)

Nervous systems, Special Senses, Behavioral Health is a 10-week block designed to provide students with a foundation in neuroscience including neuroanatomy, neurophysiology, neuropharmacology, neuropathology, and behavioral neurosciences. Basic concepts are learned within the context of neurological and psychiatric disease. *Block Chairs: Fernando Valenzuela, MD, PhD; Poone Haghani Tehrani, MD* 

### **Human Sexuality, Reproduction, Endocrinology (HSRE)**

Human Sexuality, Reproduction and Endocrinology is a 5-week block that focuses on the basic science and important clinicopathologic aspects of the human reproductive and endocrine systems. The block's content includes anatomy, physiology, pathology, pathophysiology, diagnosis, and treatment of all aspects of the male and female reproductive systems; pregnancy and its complications from fertilization to the postpartum period; and psychosocial, medicolegal, and ethical aspects of gender, sexuality, and reproduction. *Block Chairs: Carolyn Smith-Lin, MD; Teodor Duro, MD* 

### Infectious Disease (ID)

Infectious Disease is a 4-week block designed to give students an understanding of the basic concepts of microbiology, pathology and pharmacology as applied to the understanding of host and pathogen interactions in infectious diseases. *Block Chair: Bethany McMaster, MD* 

### Clinical Reasoning (CR)

An integrated curriculum designed to (1) explicitly model and actively engage students in the clinical reasoning process during block relevant case discussions, (2) provide structure, guidance and assessment for self-directed learning and information seeking skills, and (3) provide structure and guidance for the skills of critical judgment and medical problem solving. There are 3 consecutive longitudinal courses spanning from fall semester of first year through fall semester of second year. *Course Directors: Deepti Rao, MD (CR1); TBA (CR2); Carol Morales, MD (CR3)* 

### **Doctoring 1A: Laying the Foundation (D1A)**

Fall semester of the first year Doctoring course introduces students to what it means to be a clinical practitioner and to learning the basic techniques that clinicians use to forge the clinician-patient relationship, as well as communication and examination techniques to obtain essential information from the patient. Students also learn how to develop a list of patient problems, and how to present patient findings in both oral and written form. *Course Director: Deborah Heath, MD* 

### **Doctoring 1B: Stepping into Roles and Exploring Perspectives (D1B)**

In spring semester of the first year Doctoring course students step into a variety of new roles, including those they assume when interacting with patients in a real clinical environment. Students are also challenged to explore the perspectives of those impacted by healthcare and the healthcare system, including the patient, the community, and clinicians. Students build skills in communication and physical exam skills related to the conditions studied in the concurrent organ block, Cardiovascular, Pulmonary, Renal. Each student also explores and develops his/her unique role and perspective as a professional-in-training. The course prepares students to assume their clinical role in the Practical Immersion Experience (PIE) as they continue to develop their professional identities. *Course Director: Alison Campbell, MD* 

### **Continuity Clinic**

The Continuity Clinic experience spans the first and second year (Apr 2023 – Mar 2024) and provides integrated activities focusing on sequential skill-building opportunities to include the biological, population and behavioral perspectives related to patient health. Continuity experiences allow students to work with physicians who have long-term relationships with patients, families, multidisciplinary health care teams and mentors. *Course Director: Erin Bouquin, MD* 

### **Practical Immersion Experience (PIE)**

The Practical Immersion Experience is a 6-week, community-based clinical preceptorship during which students live in the community to which they are assigned. Students are mentored by a practicing community physician. PIE offers the opportunity to learn in the setting of a clinical practice, and apply the skills and knowledge acquired during year 1 basic science courses, Clinical Reasoning, and Doctoring. Students integrate basic science, communication skills, and clinical skills into the day-to-day practice of medicine, using patients as the springboard for their learning. PIE also offers the opportunity to observe first-hand the impact of being a physician on one's own life and lifestyle. *Block Chair: Erin Bouquin, MD* 

### **Doctoring 2A: Gearing up for Clerkships (D2A)**

Doctoring 2A builds on the communication and clinical skills from previous Doctoring courses. Students develop clinical evaluation skill for conditions related to the concurrent organ blocks, GI/Nutrition/Metabolism and Neurosciences. They use clinical reasoning to guide their patient evaluations and write-ups. They develop communication skills for patient education and oral presentations. *Course Director: Diana Greene-Chandos, MD* 

### **Doctoring 2B: Equipping Your Professional Toolbox (D2B)**

Doctoring 2B occurs in the spring semester of the 2<sup>nd</sup> year. Students develop a foundation in clinical ethics and ethical reasoning and clinical skills related to the concurrent organ block, Human Sexuality, Reproduction, Endocrinology. The review and consolidate their clinical skills in preparation for the clerkships. *Course Director: Diana Greene-Chandos, MD* 

### **Doctoring 2C: Transitions (D2C)**

The goal of the Transitions block is to assist students in transitioning from the basic science years of the curriculum to the clinical clerkships. The objectives of the Transitions block are accomplished by a combination of methods that reinforce the skills needed for future success in the clinical environment. *Block Chair: Donald (DJ) Luna, MD* 

#### **WISE** weeks

WISE (**W**ellness, Integration, **S**tep I preparation and **E**ducation on learning) weeks are strategically dispersed throughout Phase I of the curriculum. Each WISE week evolves as students advance in the curriculum to provide them with the personal and professional skills to progress in medical school, succeed on Step 1, and excel as physicians. The goals of the WISE weeks are:

- 1) Providing students with opportunities to reflect on and promote personal resiliency, a culture of wellness and learning efficiency.
- 2) Integrating content from the most recent block and across blocks to enhance content understanding and retention.
- 3) Enhancing understanding of high-yield information and practice learning and test-taking strategies applicable for optimal Step I performance.
- 4) Creating time for students to engage in their own educational learning plan.

