



**Guiding Principles for Preclerkship Curriculum**

Approved by TEPC June 5, 2013

Revised and Approved by TEPC: October 17, 2018

**Guiding Principles**

	LCME Element(s)
<b>A. General Principles</b>	
The MD curriculum in Tucson is designed through educational principles that are distinctive to the program. The faculty adopt these principles to ensure medical students will be well prepared for advanced study in any clinical discipline. The principles are:	
a. The curriculum is designed by means of faculty-approved sets of <i>Educational Competencies</i> , which are expressed through <i>Educational Program Objectives</i> , the attainment of which are confirmed through <i>Measurable Outcomes</i> .	8.2 Use of Medical Educational Program Objectives 6.1 Program and Learning Objectives (ED-01A, 3)
b. Students will participate in patient care and other clinical experiences beginning with the first year of the curriculum	8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35)
c. The curriculum expresses an organ-systems organization in a logical and reinforcing sequence	7.1 Biomedical, Behavioral, Social Sciences (ED-10, ED-11) 7.2 Organ Systems/ Life Cycle/ Primary Care/ Prevention/Wellness/ Symptoms/ Signs/ Differential Diagnosis, Treatment Planning, Impact of Behavioral/Social Factors (ED-10, ED-13) (ED-10) 8.1 Curricular Management (ED-33)
d. Deliver the most current understandings of medical knowledge	7.1 Biomedical, Behavioral, Social Sciences (ED-10, ED-11) 7.2 Organ Systems/ Life Cycle/ Primary Care/ Prevention/Wellness/ Symptoms/ Signs/ Differential Diagnosis, Treatment Planning, Impact of Behavioral/Social Factors (ED-10, ED-13) 8.1 Curricular Management (ED-33)
e. Deliver that content required for successful preparation for licensing examinations and beginning graduate medical education	7.1 Biomedical, Behavioral, Social Sciences (ED-10, ED-11) 7.2 Organ Systems/ Life Cycle/ Primary Care/ Prevention/Wellness/ Symptoms/ Signs/ Differential Diagnosis, Treatment Planning, Impact of Behavioral/Social Factors (ED-10, ED-13)
f. Minimize content redundancies and the delivery of unessential minutiae	8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35; ED-37) 7.4 Critical Judgment/Problem-Solving Skills (ED-6) 7.3 Scientific Method/Clinical/ Translational Research (ED-17A)

	<b>LCME Element(s)</b>
g. Locate longitudinal content and themes within and across blocks, and across years;	7.1 Biomedical, Behavioral, Social Sciences (ED-10, ED-11) 7.5 Societal Problems (ED-20) 7.6 Cultural Competence/Health Care Disparities/Personal Bias (ED-21, ED-22) 7.7 Medical Ethics (ED-23)
h. Integrate clinical and basic science disciplines, the social and behavioral sciences, and the humanities;	7.1 Biomedical, Behavioral, Social Sciences (ED-10, ED-11) 7.2 Organ Systems/ Life Cycle/ Primary Care/ Prevention/Wellness/ Symptoms/ Signs/ Differential Diagnosis, Treatment Planning, Impact of Behavioral/Social Factors (ED-10, ED-13)
i. Ensure that multiple disciplines are foundational to the content for each instructional block; and	8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35) 9.6 Setting Standards of Achievement (ED-29)
j. Meet all specific content areas identified in LCME accreditation standards.	All Elements in Standard 7: Curricular Content
<b>B. Learning Objectives</b>	
The <i>Educational Program Objectives (EPO)</i> frame the organization and delivery of program content and instructional experiences. “Educational Program Competencies” are used as surrogate references to the EPOs, and these are explicitly linked within:	8.2 Use of Medical Educational Program Objectives (ED-01) 8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35) 6.1 Program and Learning Objectives (ED-01A, 3) 9.4 Variety of measures of student achievement/Direct observation of core clinical skills (ED-26, ED-27. ED-28)
a. The educational objectives for each instructional block or course	6.1 Program and Learning Objectives (ED-01A, 3) 8.2 Use of Medical Educational Program Objectives (ED-01)
b. The learning objectives established for each instructional session	8.2 Use of Medical Educational Program Objectives (ED-01) 9.6 Setting Standards of Achievement (ED-29)
c. Instructional methods	8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35) 9.4 Variety of measures of student achievement/Direct observation of core clinical skills (ED-26, ED-27. ED-28) 9.6 Setting Standards of Achievement (ED-29)
d. The methods and tools required to assess student learning	9.4 Variety of measures of student achievement/Direct observation of core clinical skills (ED-26, ED-27. ED-28) 9.5 Narrative Assessment (ED-32) 9.8 Fair and Timely Summative Assessment (ED-30) 8.4 Program Evaluation (ED-46)
e. The design and content of examination items and other measurements of performance (e.g., surveys)	9.4 Variety of measures of student achievement/Direct observation of core clinical skills (ED-26, ED-27. ED-28) 9.5 Narrative Assessment (ED-32) 9.7 Formative Assessment and Feedback (ED-31) 9.8 Fair and Timely Summative Assessment (ED-30)
<b>C. Instruction and Learning</b>	
Instruction is progressive, attending to students’ advancing knowledge, cognitive and critical-thinking skills, and professional attributes. Instructional experiences are designed to express a continuum of lesser-to-greater sophistication and challenge as students progress across years. The continuum takes into account:	8.1 Curricular Management (ED-33) 9.4 Variety of Measures of Student Achievement/Direct Observation of core clinical. Skills (ED-26) 9.6 Setting Standards of Achievement (ED-29) 8.4 Program Evaluation (ED-46)

