



Phase I Medical Student Handbook

Class of 2023

Table of Contents

<u>Topic</u>	<u>Page</u>
General Information: Curriculum Overview	3
Phase I Course Descriptions and Course Directors	4-8
Phase I Policy on Attendance and Participation	8-9
Assessment in Phase I	10-11
Remediation in Phase I	11
Completion of On-Line Phase I Evaluations	12
Copyright and Course Materials	12
Professionalism and Student Mistreatment	12-13
Accommodations	13
Academic Integrity	13-14
Undergraduate Medical Education Administration and Services	14-16
Learning Strategies	17-22

General Information: Curriculum Overview

The University of New Mexico School of Medicine prides itself on its evolving curricular innovations that are aimed at adapting adult learning theory to medical education. The structure of the curriculum reflects the shift in emphasis from solely learning facts to teaching students the skills they will need to be effective lifelong learners.

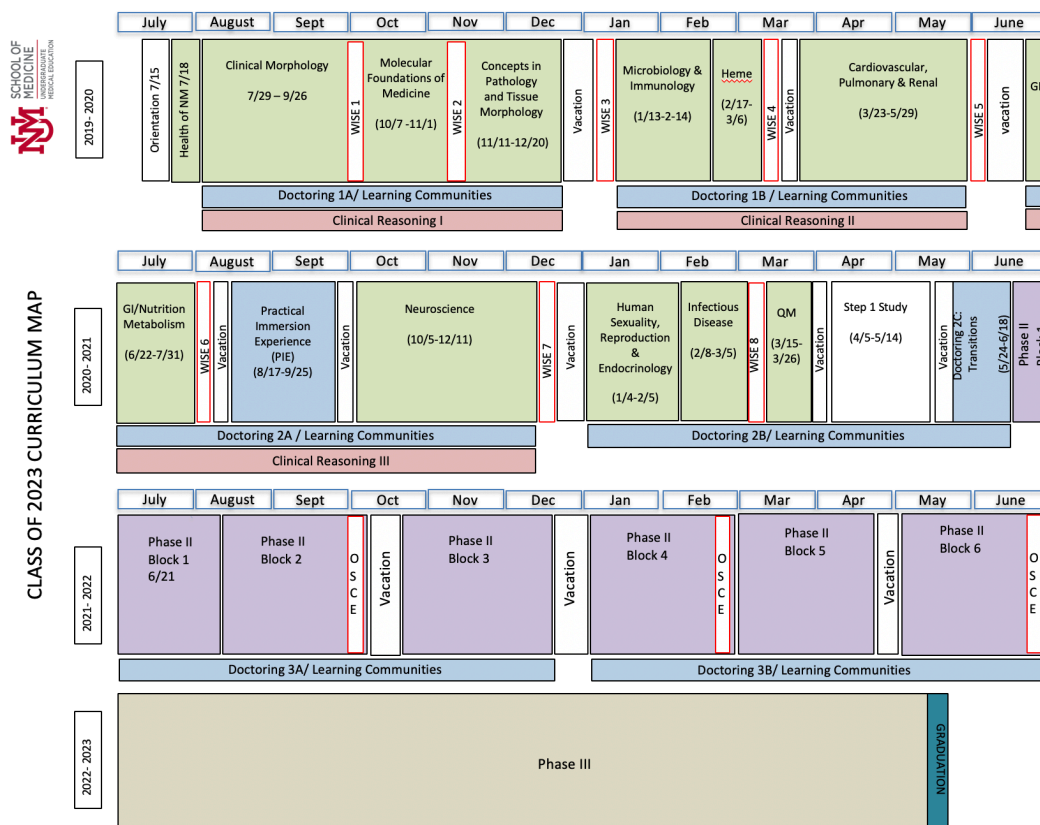
Current educational initiatives are aimed at fostering the integration of the basic sciences and clinical medicine, early exposure to patients and communities to enhance teaching and learning, progressive development of clinical reasoning skills through a problem-based approach, emphasizing professional identity formation, and attention to personal and professional wellness.

The School of Medicine curriculum is comprised of three phases:

Phase I: The first 21 months focus on core basic science education and its relevance to and integration with quantitative medicine, clinical reasoning and clinical skills development. Basic science content is organized primarily into organ system blocks, which allows for the integration of normal structure and function with specific pathophysiology. Intersessions (WISE weeks) occur throughout Phase I and focus on student wellness, content integration, Step I preparation and learning strategies.