Course Directors: Patrick Rendón, MD; Thomas Markle, PhD

### **Pharmacology Thread**

Pharmacology is the basic biomedical science discipline focused on how drugs affect the body (pharmacodynamics) and how the body affects drugs (pharmacokinetics). Pharmacology relies on a basic knowledge of the anatomy, biochemistry, physiology, and pathology of organ systems to understand the mechanistic basis for therapeutic effects as well as the side effects and toxicities associated with drug administration. Pharmacology is presented throughout the Phase I curriculum to maximize its integration with the other basic medical science disciplines. There are many more drugs and information about drugs to learn than is possible during Phase I. To optimize your study of pharmacology, content is focused on "prototypical" drugs that represent a class of therapeutic agents and are the most relevant for preparing for the USMLE Step I exam. *Thread Leader: Caitlin Bonney, MD* 

#### **Pathology Thread**

Pathology is the study of disease; more specifically, the study of the structural, biochemical, and functional changes in cells, tissues and organs that underlie disease. Pathology focused topics in each block are incorporated into classroom content and reading assignments. Reinforcement of pathology learning "threads" in organ system blocks uses cased based educational strategies. *Thread Leaders: Kristel Montano, MD; John Scariano, PhD* 

### **Medical Student Scholarly Project**

Scholarship is an important component of the medical school curriculum. The process of identifying a research topic, finding a mentor, and proposing a project begins in Phase I of the curriculum. Scholarly Projects help students develop practical skills in the scientific method and understand the role of research in informing clinical practice. Students develop and complete a scholarly project in an area of interest related to medical science and/or health care and publicly present or publish their results before they graduate. *Project Directors: Associate Dean* 

### **Phase I Curriculum Design**

The Phase I curriculum is built around the concepts of self-directed and active learning. Active and self-directed learning are pedagogies (methods) that ask students to construct knowledge, critically reflect and develop skills to support deeper and sustained learning. Examples include case-based learning, team-based learning, problem-based learning, peer instruction, laboratories, and any other format in which the students must actively participate in class to apply learned knowledge and skills to critically evaluate and solve relevant medical problems. Phase I blocks and courses adhere to established minimums and maximums of instructional delivery with no more than twenty-one (21) total scheduled hours per week (inclusive of foundational science blocks and longitudinal courses). Time spent with Learning Communities, engaging in Continuity Clinic, and completing assessments is not considered part of instructional delivery time.

Foundational Science Block	Week without Clinical	Week with Clinical
Activities	Reasoning	Reasoning
Active Learning	13-16 hours	9-12 hours
Lecture	0-3 hours	0-3 hours
Total Scheduled Hours	16 hours	12 hours
Doctoring Activities	5 hours on average	5 hours on average
Clinical Reasoning		4 hours
Total Contact Hours	21 hours	21 hours

<u>Foundational Science Blocks:</u> Time for the delivery of content using independent learning modules (ILM) and pre-work will be limited to 12 hours/week (videos, faculty provided notes, readings, problem sets, etc.)

<u>Doctoring:</u> Time for the delivery of content using independent learning modules (ILM) or prework will be limited to 2 hours/week.

<u>Clinical Reasoning:</u> Time for the delivery of content using independent learning modules (ILM) or pre-work will be limited to 6 hours/week (4 hours/week before sessions and 2 hours/week during sessions)

### Phase I Policy on Attendance at Required Activities

The purpose of this policy is to specify the expectations and requirements for student attendance, preparation, and participation in the Phase I Curriculum activities. The Phase I Curriculum consists of a variety of educational activities that include large and small groups, laboratories, independent learning, simulation, and clinical workplaces each of which assumes a certain level of attendance and participation to obtain the most beneficial learning. An expectation that students are fully engaged in these learning activities is supported by:

- The value of active learning in a student's professional development and in a physician's work life.
- Students' professional responsibility to contribute to the learning of peers by preparing for and participating fully in group learning activities.
- The need to prioritize and avoid disruption to patient care in clinical workplaces, and to ensure that students are viewed as integral members of the care delivery team.
- Respect for patients who contribute generously to a student's education; faculty who would alternatively be engaged in patient care, research, or other professional activities; and staff who coordinate curricular activities.
- The alignment with accreditation and licensing standards.

Students are accountable for effectively managing their schedules, monitoring their on-time attendance and participation, communicating professionally about absences, and seeking the school's assistance if personal circumstances interfere with their on-time attendance and participation.

