

## **Supplemental Digital Content**

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**UC San Diego**  
**School of Medicine**  
**Integrated Scientific Curriculum**

	Summer	Fall	Winter	Spring		
Year 1	Optional Prematriculation Course	<b>Human Health and Disease</b>				
		Foundations of Medicine Cardiovascular System I Pulmonary System I Gastrointestinal System & Nutrition	Renal System I Musculoskeletal System Mind, Brain, and Behavior I	Endocrine, Reproduction, and Metabolism I Immunology and Hematology Microbiology		
		<b>Clinical Foundations</b> Including Problem-Based Learning, Practice of Medicine, and Ambulatory Care Apprenticeship (winter and spring)				
Year 2	Optional Exploratory Pursuits (e.g., research, clinical outreach)	<b>Human Health and Disease</b>				
		Principles of Clinical Oncology Epidemiology, Biostatistics and Medical Informatics Arthritis, Rheumatic Diseases, and Dermatology Gastrointestinal Diseases Endocrine, Reproduction, and Metabolism II Cardiovascular System II	Mind, Brain, and Behavior II Pulmonary System II Renal System II	MultiOrgan System Disorders and Integrative Cases	Comprehensive Review and Study for USMLE Step 1 (6 weeks)	Clinical Transitions Week
		<b>Clinical Foundations</b> Including Problem-Based Learning, Practice of Medicine, and Ambulatory Care Apprenticeship (fall)				
Year 3	<b>Core Clinical Clerkships</b> Medicine (12 weeks); Surgery (8 weeks); Pediatrics (8 weeks); Reproductive Medicine (6 weeks); Psychiatry (6 weeks); Neurology (4 weeks); Primary Care (1 afternoon/week throughout year, except during Surgery); Clinical Selectives (2 two-week selectives, 1 must be in surgery or surgery-related field)					
Year 4	<b>Requirements of 4<sup>th</sup> Year:</b> 4 quarters of enrollment that includes 12 weeks of direct patient care clerkships (1 each of inpatient, outpatient, and primary care), at least 12 weeks of other clinical electives, 2 additional elective months, completion of the Independent Study Project		<b>Principles to Practice</b> (4 weeks)	<b>Residency Transition</b> (4 weeks)  Completion of 4 <sup>th</sup> year requirements		

## Supplemental Digital Appendix 2

### Competencies, Objectives, and Outcome Measures

General Competency	Educational Program Objective(s)	Outcome Measure(s)
Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.	To demonstrate an understanding of normal anatomy, histology, physiology, development and aging as integrated disciplines that provide a basis for understanding disease.	<ul style="list-style-type: none"> <li>• Student scores on written exams developed by preclerkship courses</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.	To demonstrate an understanding of the biological mechanisms governing homeostasis.	<ul style="list-style-type: none"> <li>• Student scores on written exams developed by preclerkship courses</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> </ul>
Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.	To demonstrate an understanding of mechanisms of drug action, pharmacokinetics, pharmacodynamics and therapeutics.	<ul style="list-style-type: none"> <li>• Student scores on written exams questions of the Pharmacology Thread</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> </ul>
Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.	To demonstrate an understanding of the genetic, biochemical, physiologic, micro-biologic, immunologic, environmental and pathologic mechanisms underlying disease states and their treatment.	<ul style="list-style-type: none"> <li>• Student scores on written exams developed by the preclerkship courses and clinical clerkships</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> </ul>
Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.	To demonstrate an understanding of the clinical, laboratory, radiologic and pathologic manifestations of diseases.	<ul style="list-style-type: none"> <li>• Student scores on written exams developed by the Human Health and Disease block courses, and the Anatomy, Histology, and Pathology Threads, and evaluations in clinical clerkships</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> </ul>

<p>Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.</p>	<p>To demonstrate an understanding of the manifestations and consequences of illness at various stages of life.</p>	<ul style="list-style-type: none"> <li>• Student scores on written exams developed by the Clinical Foundations course sequence</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance on GOSCEs (POM)</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
<p>Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.</p>	<p>To demonstrate an understanding of health maintenance, disease prevention, and the principles of public health as they relate to the practice of medicine.</p>	<ul style="list-style-type: none"> <li>• Student scores on written exams developed by the Epidemiology, Biostatistics, and Medical Informatics course, and evaluations in clinical clerkships</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance on GOSCEs (POM)</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
<p>Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.</p>	<p>To demonstrate an understanding of the structure and function of the health care system and how it affects the delivery of care.</p>	<ul style="list-style-type: none"> <li>• Student scores on written exercises and small group sessions in the Clinical Foundations course sequence</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
<p>Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.</p>	<p>To demonstrate an understanding of the basic epidemiologic methods and statistical principles that underlie evidence-based medicine.</p>	<ul style="list-style-type: none"> <li>• Student scores on written exams and small group exercises in the Epidemiology, Biostatistics, and Medical Informatics course</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> </ul>
<p>Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.</p>	<p>To demonstrate an understanding of the ethical principles of the medical profession.</p>	<ul style="list-style-type: none"> <li>• Student scores on written exams and small group experiences in the Clinical Foundations course sequence</li> <li>• Performance in clinical clerkships</li> </ul>