Phase II: 12 months that comprise the required clinical clerkships in Family Practice, Internal Medicine, Neurology, Obstetrics and Gynecology, Pediatrics, Psychiatry and Surgery. Professional identity formation continues in Phase II with special topics relevant to the clinical phase of training.

Phase III: The final 12 months, which includes clinical and non-clinical electives, a required sub-internship, ICU rotation, and an ambulatory and community-based clinical experience.



Phase I Course Descriptions

Health of New Mexico

Health of New Mexico is the first block of Phase I, beginning immediately after orientation. The goals of this course are to have students: 1) consider the role of the Medical School in the state and in the health of its population, 2) understand the role of clinicians in managing the health of individuals and populations with a focus on the major causes of ill health, 3) consider the complex etiologies of health, wellness and illness with a focus on NM, including the role of social determinants of health and 4) understand the role of partners outside of the HSC in improving health of NM residents. *Block Chair: Rob Williams, MD*

Clinical Morphology

The Clinical Morphology Block is a 9-week block that focuses on an overview of basic anatomical concepts, and normal human anatomy, histology and embryology as it relates to clinical practice. The course will present an integrated approach using large and small group learning, laboratories and independent learning.

Block Chairs: Rebecca Hartley, PhD; Paul McGuire, PhD

Molecular Foundations of Medicine

The Molecular Foundations of Medicine block is a 4-week block that primarily focuses on the molecular, cellular, and genetic foundations of modern medicine. Our primary objectives are to review fundamentals of molecular biology, genetics, and basic pharmacology in the context of normal and abnormal cellular function and extend these studies into interpretations of human disease. *Block Chair: Robert Orlando, PhD*

Concepts in Pathology

The Concepts in Pathology block is a 5-week course introducing the fundamental concepts in cell injury / cell death, histopathology, and neoplasia. Anti-neoplastic pharmacology will be introduced, and relevant topics in histology will also be reviewed for emphasis. The second half of the course will cover common pathologies involving soft tissue, bone, and skin. The course will present an integrated approach using large and small group learning, laboratories and independent learning. *Block Chairs: Sam Reynolds, MD; Cory Broehm, MD*

Microbiology and Immunology

Microbiology and Immunology is a 5-week course with the goal of introducing students to basic microbiology, infectious disease, and immunology in preparation for the organ system-based courses. The first half of the course will introduce the basics of bacteriology, virology, and other classes of infectious organisms. The second half of the course will cover the innate and adaptive arms of the immune system and how immunity is involved in both health and disease.

Block Chairs: Bryce Chackerian, PhD; Michael Mandell, PhD; Judy Cannon, PhD

Hematology

Hematology is a 3-week block that focuses on an overview of basic principles of hematology and hemostasis. This course builds on concepts established during Foundations of Medical Science in the consideration of the diseases of the circulating elements of blood. *Block Chairs: David Czuchlewski, MD Marian Rollins-Raval, MD*

Cardiovascular, Pulmonary, Renal

The Cardiovascular/Pulmonary/Renal Block is a 10-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 Chair: Helen Hathaway, PhD and Laura Gonzales-Bosc, PhD*

GI/Nutrition/Metabolism

The GI/Nutrition/Metabolism block is a 6-week course 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: Robert Orlando, PhD*

Neuroscience

The Neuroscience Block is a 10-week course designed to provide students with a foundation in neurosciences 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 and Deborah Dellmore, MD*

Human Sexuality, Reproduction and Endocrinology

The Human Sexuality, Reproduction and Endocrinology block 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, medico-legal, and ethical aspects of gender, sexuality, and reproduction. *Block Chair: Lisa Hofler, MD, Evan Taber, MD and Matthew Bouchonville, MD*

Infectious Disease

The Infectious Disease Block is a 4-week course designed to give students an understanding of the basic concepts of microbiology, pathology and pharmacology that can be applied to the understanding of host and pathogen interactions in infectious diseases. *Block Chairs:*

Quantitative Medicine

A 2-week course that applies the principles of epidemiology, study design and biostatistics to health care data and research. Using active learning modalities in the classroom, these basic principles of epidemiology and biostatistics will be applied to clinically relevant scenarios. The course will utilize an evidence-based practice framework to inform decisions for optimal patient care. *Block Chairs: Melissa Schiff, MD,MPH and Jens Langsjoen, MD, Jonathan Eldredge, PhD*

Clinical Reasoning

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. *Block Chairs: Deepti Rao, MD, Patrick Rendon, MD and Rebecca Craig, MD*