### **Expected Attendance Practices**

- 1. Students are required to attend certain synchronous learning activities, either online or in person, and are expected to complete the pre-class work in preparation for these sessions including:
  - Any scheduled Team-Based Learning (TBL) session.
  - All sessions in Health of New Mexico.
  - Any required sessions during the WISE weeks.
  - Any session in which real or standardized patients are present as part of the learning experience.
  - Any small group session in which students work together as a team and teach each other including Doctoring small groups, Anatomy/ Neuroanatomy/Pathology laboratories, Clinical Reasoning sessions and Block Content Integration sessions during the WISE weeks.
  - All Learning Communities activities.

- 2. Students are highly encouraged to attend peer instruction, case-based learning, and all other active learning sessions.
- 3. Students may be granted an excused absence from required activities for sickness or other extenuating circumstances by approval from the Block Chair, Course Director, or the Director of Assessment and Learning for absences from required assessments.
- 4. Students may request absences of 1-3 days from required activities for personal and professional commitments, attendance at professional meetings/conferences, family events/obligations and religious observances. All requests must be in writing and submitted directly to the block/course leadership for approval and to facilitate the make-up of any activities or assignments.
- 5. Permission for time off to attend a professional meeting/conference requires written approval from the block chair and should be initiated prior to the start of the block. Students must be in good academic standing, be presenting research or representing UNM as an officer or delegate to attend a professional meeting/conference. The Office of Assessment and Learning must additionally approve any absences from assessments.

Please consult the School of Medicine Leave Policy for further details on absences, including emergency or extended leaves of absence.

### Assessment in Phase I

Phase I consists of 22 graded curricular components. All components are graded as Pass/Fail (Credit/No Credit).

### **Guiding Principles for Assessment of Medical Students**

At the University of New Mexico School of Medicine, it is our goal for assessment to drive learning. We strive to create assessment tools that allow students to demonstrate what they have learned and what areas may need additional attention to ensure they are ready for the next phase of their education and success in their careers as physicians. In developing assessments, faculty educators follow these guiding principles:

- 1. Faculty acknowledge the fact that high stakes examinations (i.e., USMLE exams, Board Certification Examinations) are part of our students' performance standards. We strive to prepare them for success as they approach those exams.
- 2. Clinical and communication skills assessment are highly valued; our goal is for all students to be excellent clinicians and communicators.

- 3. Development of skills to be independent learners is critical to the education of physicians-in-training and is supported by provision of regular formative assessments.
- 4. Increased consistency of assessment throughout medical school improves the learning environment for students. This requires developing standard operating procedures for blocks and clerkships that include consistent information in syllabi, grading rubrics, assessment blueprinting, etc.
- 5. Acknowledging the vast amount of material medical students are responsible for in preparation for licensing exams and for clinical practice, opportunities for cumulative assessment should be developed and incorporated.
- 6. Physicians must be able to work in teams. Medical students will continue to learn and be assessed in small group environments, including multidisciplinary teams.
- 7. Assessments will align with what is taught in the curriculum.
- 8. We aspire to provide assessment that is fair and unbiased.
- Conduct reflects professional development. Students will be expected to read and follow instructions for participation in examinations and to always follow the student code of conduct.

### Policies and Practices

- (1) To receive Credit for a Phase I block a student must achieve a minimum of 75% on the knowledge-based portion of the course and 70% for the TBL/small group peer evaluation if it occurs. Credit in some blocks is determined by meeting requirements other than a specific numerical score (i.e., a combination of attendance, participation and completion of assignments as defined by that course).
- (2) Each foundational science block will have weekly quizzes that are administered using ExamSoft. Each quiz will consist of approximately 40 questions, in multiple choice question (MCQ) format using Step I-style questions. Each quiz will contribute 5% to the final block grade.
- (3) Final exams will be comprehensive.
- (4) Small group activities will be assessed through end-of-block or end-course assessments, performed either by peers or by faculty. A small group peer evaluation form has been developed for use by all blocks and courses as appropriate. These will be treated as must-pass components of the block or course, but they will not contribute to the final numerical block score.

- (5) Standards for communication skills, clinical skills and note-writing in performance exams will be determined jointly by the Doctoring block chairs and Assessment & Learning and will be posted in the Doctoring syllabus.
- (6) All blocks in Phase I will offer formative feedback that includes exercises/assessments with no impact on the final course grade.
- (7) Students will additionally receive narrative feedback in those courses in which faculty work with students for a significant amount of time in small groups or one-on-one (e.g., Clinical Reasoning, Doctoring).
- (8) Quizzes and exams that are written in multiple-choice USMLE Step 1 format have a single-best-answer. Although there may be more than one possible choice that could be true under certain circumstances, the correct answer will be the single best answer. If for any reason the instructor chooses to discard a question after the exam has been scored, the new score for the exam will be based on the number of correct answers to the remaining questions. Thus, in some cases when a question is discarded, a student's original score may go up or down. There will be no credit given for a correct answer to a question that is discarded.