		<ul style="list-style-type: none"> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.	To demonstrate an understanding of the psychological aspects of illness.	<ul style="list-style-type: none"> <li>• Student scores on written exams in the Mind, Brain, and Behavior courses</li> <li>• Performance in the Psychiatry core clerkship</li> <li>• Results of USMLE exams or other national standard</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>knowledge</u> needed to become capable, compassionate physicians.	To demonstrate an understanding of the influence of culture, race and ethnicity on the perception of illness and its treatment.	<ul style="list-style-type: none"> <li>• Performance in Standardized Patient encounters which specifically address this issue</li> <li>• Student scores on written exams developed by the Clinical Foundations course</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to identify, access, interpret and apply scientific literature.	<ul style="list-style-type: none"> <li>• Performance in the Reading Group section of Foundations of Human Biology</li> <li>• Performance in the Epidemiology, Biostatistics, and Medical Informatics course</li> <li>• Performance in clinical clerkships</li> <li>• Performance-based assessment of student skills and abilities</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to obtain both a comprehensive and directed medical history and perform a careful, accurate, complete and directed physical examination.	<ul style="list-style-type: none"> <li>• Performance on OSCE (Year 1 and Year 2)</li> <li>• Results of USMLE Clinical Skills exam</li> <li>• Performance in clinical clerkships</li> <li>• Performance-based assessment of student skills and abilities</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> <li>• Faculty observation and feedback on student performance on GOSCEs (POM)</li> </ul>

Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to competently perform common technical procedures.	<ul style="list-style-type: none"> <li>• Performance in the Ultrasound Skills Sessions (Anatomy Thread, yrs.1-2)</li> <li>• Performance in Clinical Skills Laboratory Sessions (ARDD, yr. 2)</li> <li>• Performance in clerkship procedure simulation labs</li> <li>• Performance in clinical clerkships</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to demonstrate deductive reasoning in solving clinical problems, including situations in which information is incomplete or ambiguous.	<ul style="list-style-type: none"> <li>• Clinical clerkship evaluations</li> <li>• Student advancement and graduation rates</li> <li>• Performance in the Clinical Foundations PBL small group sessions</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to communicate effectively with patients, families, colleagues and other health care professionals.	<ul style="list-style-type: none"> <li>• Performance-based assessment of student skills and abilities in the Introduction to Clinical Foundations course sequence and Primary Care and Neurology clerkships</li> <li>• Performance in clinical clerkships.</li> <li>• Results of USMLE Clinical Skills exam</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to correctly diagnose common illnesses based upon historical, physical examination and laboratory data.	<ul style="list-style-type: none"> <li>• Results of USMLE Clinical Skills exam</li> <li>• Performance-based assessment of student skills and abilities.</li> <li>• Performance in clinical clerkships</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to recognize and incorporate into clinical decision making the important psychosocial determinants contributing to poor health.	<ul style="list-style-type: none"> <li>• Performance in clinical clerkships</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to construct and execute a therapeutic plan.	<ul style="list-style-type: none"> <li>• Results of USMLE exams or other national standard</li> <li>• Performance-based assessment of student skills and abilities.</li> <li>• Performance in clinical clerkships</li> <li>• Student advancement and graduation rates</li> <li>• Faculty observation and feedback on student performance during PBL</li> </ul>

Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to recognize and respond appropriately to medical situations that are immediately life threatening.	<ul style="list-style-type: none"> <li>• Results of USMLE exams or other national standard</li> <li>• Performance-based assessment of student skills and abilities.</li> <li>• Performance in clinical clerkships</li> <li>• Performance in Principles to Practice course</li> <li>• Student advancement and graduation rates</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to work effectively with the other members of the health care team.	<ul style="list-style-type: none"> <li>• Performance in clinical clerkships</li> <li>• Faculty observation and feedback on student performance during POM interdisciplinary sessions</li> </ul>
Sufficient mastery of the medical <u>skills</u> needed to become capable, compassionate physicians.	To be able to relate in an effective manner to patients of different ages, gender and backgrounds.	<ul style="list-style-type: none"> <li>• Results of USMLE Clinical Skills exam</li> <li>• Performance-based assessment of student skills and abilities</li> <li>• Performance in clinical clerkships</li> <li>• Faculty observation and feedback on student performance during PBL</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>behaviors</u> needed to become capable, compassionate physicians.	To demonstrate compassion and sensitivity in the care of patients and respect for their privacy and dignity.	<ul style="list-style-type: none"> <li>• Results of USMLE Clinical Skills exam</li> <li>• Performance-based assessment of student skills and abilities</li> <li>• Performance in clinical clerkships</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> <li>• Faculty observation and feedback on student performance on GOSCEs (POM)</li> </ul>
Sufficient mastery of the medical <u>behaviors</u> needed to become capable, compassionate physicians.	To demonstrate respect for patient autonomy.	<ul style="list-style-type: none"> <li>• Results of USMLE Clinical Skills exam</li> <li>• Performance-based assessment of student skills and abilities</li> <li>• Performance in clinical clerkships</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> <li>• Faculty observation and feedback on student performance on GOSCEs (POM)</li> </ul>
Sufficient mastery of the medical <u>behaviors</u> needed to become capable, compassionate physicians.	To demonstrate the ability to build therapeutic relationships with patients.	<ul style="list-style-type: none"> <li>• Results of USMLE Clinical Skills exam</li> <li>• Performance-based assessment of student skills and abilities</li> <li>• Performance in clinical clerkships</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> <li>• Faculty observation and feedback on student</li> </ul>

		performance on GOSCEs (POM)
Sufficient mastery of the medical <u>behaviors</u> needed to become capable, compassionate physicians.	To demonstrate honesty and integrity in all interactions.	<ul style="list-style-type: none"> <li>• Performance-based assessment of student skills and abilities</li> <li>• Performance in clinical clerkships</li> <li>• Review of incidents reported as part of UCSD professionalism policy</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>behaviors</u> needed to become capable, compassionate physicians.	To demonstrate responsibility and trustworthiness in the execution of all duties.	<ul style="list-style-type: none"> <li>• Compliance with policies and procedures relevant to the clerkship curriculum</li> <li>• Performance in clinical clerkships</li> <li>• Review of incidents reported as part of UCSD professionalism policy</li> </ul>
Sufficient mastery of the medical <u>behaviors</u> needed to become capable, compassionate physicians.	To demonstrate the ability to accept criticism and to understand the limitations of one's own knowledge and skills.	<ul style="list-style-type: none"> <li>• Performance in clinical clerkships</li> <li>• Review of incidents reported as part of UCSD professionalism policy</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>behaviors</u> needed to become capable, compassionate physicians.	To demonstrate adherence to all of the principles of UCSD's Professionalism Code.	<ul style="list-style-type: none"> <li>• Performance in clinical clerkships</li> <li>• Performance in the anatomy laboratory</li> <li>• Review of incidents reported as part of UCSD professionalism policy</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> <li>• Faculty observation and feedback on student performance during POM small group sessions</li> </ul>
Sufficient mastery of the medical <u>behaviors</u> needed to become capable, compassionate physicians.	To demonstrate a commitment to excellence and ongoing professional development	<ul style="list-style-type: none"> <li>• Performance in clinical clerkships</li> <li>• Step 3 Pass Rates</li> </ul>
Appropriate <u>attitudes</u> needed to become capable, compassionate physicians.	To possess dedication to the well-being and needs of patients.	*See note
Appropriate <u>attitudes</u> needed to become capable, compassionate physicians.	To possess dedication to lifelong learning and an appreciation for the role of science in medical advances.	*See note



Appropriate <u>attitudes</u> needed to become capable, compassionate physicians.	To possess dedication to continual enhancement of clinical skills.	*See note
Appropriate <u>attitudes</u> needed to become capable, compassionate physicians.	To possess an understanding of the threats posed by conflicts of interest in the practice of medicine and the performance of research.	*See note
Appropriate <u>attitudes</u> needed to become capable, compassionate physicians.	To possess a commitment to promote the health and well-being of the communities served.	*See note
Appropriate <u>attitudes</u> needed to become capable, compassionate physicians.	To possess the willingness to lead when leadership is required.	*See note

\* Note: While professional attitudes cannot be directly measured, their appropriate development is an important goal of the medical school curriculum. Student behaviors are scrutinized by faculty and housestaff in interactions with standardized and actual patients, as well as in interactions with faculty, with allied health professionals, and between students. Professionalism issues that may reflect inadequate development of appropriate professional attitudes are brought to the attention of the Associate Dean for Admissions and Student Affairs and the Associate Dean for Undergraduate Medical Education, who may refer the student to the Standings and Promotions Committee for further action. Students are also given ample opportunities to share and reflect upon their attitudes. For example, in the Medicine Clerkship, students are required to participate in a reflective journaling exercise. At least once during the 12-week course, students must submit an anonymous entry (-ies) under the reflective journaling tab in the clerkship ePortfolio. This provides a context for students to record personal experiences that occur during the clerkship.