Doctoring 1A: Laying the Foundation

Fall semester of the first year Doctoring course introduces students to what it means to be a clinical practitioner and learn 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. They also learn how to develop a list of patient problems, and how to present patient findings in both oral and written form. *Block Chair: Deborah Heath, MD*

Doctoring 1B: Stepping into Roles and Exploring Perspectives

In Spring semester of the first year Doctoring course students step into a variety of new roles, including the roles they assume when interacting with patients in a real clinical environment. In addition, students are 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. *Block Chair: Amy Robinson, MD*

Practical Immersion Experience

The Practical Immersion Experience (PIE) is a 6-week, rural, 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 1 and 2. Students integrate basic science, communication skills, and clinical skills into the day-to-day practice of medicine, using patients and their problems 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: Anthony Fleg, MD*

Doctoring 2A: Gearing up for Clerkships

Doctoring 2A builds on the communication and clinical skills from previous Doctoring courses. Students develop clinical evaluation skill for conditions related to 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. *Block Chair: Ann Morrison, MD*

Doctoring 2B: Equipping Your Professional Toolbox

Doctoring 2B occurs in the spring semester of the 2nd year. Students develop a foundation in clinical ethics and ethical reasoning. The review and consolidate their clinical skills in preparation for the clerkships. *Block Chair: Ann Morrison, MD*

Doctoring 2C: Transitions

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 specially designed small-group cases, lectures, demonstrations, labs, panels and numerous practical exercises to reinforce the skills needed for future success in the clinical environment. *Block Chairs: Sylvia Alden, MD*

WISE weeks

The eight WISE (Wellness, Integration, Step I preparation and Education) weeks are strategically dispersed in Phase I of the new curriculum. Each week evolves as a student advances in the curriculum to include content changes and alterations in structure. This best provides students 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 to provide students with opportunities to reflect on and promote personal resiliency, a culture of wellness and learning efficiency. Integrate content from the most recent block and across blocks to enhance content understanding and retention. To enhance understanding of high-yield information and practice learning and test-taking strategies applicable for optimal Step I performance. To create time for students to engage in their own educational learning plan. *Block Chairs: Patrick Rendon, 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 both the 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. In an effort to optimize your study of pharmacology, the faculty limit their presentations to “prototype” drugs that often represent a large class of therapeutic agents, and focus on the primary mechanism(s) of drug action as they relate to their therapeutic effects and their primary or most significant side effects. These areas of drug knowledge are the most relevant and important in preparing for the NBME Step I. Trade names and detailed dosing information are not emphasized during Phase I teaching of pharmacology. *Thread Leader: Dan Savage, PhD*

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 hours and reading assignments. Reinforcement of pathology learning “threads” in organ system blocks uses case based educational strategies. *Thread Leader: Karen Santa Cruz, MD*

Medical Student Scholarly Project

Scholarship is an important component of the curriculum. The process of identifying a topic, finding a mentor and proposing a project begin 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 Director: Paul McGuire, PhD*

Phase I Curriculum Design

The Phase I curriculum is built around the concepts of self-directed and active learning in order to address the rapid changes in foundational science education during the preclinical curriculum. Active and self-directed learning is a pedagogy that asks students to construct knowledge, critically reflect and develop skills in order to support deeper and sustained learning. Examples include case-based learning, team-based learning, problem-based learning, small group instruction, peer instruction, laboratories, assessment review and any other format in which the students must actively participate in class to practice the application of learned knowledge and skills to critically evaluate and solve relevant medical problems.

Phase I blocks will adhere to established minimums and maximums of instructional delivery with no more than twenty-one (21) total scheduled hours per week (inclusive of all blocks, Biomedical Science and Longitudinal). Time spent with Learning Communities and time spent completing assessments **is not** considered part of the instructional delivery time.

Basic Science Block Activities	Week without Clinical Reasoning	Week with Clinical Reasoning
Active Learning (TBL/PI/CBL/Labs/Patient Presentations/Assessment Review)	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
Total Contact Hours	21 hours	21 hours

Basic Science Blocks: Time for the delivery of content through the use of independent learning modules (ILM) or pre-work will be limited to 12 hours/week (video, faculty provided notes, readings, problem sets etc.)

Doctoring: Time for the delivery of content through the use of independent learning modules (ILM) or pre-work will be limited to 2 hours/week.