#### Remediation in Phase I

### Test remediation in Phase I:

#### **INCOMPLETE**

If the student does not take an examination because of approved extenuating circumstances, they receive a grade of INCOMPLETE. If the student receives an INCOMPLETE, they are allowed to complete non-clinical course requirements at a date and time that is mutually acceptable to the student and block chair. Completion of the non-clinical course requirements should be scheduled during a time when no class is in progress (i.e., an unscheduled afternoon or a weekend).

### NO CREDIT/FAIL

RE-TESTs or other forms of REMEDIATION may be taken only in the academic phase in which the student received the grade of NO CREDIT/FAIL. All NO CREDIT/FAIL grades must be converted to a grade of CREDIT/PASS before promotion to Phase II. (When a student successfully remediates a NO CREDIT/FAIL, the maximum percentile grade they may receive is 75%, regardless of their score on the remediation exam).

Each academic unit/course must provide one and only one opportunity for a RE-TEST/REMEDIATION to students receiving a grade of NO CREDIT/FAIL. The format of the RE-TEST/REMEDIATION is at the discretion of the responsible faculty; however, the RE- TEST/REMEDIATION must be comparable to the original evaluation. RE-TESTs for NO CREDIT/FAIL grades cannot be taken while another block is in session. Please be advised that dates for RE-TESTs are set by the Office of Assessment & Learning.

Remediation Exam dates for Phase I-1 are Friday, January 5 and Friday, June 28, 2024.

### Remediation of a component of the curriculum in Phase I

Any student who, at the end of Phase I-1, is unsuccessful in improving a grade by the RE-TEST and still records a grade of NO CREDIT/FAIL or INCOMPLETE, must petition CSPE for permission to repeat Phase I-1. Similarly, any student who, at the end of Phase I-2, is unsuccessful in improving the grade by the RE-TEST and still records a grade of NO CREDIT/FAIL or INCOMPLETE must petition CSPE for permission to repeat Phase I-2. CSPE will review each petition and approve or decline the request.

If the request is approved and the student repeats Phase I-1 or Phase I-2, the student's grades from all attempts will appear on the student's official transcript.

Students who have successfully repeated Phase I-1 year but then fail one Phase I-2 block and its RE-TEST or REMEDIATION OR fail two Phase I-2 blocks are not eligible to repeat Phase I-2 and will be referred to CSPE for dismissal.

In the case of a grade of NO CREDIT/FAIL for any component of Doctoring or Clinical Reasoning, the Director of the Doctoring or Clinical Reasoning course must assist CSPE in outlining an appropriate REMEDIATION for the curricular component.

When a student is referred to CSPE for dismissal, the student should continue attending scheduled classes pending CSPE's decision, unless they have been placed on leave for professionalism issues.

#### **DISMISSAL FROM PHASE I**

Students who have not met all promotion criteria despite RE-TESTs and/or REMEDIATION, OR students who will not complete all remaining degree requirements within six years, OR students whose leaves of absence exceed twelve consecutive or 18 cumulative months, OR students who have not posted a passing score on USMLE Step 1 within six months of the end of Phase I-2, must be referred to CSPE for dismissal from medical school. Students who have been dismissed may appeal the dismissal to the Student Appeals Committee as described in the University of New Mexico School of Medicine's Due Process Policy and Procedure.

### **Completion of Online Phase I Evaluations**

Timely completion of the online course/block evaluations by students is essential for the continued improvement of Phase I. This feedback allows each Phase I block director to make

appropriate improvements in his/her course, give *constructive and professional* feedback to faculty who teach in the block, address any reports of unprofessional behavior, and give kudos to those faulty who have excelled at teaching. For any changes to be made and for your constructive and professional feedback to be meaningful, it must be received in a timely manner. Therefore, completion of the online evaluation of each Phase I block and course by each student is mandatory.

### **Copyright and Course Materials**

School of Medicine faculty will provide students with a variety of different course materials throughout Phase I including notes, PowerPoint handouts, videos, cases, and formative questions. Distribution of these materials or posting of these materials to a third-party website without the expressed written permission of its owner(s) may violate copyright and other intellectual property rights laws.

### **Student Wellness**

Medical school is an exciting and rewarding experience. You have an opportunity to meet and bond with new classmates, to learn about the human body, and to work with patients for the first time. Medical school can also be a challenging experience. You may face academic pressures, adjustment to medical culture, financial stress, and scheduling conflicts as you juggle your outside interests and relationships with your new schedule. You may feel like an "imposter" as you and your classmates settle into the medical school routine.

The (OPW) is here to help you to maintain your personal and professional wellness in Phase I. We see the learning environment, the curriculum, school policies, and your personal self-care as all contributing to your overall wellness. Please reach out to anyone in OPW if you want to share ideas for how to improve the way UNM SOM supports your wellness – or if you begin to feel overwhelmed –or if you just want to talk about how best to integrate self-care into your daily schedule – or if you just want to talk about life as a medical student. We are here to help.

A new resource available to students, <u>unmsom.caresforyou.org</u>, is an interactive screening program (ISP) that allows you to anonymously and confidentially take standardized screening tests to assess your levels of anxiety, burnout, resilience, and more - and then communicate anonymously and confidentially with a trained clinician to discuss your responses and learn about resources. Just click on <u>unmsom.caresforyou.org</u> and the instructions for this ANONYMOUS and CONFIDENTIAL resource should be clear. Consider screening yourself periodically as an objective marker of how your wellness is doing over time.