	<b>LCME Element(s)</b>
a. Students' cumulative acquisition of medical and patient-care knowledge	7.1 Biomedical, Behavioral, Social Sciences (ED-10, ED-11) 7.2 Organ Systems/ Life Cycle/ Primary Care/ Prevention/Wellness/ Symptoms/ Signs/ Differential Diagnosis, Treatment Planning, Impact of Behavioral/Social Factors (ED-10, ED-13) 7.5 Societal Problems (ED-20) 7.6 Cultural Competence/Health Care Disparities/Personal Bias (ED-21, ED-22) 7.7 Medical Ethics (ED-23)
b. The development of student abilities to solve complex problems	7.3 Scientific Method/Clinical/ Translational Research (ED 17A) 7.4 Critical Judgment/Problem-Solving Skills (ED-6)
c. Cooperative learning and active participation of students	6.3 Self-Directed and Life-Long Learning (ED-5A) 7.8 Communication Skills (ED-19)
d. The development of self-directed and life-long learning skills	6.3 Self-Directed and Life-Long Learning (ED-5A)
e. Student responsibility and accountability toward meeting learning goals	6.3 Self-Directed and Life-Long Learning (ED-5A)
f. Student skills in the acquisition of knowledge, including the use of information technology	6.3 Self-Directed and Life-Long Learning (ED-5A) 8.1 Curricular Management (ED-33)
g. Opportunities for students to participate in interprofessional teams	7.9 Interprofessional Collaborative Skills (ED-19-A) 7.8 Communication Skills (ED-19)
h. Regular opportunities to learn and practice the oral, written and presentational skills required of clinicians	7.2 Organ Systems/ Life Cycle/ Primary Care/ Prevention/Wellness/ Symptoms/ Signs/ Differential Diagnosis, Treatment Planning, Impact of Behavioral/Social Factors (ED-10, ED-13) 7.8 Communication Skills (ED-19)
i. The use of multiple methods of instruction, adapted from the MedBiquitous Curriculum Inventory Working Group Curriculum Inventory Standards, and the distribution of each method within and among blocks/courses.	8.1 Curricular Management (ED-33) 8.8 Monitoring Student Time (ED-38)
j. Two afternoons per week will be protected for students' self-directed learning, for a total of 8 hours per week.	8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)
k. A minimum of 45 hours of work by each student is required for each unit of credit (1 week = 45 hours of work), per ABOR Policy Number 2-224 (Academic Credit), Policy Date 9/2016.	8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35) 8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)
l. The block weekly schedule will adhere to the Weekly Template (Appendix) of approximately 30-32 hours of scheduled contact hours (i.e. lecture, TL, exam, discussion, lab, etc.).	8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)
m. Based on the 45 hours of work for each unit, approximately 13-15 hours of those contact hours will be protected for students' independent learning (i.e. independent study; homework).	8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)

		LCME Element(s)										
n. Maximum total hours of learning events per week:		8.1 Curricular Management (ED-33) 8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35) 8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)										
<table border="1"> <thead> <tr> <th>Curriculum Component</th> <th>Learning Events/Week Maximum Total Hours</th> </tr> </thead> <tbody> <tr> <td>Blocks/Courses/ Pathways in Health &amp; Medicine</td> <td>20-26</td> </tr> <tr> <td>Doctor &amp; Patient/Societies</td> <td>4</td> </tr> <tr> <td>Clinical Reasoning Course</td> <td>2</td> </tr> <tr> <td><b>Total</b></td> <td><b>26-32</b></td> </tr> </tbody> </table>		Curriculum Component	Learning Events/Week Maximum Total Hours	Blocks/Courses/ Pathways in Health & Medicine	20-26	Doctor & Patient/Societies	4	Clinical Reasoning Course	2	<b>Total</b>	<b>26-32</b>	
Curriculum Component	Learning Events/Week Maximum Total Hours											
Blocks/Courses/ Pathways in Health & Medicine	20-26											
Doctor & Patient/Societies	4											
Clinical Reasoning Course	2											
<b>Total</b>	<b>26-32</b>											
<p>**Original Pathways in Health &amp; Medicine (aka: longitudinal curriculum) allowed 2 hours/week of block for the Class of 2021. New Hybrid schedule for the Class of 2022 will allow flexibility in scheduling learning events in a way that maximizes integration of content with block content</p>												
o. Learning events will begin at 8:00 am		8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)										
p. Maximum of one day off prior to high stakes exam		8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)										
q. No more than 50% of learning events shall be lectures		8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35) 8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)										
r. Mid-term exams will be administered on Mondays		8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)										
s. Content spiraling will be dedicated to every Monday from 10 am – 12 pm		8.1 Curricular Management (ED-33) 8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35)										
t. Flipped classroom instructional methods require student attendance		8.1 Curricular Management (ED-33) 8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)										
u. The Clinical Reasoning Course will be dedicated to Friday mornings: 8am – 10am = 1 <sup>st</sup> & 2 <sup>nd</sup> semester students, 10am – 12pm = 3 <sup>rd</sup> semester students		8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)										
v. Block and course draft planning schedules (including CRC and Pathways to Health & Medicine) are due four months in advance before start of course		8.1 Curricular Management (ED-33) 8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35)										
w. Block and course directors will present block schedules (Block Change Form) during TCMS and TCCS meetings each year		8.1 Curricular Management (ED-33) 8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35)										
x. Course directors, discipline directors, core teaching faculty and thread directors will set standing planning meetings to design an integrated, coordinated curriculum design of each block		8.1 Curricular Management (ED-33) 8.3 Curricular Design, Review, Revision/Content Monitoring (ED-35) 8.8 Monitoring Student Time (ED-38) 6.3 Self-Directed and Life-Long Learning (ED-5A)										