Clinical Reasoning: Time for the delivery of content through the use of 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 in order to obtain the most beneficial learning. An expectation that students are fully engaged in these learning activities is supported by:

- The value of active team based 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 students' 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 learning activities and are expected to complete the pre-class work in preparation for these in-class 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 physically 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 lectures, peer instruction and all other block activities.

3. Students may be granted an excused absence from required activities for sickness or other extenuating circumstances by approval from the Block Chair 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 students must work directly with the course director for approval and to facilitate the make-up of any activities or assignments. A request 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. 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 28 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 that assessment drives 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 as our goal is for all of our students to be excellent clinicians.
3. Development of skills to be independent learners is critical to the education of physicians-in-training by providing 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, blue printing, 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.
9. Conduct reflects professional development. Students will be expected to read and follow instructions for participation in on-site and take-home examinations and to follow the student code of conduct at all times.

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 basic science block will have weekly quizzes, which are administered in take-home format using ExamSoft. Each quiz will consist of no more than 40 questions, in 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 evaluations, performed either by peers or by faculty. A form has been developed for use by all blocks. These will be treated as must-pass components of the block but they will not contribute to the final numerical block score.
- (5) All blocks in Phase I will offer formative feedback that includes exercises/ assessments with no impact on the final course grade.
- (6) Students will additionally receive narrative feedback in those courses where faculty work with students for a significant amount of time in small-groups or one-on-one (e.g. Clinical Reasoning, Doctoring).
- (7) Quizzes and exams that are written in multiple-choice USMLE 1 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

Incomplete

If the student does not take an examination because of approved extenuating circumstances, he/she receives a grade of "Incomplete". If the student receives an "Incomplete" he/she is allowed to complete course requirements at a date and time that is mutually acceptable to both the student and block chair.

No Credit/Fail

All NC (FAIL) grades must be converted to a grade of "Credit" (CR or PASS) by means of a re-test before promotion to Phase II. Each academic unit/course must provide one and only one opportunity for a re-test to students receiving a grade of NC (FAIL). The format of the re-test is at the discretion of the responsible faculty. However, the re-test must be comparable to the original evaluation. Please be advised that dates for re-tests are set by the Office of Assessment and Learning.

Remediation of a component of the Phase I curriculum (please refer to the policy on Student Promotion and Awarding of the MD Degree for details)

Any student who is unsuccessful in improving his/her grade by passing the re-test and still records a grade of "NC" (FAIL) or "I" (INCOMPLETE), must petition the Committee on Student Promotion and Evaluation (CSPE) for permission to repeat a part or all of Phase I. CSPE will review each petition and approve or decline the request. If the request is approved and the student repeats a portion of the curriculum, the student's grades ("NC" / "CR") from both attempts will appear on the student's official transcript.

When a student is repeating all or part of Phase I, a grade of "NC" (FAIL) for any block in the repeated year will result in immediate referral to CSPE for dismissal. No re-test is permitted for a failed block during a repeated Phase I year. In the case of a grade of "NC" (FAIL) for any non-basic science course in Phase I (i.e. Doctoring, Clinical Reasoning, WISE week), the relevant course director will assist CSPE in outlining an appropriate remediation for the curricular component.

Completion of On-line Phase I Evaluations

Timely completion of the on-line evaluation of Phase I blocks by students is essential for the continued improvement of Phase I. This anonymous feedback allows each Phase I block director to make appropriate improvements in his/her course, give constructive feedback to faculty who teach in the block, address any reports of unprofessional behavior and give kudos to those faculty who have excelled at teaching. In order for any constructive changes to be made and for your feedback to be meaningful, it must be received in a timely manner. Therefore, completion of the on-line evaluation of each Phase I block by each student is mandatory.

Copyright and Course Materials

School of Medicine faculty will provide students with a variety of different types of course materials throughout Phase I including notes, PowerPoint handouts, 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.

Professionalism and Student Mistreatment

Medical students, Faculty and Staff, whether employed by the University of New Mexico School of Medicine or affiliated through agreements with the University as volunteer community faculty, are obligated to interact with one another in a professional manner. The School of Medicine is committed to ensuring that the learning environment is conducive to open communication and robust interactions between faculty, learners and staff that promote the acquisition of knowledge and foster attitudes and skills required for the professional practice of medicine. Such activities require an environment that is free from harassment, discrimination, retaliation, or other inappropriate conduct. These attributes describe professional behaviors that are expected from all members of the University of New Mexico School of Medicine. Professionalism is expected to be upheld during all exchanges including, but not limited to, face-to-face and telephone/teleconference meetings, texting, video, email, and social networking technologies. Professional behavior expects:

- Communication in a manner that is effective and promotes understanding.
- Adherence to ethical principles accepted to be the standards for scholarship, research, and patient care, including advances in medicine.
- Demonstration of sensitivity and respect to diversity in age, culture, gender, disability, social and economic status, sexual orientation, and other unique personal characteristics.
- 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 as a role model to others.
- Working collaboratively to support the overall SOM mission in a manner that demonstrates initiative, responsibility, dependability, and accountability.
- Maintaining a professional appearance, bearing, demeanor, and boundaries in all settings that reflect on the School of Medicine.
- Encouraging well-being and self-care for patients, colleagues, and oneself.
- Being responsive to the needs of patients and society that supersedes self-interest.

Learner mistreatment refers to unprofessional behavior that creates an intimidating environment that is likely to interfere with an individual's work, education or well-being. An on-line reporting tool is available to provide a confidential mechanism for students to report incidents of mistreatment/unprofessional behavior that create a negative learning environment for them whether these incidents are directed at them specifically or incidents

that they observe against others (click [here](#) to access the form). All submitted reports will go directly to the Learning Environment Office that will initiate further action and follow up. The reports will remain confidential and your identity will be protected to the maximum extent possible. It is also an option to submit the report anonymously, however follow up to your report will not be possible. As mentioned above, mistreatment can also be reported in the Phase-I 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 your Learning Community Mentor, the Associate or Assistant Dean of Students, the Associate or Assistant Dean of Undergraduate Medical Education, the Director of the Office of Professional Wellness, faculty or staff in the Learning Environment Office or any other person you would feel comfortable talking to about the situation.

Academic Accommodations

Students with diagnosed disabilities who need accommodations for learning and/or testing must present current documentation. An HSC advisory committee evaluates the necessity for and appropriateness of accommodation requests to assist students in meeting the technical standards necessary for completing medical training. Students who have been diagnosed with a learning disability may contact the UME office or the Office of Medical Student Affairs for appropriate referrals.

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.

Undergraduate Medical Education Administration and Services

Office of Undergraduate Medical Education (UME)

Website: <http://som.unm.edu/leadership/education/ume/index.html>

Phone: (505) 272-4823

Location: Reginald Heber Fitz Hall, room 114

Leadership: Paul McGuire, PhD, Associate Dean of Undergraduate Medical Education;

Felisha Rohan-Minjares, MD, Assistant Dean of Undergraduate Medical Education

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)

Website: <http://som.unm.edu/leadership/education/ume/assessment.html>

Phone: (505) 272-8028

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

Office 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.

Curriculum Support Center and Preceptor Programs:

Website: <http://som.unm.edu/leadership/education/ume/csc.html>

Phone: (505) 272-8042

Location: Reginald Heber Fitz Hall, room B65

Leadership: Emily Grunberger, Program Coordinator; Kim Mora, Program Coordinator

Office 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. We also manage the clinical rotation components for all Doctoring courses including the recruitment, management of all compliance requirement paperwork, and site matching for all student placements. The preceptorship programs oversee and coordinate student 1-on-1 clinical experiences with preceptors within UNM and in communities around the state of New Mexico.

Academic Multimedia Services (AMS)

Website: <http://som.unm.edu/leadership/education/ume/ets.html>

Email: hsc-studio@salud.unm.edu

Phone: (505) 272-0666

Location: Health Sciences Library & Informatics Center, room 140

Leadership: Paul Perea, Program Operations Director

Office 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)

Website: <http://som.unm.edu/leadership/education/ume/pear.html>

Phone: (505) 272-8069

Location: Reginald Heber Fitz Hall, room B65G

Leadership: Rebecca Hartley, PhD, Executive Director

Office 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 health professions, including interdisciplinary and community-based projects and grants. Students are asked to evaluate courses and rotations throughout the curriculum. Most evaluations are available online and are completed by students both periodically throughout the course (weekly or biweekly evaluation of faculty) as well as at the end of the course (full evaluation). 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 conducted about specific aspects of the curriculum.

Office of Professional Wellness

Phone: (505) 272-3414

Location: Reginald Heber Fitz Hall, room 147

Leadership: Liz Lawrence, Director

The first year of medical school is a tremendously exciting time. 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. Phase 1 can also be challenging due to academic pressures, adjusting to being back in school after working for a few years, and/or juggling outside interests and relationships with your new schedule. You may feel like an “imposter” as you watch classmates settle into the medical school routine.