Email Dr. Liz Lawrence at <u>ELawrence@salud.unm.edu</u> or the Office of Professional Well-being at <u>OPW@salud.unm.edu</u> with requests for further information or an appointment – or contact any of the resources on our <u>website</u> directly.

### Learning Environment, Mistreatment, and Professional Behavior

### Learning Environment

The University of New Mexico (UNM) School of Medicine (SOM) is committed to ensuring respectful, positive, and inclusive learning environments that are free from learner mistreatment. Such a learning environment should exhibit and promote:

- freedom for learners to ask questions
- respect for diversity and differences
- meaningful, trusting relationships
- protection of civil discourse without fear of retaliation
- freedom from bullying or intimidation
- ability for teachers to provide constructive feedback to learners

The learning environment at the SOM encompasses the physical, social, and psychological contexts in which learning happens. This includes interactions with faculty, staff, and peers as well as the formal, informal, and hidden curricula. It further encompasses the attitudes, standards, and tone set by the instructor and the institution.

<u>The SOM Mistreatment Policy</u> defines the standards of conduct that must guide teachers' treatment of learners and to provide a mechanism by which to address violations of the standards. All learners must be provided with procedures to report violations and to have those violations investigated and acted upon without fear of retaliation.

Interactions between teachers and learners in the education programs offered by the UNM SOM are guided by principles of mutual trust, respect, inclusion, belonging, and professionalism. All learners have the right to study, learn, and work in environments that are free from mistreatment, harassment, discrimination, threats, intimidation, or bullying.

### **Mistreatment**

The UNM SOM prohibits all forms of learner mistreatment. Learner mistreatment may be either intentional or unintentional and occurs when behavior shows disrespect for the dignity of others and unreasonably interferes with the learning process or environment. An online reporting tool is available to provide a confidential mechanism for students to report incidents of mistreatment, including unprofessional behavior that creates a negative learning environment, whether these incidents are directed at the student specifically or are incidents the student observes targeted against others (click here to access the form). All submitted reports will go directly to the Learning Environment Office (LEO) for investigation, determination, and recommended response. Click here to learn more about LEO's reporting and response process, as well as confidentiality. The reports will remain confidential, and the reporting student's identity will be protected to the maximum extent possible. There is also an option for a student to submit the report anonymously; however, follow up with the reporter

on how the report was addressed will not be possible. For more information on the services LEO provides, <u>click here</u>.

Mistreatment can also be reported in end-of-block evaluations. If you feel that speaking confidentially about this incident prior to submitting a report would be beneficial, we encourage you to reach out to LEO or a trusted faculty or staff member, such as your Learning Community Mentor, the Associate or Assistant Dean of Students, the Associate or Assistant Deans of Undergraduate Medical Education, the Director of the Office of Professional Wellbeing, or any other person you would feel comfortable talking to about the situation.

### <u>Professional Behavior</u>

Medical students, faculty, residents, fellows, and staff, whether employed by the UNM SOM or affiliated through agreements with the University as volunteer community faculty, are obligated to interact with one another in a professional manner. The following attributes describe professional behaviors that are expected from all members of the SOM. Professionalism is expected to be upheld during all interactions including, but not limited to, face-to-face and telephone/teleconference meetings, texting, video, email, and social networking technologies. Professional behavior includes:

- Treating all people with kindness, respect, and dignity.
- Communicating in a manner that is compassionate, respectful, prompt, and clear.
- Adhering to ethical principles accepted to be the standards for scholarship, research, and patient care, including advances in medicine.
- Actively fostering a culture of respect, inclusion, and belonging for all.
- Giving and receiving all feedback, including on academic, medical, and professional behaviors, with a growth mindset.
- Striving for excellence and quality in all activities and continuously seeking to improve knowledge and skills through life-long learning while recognizing personal limitations.
- Upholding and being respectful of the privacy of others.
- Consistently displaying compassion, humility, integrity, and honesty.
- Working collaboratively to support the overall SOM mission in a manner that demonstrates initiative, responsibility, dependability, and accountability.
- Encouraging well-being and self-care for patients, colleagues, and oneself.
- Being responsive to the needs of patients and society that supersedes self-interest.
- Knowing and upholding policies, including the Mistreatment Policy, Professionalism Policy, Anti-Retaliation Policy, etc.

#### **Academic Accommodations**

UNM's Accessibility Resource Center (ARC) evaluates the necessity for and appropriateness of accommodation requests to assist students in meeting the technical standards necessary for

completing medical training. Students who need accommodations for learning and/or testing must present current documentation to ARC. Students may contact the UME office or the Office of Medical Student Affairs for appropriate referrals or contact the ARC directly.

Website: <a href="https://arc.unm.edu/students/index.html">https://arc.unm.edu/students/index.html</a>

Phone: (505) 277-3506 Email: arcsrvs@unm.edu

### **Academic Integrity**

The University of New Mexico and the School of Medicine believe that academic honesty is a foundational principle for personal and academic development. All University policies regarding academic honesty apply to all curricular components. Academic dishonesty includes, but is not limited to, cheating or copying, plagiarism (claiming credit for the words or works of another from any type of source such as print, Internet or electronic database, or failing to cite the source), fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

### **Undocumented Student Support Statement**

The University of New Mexico School of Medicine supports the rights of undocumented students to an education and to live free from the fear of deportation. We will not disclose the immigration status of any student who shares this information with us unless required by a warrant, and we will work with students who require immigration-related accommodations. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website: http://undocumented.unm.edu/.

### **Undergraduate Medical Education Administration and Services**

Office of Undergraduate Medical Education (UME)

**Phone:** (505) 272-4823

**Location:** Medical Education Building 2 (Med 2), northwest door

**Leadership:** Edward Fancovic, MD, Interim Associate Dean of Undergraduate Medical Education <a href="mailto:efancovic@salud.unm.edu">efancovic@salud.unm.edu</a>; Janet Veesart, MD, Assistant Dean for Clinical Education <a href="mailto:jveesart@salud.unm.edu">jveesart@salud.unm.edu</a>; Rebecca Hartley, PhD, Assistant Dean for Foundational Medical

Sciences <a href="mailto:rhartley@salud.unm.edu">rhartley@salud.unm.edu</a>

**Functions: UME** is responsible for the coordination of the four-year undergraduate medical education program, including curriculum, assessment, faculty development, program evaluation, and academic support. This oversight requires collaboration with the School of Medicine faculty, committees, and other groups to develop policies and review course activities. UME coordinates the Phase I curriculum schedule. UME may also fund and help arrange travel for students who represent UNM at various conferences and national meetings throughout the year or to present their research at national meetings.

### Assessment and Learning (A&L)

**Phone:** (505) 272-8028

**Location:** Health Sciences Library & Informatics Center Lower level, south side **Leadership:** Jacob Imber, MD, Executive Director of Assessment & Learning,

jimber@salud.unm.edu

**Functions:** Assessment and Learning supports students and faculty in the use of formative and summative assessment to aid learning. A&L coordinates the HSC-wide Standardized Patient Program and provides planning for and production of performance and written student assessments. This office reports grades, maintains test information for student review, and develops and provides learning support for patient interviewing, physical examination, patient communication, and ethics and professionalism skills.

<u>Curriculum Support Center (CSC) & Preceptorship Programs</u>

HSC-SOM-Curr-Support@salud.unm.edu; Preceptorship@salud.unm.edu

Location: School of Medicine Building 2, Room 151A&B

**Leadership:** TBA, Operations Manager, Erin Bouquin, MD, Director of Clinical Preceptorship,

ebouquin@salud.unm.edu

**Functions:** The Curriculum Support Center provides organizational and on-site support to faculty and students across the UME curriculum. This includes curriculum and room scheduling, session support for lectures and small group learning sessions, and all Doctoring sessions. The preceptorship programs facilitate student 1-on-1 clinical experiences with preceptors within UNM and in communities around the state of New Mexico. This includes tracking of preceptors recruited by the Director of Clinical Preceptorship, management of all compliance requirement paperwork, and site matching for all student placements for Continuity Clinic, PIE, and other clinical experiences.

Academic Multimedia Services (AMS)

Email: HSC-AMS@salud.unm.edu

**Phone:** (505) 272-0666

**Location:** Health Sciences Library & Informatics Center, room 140

Leadership: Paul Perea, Operations Director

**Functions:** Enhances the learning process by advocating the seamless integration of educational technologies. AMS is the first stop for tech support with many of your technology resources including, Brightspace, One45, ExamSoft, Mediasite (Lecture Capture), iClickers, ThinkShare, and various classroom technologies. Our studio provides direct support with high quality digital, audio visual, and production services for many of the multimedia materials used in the curriculum.

Office of Program Evaluation, Education, and Research (PEAR)

Email: HSC-PEAR@salud.unm.edu

Phone: (505) 272-8069

**Location:** Reginald Heber Fitz Hall, room B65G

**Leadership:** Roger Jerabek, MS, Director <a href="mailto:rjerabek@salud.unm.edu">rjerabek@salud.unm.edu</a>

**Functions:** Provides evaluations of blocks, courses, and rotations, reports on student outcomes, and tracks graduates into practice. PEAR supports evaluation and research of educational initiatives in the SOM, including interdisciplinary and community- based projects, and grants. Students are asked to evaluate courses and rotations throughout the curriculum. Students are invited to participate in the review of course evaluation data in Phase I as part of a continuous quality improvement process (CQI). Students are also randomly selected to attend student focus groups evaluating specific aspects of the curriculum.