The Office of Medical Student Wellness is here to help you to maintain your personal and professional wellness in Phase 1. Please reach out to one of us if you begin to feel overwhelmed – or if you just want to talk about how best to integrate self-care into your daily schedule.

- Liz Lawrence, MD, Elawrence@salud.unm.edu, Director of Medical Student and Physician Wellness
- Jeff Dunn, MD, JeDunn@salud.unm.edu, Psychiatrist (also available at 272-2800. If you call for an appointment, please be clear you are a medical student.)
- Cheri Koinis, PhD, CKoinis@salud.unm.edu, Psychologist, (also available at 272-3898)

Meetings with Dr. Lawrence, Dr. Dunn, and Dr. Koinis are all confidential and free of charge.

Additional resources are available at:

<http://som.unm.edu/education/md/omsa/wellness.html> .

Office of Medical Student Affairs

Phone: (505) 272-3414

Location: Reginald Heber Fitz Hall, room 107

Leadership: Dr. Sheila Hickey, MD Associate Dean Student Affairs

Dr. Teresa Vigil, MD, Assistant Dean Student Affairs

The Office of Medical Student Affairs is the primary student services provider for UNM's medical students. OMSA is home to academic support services including advisement and mentoring, financial aid and scholarships, enrollment management and event coordination. OMSA provides administrative support for the Learning Communities program, the Committee for Student Promotion and Evaluation, and the Student Appeals Committee.

Advanced Cognitive Skills in Medical Science Program (ACS)

Phone: (505) 925-4441

Location: Reginald Heber Fitz Hall, room B80

Leadership: Thomas Markle, PhD, Program Operations Director

Office Functions: The ACS program focuses on using cognitive science to assist students in developing advanced techniques for retaining medical knowledge, as well as methods of transferring complex information into application and problem-solving skills for medical exams as well as clinical settings. The program offers various interactive workshops throughout the year, supports WISE week activities, and offer walk-in times for one-on-one appointments.

Learning Strategies

Am I A Good 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 generated familiarity with the concepts before class. In-class learning through lecture and

activity causes you to 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: <http://gradschool.about.com/cs/reading/a/sq3r.htm>).

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 targeted study. But, even more importantly, answering questions generates learning. Every time you retrieve knowledge and operate with it, it strengthens your retrieval and understanding. The act of retrieval is a reconstructive process, which adds to the knowledge base the other neural networks currently in use. 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 study of 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.

Re-reading the textbook and your notes is the least effective way to prepare for a test. Renewing exposure to knowledge sources is not the same as retrieving knowledge from memory and manipulating it in new ways in order 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: *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 Note-Taking

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 Cornell Notes approach:

<http://coe.jmu.edu/learningtoolbox/cornellnotes.html>

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 text book. 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, because it is simply 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. Many if not all of the courses will have Monday morning quizzes over the prior week(s) material. The weekend is for reviewing and resting.

Suggestions on How to Study Gross Anatomy

The study of gross anatomy requires you to learn a lot of information, apply that information to various situations, and be able to visually identify structures and work effectively as a member of a team.

How to approach Laboratory Learning:

- Preview each day's work by reading the dissection guide ahead of time.
- Review the day's work, either after lab or by using the atlas and dissection guide at home. Make notes of things you do not understand and structures you have not seen. Ask classmates at other tables to show you structures you might not have on your donor and be sure to clarify things you do not understand as soon as possible.
- Be sure to look at other donors as well as your own. There are many normal variations that occur and you should be aware of individual differences.
- Get a clear mental image of the structures you are dissecting. Compare structures on your donor with pictures in the atlas and with the same structures on different cadavers.
- Discuss and synthesize information while dissecting.
- Quiz each other both on straight identification of the structures and on facts pertaining to the structures. For example, you might ask the following questions. "What is this structure?" "What does it do?" "What innervates it?" "What would happen if the innervation were lost?" "What landmarks could help identify it either for a lab practical exam or patient physical exam?"
- Don't be afraid to ask your partners to explain something to you that you really don't understand after giving it your best effort. Remember that if you really want to learn something - as opposed to just memorizing it - teach it to someone else!
- Ask for clarification from faculty. Several faculty members and TAs are available during lab time, make use of their expertise. Call them over to your table and explain what you're doing. Let them question you, this helps you "go deeper" into understanding the material.
- Talk to a faculty member or visit the OARS office early in the block if you're feeling overwhelmed, or having problems with coordinating your study