### Office of Professional Wellbeing (OPW)

**Phone:** (505) 272-3414

**Location:** Reginald Heber Fitz Hall, room 106

Leadership: Liz Lawrence, MD, Assistant Dean for Professional Wellbeing

- Liz Lawrence, MD, <u>Elawrence@salud.unm.edu</u>, Assistant Dean for Professional Wellbeing, Chief Wellness Officer
- Joyce Phillips, MD, <u>JPhillips@salud.unm.edu</u>, Director, Medical Student Wellness Initiatives
- Stephen Sanchez, MD, ssanche@salud.unm.edu, Psychiatrist
- Rebecca Ezechukwu, PhD, <u>rezechukwu@salud.unm.edu</u>, Psychologist
- Raven Cuellar, PhD, <u>Ravencuellar@salud.unm.edu</u>, Psychologist

**Functions:** The mission of OPW is to educate, serve, and advocate for best practices to support resilience and well-being for UNM SOM faculty, house staff, and learners. We achieve this mission through educational programs, advocating for policy and curricular changes, building a culture of wellness, and offering individual support. Please contact Dr. Phillips if you would like to become more involved in this important work. For individual counselling – all of which is free and confidential – please reach out to Dr. Sanchez, Dr.

Ezechukwu, or Dr. Cuellar. Additional resources are available at the <u>Office of Professional</u> Well-being.

<u>Learning Environment Office (LEO)</u> **Email:** HSC-LEO@salud.unm.edu

**Phone:** (505) 272-7867

Location: Reginald Heber Fitz Hall room 106

Leadership: Diana Martínez, MPH, Director (she/her/ella)

Emma Naliboff Pettit, MA, Assistant Director (she/her/ella) Brenda Loya, Case Management Specialist (she/her/ella)

**Functions:** The mission of the Learning Environment Office (LEO) is to foster an inclusive learning environment where teachers, staff, and learners thrive, and relationships are mutually respectful and beneficial to each other and to our institutional climate. The primary goals are to increase exemplary behavior and decrease incidents of learner mistreatment. LEO serves as a resource for the SOM in creating and maintaining inclusive and positive learning environments.

### Office of Medical Student Affairs (OMSA)

Email: HSC-OMSA@salud.unm.edu

**Phone:** (505) 272-3414

**Location:** Reginald Heber Fitz Hall, room 107 **Leadership:** TBA, MD, Associate Dean of Students

**Functions:** The Office of Medical Student Affairs is the primary student services provider for UNM SOM's medical students. OMSA is home to academic support services including advisement and mentoring, financial aid and scholarships, enrollment management and event coordination. The Dean of Students and the Co-Directors of Career Advisement provide guidance on residency matching as well. OMSA provides administrative support for the Learning Communities program, the Committee on Student Promotion and Evaluation, and the Student Appeals Committee.

### <u>Applied Cognition in the Medical Sciences Program (ACP)</u>

Email: <a href="https://docs.py.co.org/line-style="https://docs.py.co.org-">HSC-ACP@salud.unm.edu</a>. Reginald Heber Fitz Hall, room 106

Leadership: Tom Markle, PhD, Director, <a href="https://dtmarkle@salud.unm.edu">dtmarkle@salud.unm.edu</a>; Alyssa Gammon, MEd, Learning Specialist, <a href="https://deetweiler.go.org/">aagammon@salud.unm.edu</a>; Joshua Dettweiler, BS, Learning Specialist, <a href="https://deetweiler.go.org/">jdeetweiler.go.org/</a> Salud.unm.edu, Elain Bailey, MA, Learning Specialist, <a href="https://kaeBailey@salud.unm.edu">KaeBailey@salud.unm.edu</a>
Functions: The ACP program focuses on using cognitive science to assist students in developing advanced learning and memory techniques for retaining medical knowledge. We work with students on improving their methods of transferring complex information into application and problem-solving skills for exams, as well as clinical settings. The program offers various interactive workshops throughout the year, co-chairs the WISE week activities, and offers walkin times for one-on-one appointments.

### **Learning Strategies**

### Am I An Efficient Learner?

Effective learning refers to understanding concepts deeply, not just superficial memorization, and allowing for retrieval of what is learned after a long period of disuse. Learning causes changes in the brain through the construction and expansion of neural networks. A considerable body of research by cognitive psychologists and neuroscientists informs effective strategies for learning. Cognitive based learning techniques focus on how knowledge is encoded, how it is consolidated through activation that strengthens and expands the neural networks, and how stored information is retrieved for later use.

You learn more when you're "doing" rather than "listening." The first step to improving learning is to understand how information encoded in the brain. Neural networks that are active at the same time begin to have connections made between them. Therefore, cognitive tasks that require dynamic thinking often provide the greatest gains in storing information. Conversely, passive tasks, such as reading or listening to a lecture, are less effective for most learners. So, if your instructor requires you to be actively involved in class (e.g., small-group learning with problem-based learning or team-based learning approaches, worksheets, discussions, "clicker" questions) this is driving toward the goal of dynamic thinking. Humans learn more when they try things out on their own, discuss and debate with peers, and incorporate different ideas and learning approaches.

Reading and problem solving before class improves learning during class. While active learning is the most effective method of retaining new information, there is one caveat. A basic level of preliminary knowledge is needed from which to operate. If you have no base network, you have nothing to attempt to connect. Therefore, even if you struggle to understand parts of the readings or pre-class problems, it is better to do them. There is an inherent cognitive advantage by becoming familiar with the concepts before class. In-class learning through lecture and activity helps you retrieve what you learned and to consolidate your understanding. If you find yourself reading through text, highlighting and underlining lots of words, but unable to explain what you've read there are methods for active reading that can help (For example: <a href="http://gradschool.about.com/cs/reading/a/sq3r.htm">http://gradschool.about.com/cs/reading/a/sq3r.htm</a>).

Quizzes are for learning, not just for earning a grade. While quizzes are primarily used for assessment, they are also valuable learning tools to be carefully dissected. Quizzes can effectively focus attention on your strengths and weaknesses, a valuable step in learning. But, even more importantly, answering questions generates learning. Every time you remember something and apply and connect it with new information, you create a new memory for the next retrieval. The result is greater connectivity of ideas and more pathways by which to retrieve that information in the future. Use a test bank often to quiz yourself for stronger learning.

Spacing and "changing up" your studying is better than cramming. The research is clear: space your studying over days, weeks, or months, especially if you alternate studying different subjects or topics during single study sessions. Learning is improved with repeated retrieval, so the more times you study, the deeper and more permanent the learning will be. Developing strong time management skills to allow for daily studying is a key to success in medical school.

Renewing exposure to knowledge sources is not the same as retrieving knowledge from memory and manipulating it in new ways to consolidate the memories. Re-reading is easy and can give the illusion of learning because you do develop increasing fluency with what is written in the text or in your notes. However, the research shows that self-testing (including retaking quizzes and homework provided by your instructor) enhances learning by retrieval of relevant memories. Making new notes that link ideas from your learning experiences, for example by drawing concept maps or other diagrams and charts that connect these ideas, is a form of elaboration of knowledge that is also strengthening and growing the linkages between the neurons in your brain.

Reflection on your learning makes you a better learner. Students, who understand how their learning methods affects their performance, consistently are the top performers. It is always important to monitor the learning process so that you can adjust your approach. After a class session or completing a reading assignment, consider answering these questions in your notebook or journal, or trying to explain it to a novice or classmate: What are the key ideas? What are some examples of these ideas? How does what I just learned relate to what I already knew? What remains unclear to me? What would I like to learn more about and why? After a test or quiz, consider answering these questions in your notebook or journal: What went well? What could have gone better? What do I need to do to learn for better mastery so that I get better results the next time?

Reflection encodes knowledge in different ways than how you initially received it through the external stimuli of lecture, reading, or quizzing. Reflection also prompts retrieval of prior knowledge. And reflection is important for monitoring your learning so that you are providing your own insights into where your strengths and weaknesses lie.

### **Suggestions for Effective Notetaking**

Students' notes, created in class or while studying course material, are an important tool for learning. Good note-taking practices can lead to efficient study practices, better course outcomes and improved retention of content beyond a course's conclusion.

**Take generative notes.** Do not write every word the instructor says or that you read. This is transcription and takes too much cognitive effort at the expense of comprehending what you are hearing or reading. Rather take notes in your own words. This means you will actively think

about lecture content (i.e., comprehension), which may facilitate retrieval of information from lectures or texts during review sessions. By comparison, taking notes verbatim or transcribing every word the instructor says is maladaptive as it dedicates too many cognitive resources towards production, reducing the effectiveness of learning during the note-taking process. Importantly, notes should be made brief, yet understandable, reflecting your comprehension of the material and providing you with a condensed resource for future review. One suggested method is the <a href="Cornell Notes">Cornell Notes</a> approach: <a href="http://coe.jmu.edu/learningtoolbox/cornellnotes.html">http://coe.jmu.edu/learningtoolbox/cornellnotes.html</a>

**Always ask yourself why.** When you are writing your notes, or the summary if you are using the Cornell Notes method, do not just write A is B because that is what it says in the lecture or textbook. Ask why A is B? Here are a couple of examples:

- (1) Your lecture says, "the adrenal medulla releases epinephrine and norepinephrine"; your notes should say "the adrenal medulla releases epinephrine and norepinephrine, <u>because</u> it is a modified post-ganglionic sympathetic ganglion".
- (2) Your lecture says, "Antibiotic therapy can cause C. diff"; your notes should say "Antibiotic therapy can cause C. diff, because the antibiotic is killing the gut bacteria that usually keep C. diff in check."

Carefully consider how you want to take notes. Specifically, think about whether you would prefer taking notes with pen and paper or with a laptop, as there are costs and benefits to each. Given the constraints on handwriting (e.g., fewer words per minute than typing) you are forced to be more selective in what you write down (which may assist with taking notes in your own words) but makes you at risk for missing important points during the session. However, there is a temptation to transcribe content verbatim with a laptop, and you may find yourself recording more information in your notes than you would otherwise (making your notes too dense and a less effective study aid). There is also the additional temptation to multi-task while taking notes with a laptop.

Review early and often. Review or complete your notes shortly after the session—clarify any questions or ambiguities you may have lingering from the session, either by consulting peers, instructors, course materials, etc. Write down any questions or important keywords in margins and write brief summaries of your notes' contents at the bottom of each page in your own words (Cornell Notes are ideal for this). Do not go to sleep if you have not reviewed the day's material and finished taking your notes. Do not wait until the weekend to get caught up. Foundational science block quizzes are on Monday mornings. The earlier that you complete studying for your quiz, the more time you will have for resting and starting on the next week's prework.