	LCME Element(s)
<b>D. Assessment of Student Performance</b>	
A plan for the assessment of student performance that supports the principles for learning and instruction as expressed above.	9.4 Variety of measures of student achievement/Direct observation of core clinical skills (ED-26, ED-27, ED-28) 9.6 Setting Standards of Achievement (ED-29)
<b>E. Learning Environment</b>	
The learning environment manifests the highest standards of personal, social and professional integrity and support for students.	3.5 Learning Environment/Professionalism

## Appendix. Weekly Scheduling Templates

**Weekly Template – Class of 2022\***

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM	Lecture, Discussion, or Laboratory	Lecture, Large Group, or Laboratory	Lecture, Discussion, or Laboratory	Lecture, Discussion, or Laboratory	Clinical Reasoning Course
9:00 AM	Lecture, Discussion, or Laboratory	Lecture, Large Group, or Laboratory	Lecture, Discussion, or Laboratory	Lecture, Discussion, or Laboratory	
10:00 AM	Medical Spiral Curriculum	Lecture, Large Group, or Laboratory	Team-Based Learning	Lecture, Discussion, or Laboratory	Lecture, Discussion, or Laboratory
11:00 AM					
12:00 PM					
12:30 PM					
1:00 PM	Lecture, Discussion, or Laboratory	Group 1 Doctor & Patient/Societies Group 2 Self-Directed Learning	Lecture, Discussion, or Laboratory	Group 1 Self-Directed Learning Group 2 Doctor & Patient/Societies	Self-Directed Learning
2:00 PM	Lecture, Discussion, or Laboratory	Group 1 Doctor & Patient/Societies Group 2 Self-Directed Learning	Lecture, Discussion, or Laboratory	Group 1 Self-Directed Learning Group 2 Doctor & Patient/Societies	Self-Directed Learning
3:00 PM	Lecture, Discussion, or Laboratory	Group 1 Doctor & Patient/Societies Group 2 Self-Directed Learning	Lecture, Discussion, or Laboratory	Group 1 Self-Directed Learning Group 2 Doctor & Patient/Societies	Self-Directed Learning
4:00 PM	Lecture, Discussion, or Laboratory	Group 1 Doctor & Patient/Societies Group 2 Self-Directed Learning	Lecture, Discussion, or Laboratory	Group 1 Self-Directed Learning Group 2 Doctor & Patient/Societies	Self-Directed Learning

\* Pathways in Health & Medicine: New Hybrid schedule will allow flexibility in scheduling learning events in a way that maximizes integration of content with block content

### Weekly Template - Class of 2021

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM	Lecture, Discussion, or Laboratory	Lecture, Large Group, or Laboratory	Lecture, Large Group, or Laboratory	Lecture, Discussion, or Laboratory	Lecture, Discussion, or Laboratory
9:00 AM	Lecture, Discussion, or Laboratory	Lecture, Large Group, or Laboratory	Lecture, Large Group, or Laboratory	Lecture, Large Group, or Laboratory	Lecture, Discussion, or Laboratory
10:00 AM	Pathways In Health & Medicine	Lecture, Large Group, or Laboratory	Team-Based Learning	Lecture, Large Group, or Laboratory	Clinical Reasoning Course
11:00 AM					
12:00 PM					
12:30 PM					
1:00 PM	Group 1 Doctor & Patient/Societies Group 2 Self-Directed Learning	Lecture, Discussion, or Laboratory	Group 1 Self-Directed Learning Group 2 Doctor & Patient/Societies	Lecture, Discussion, or Laboratory	Self-Directed Learning
2:00 PM	Group 1 Doctor & Patient/Societies Group 2 Self-Directed Learning	Lecture, Discussion, or Laboratory	Group 1 Self-Directed Learning Group 2 Doctor & Patient/Societies	Lecture, Discussion, or Laboratory	Self-Directed Learning
3:00 PM	Group 1 Doctor & Patient/Societies Group 2 Self-Directed Learning	Lecture, Discussion, or Laboratory	Group 1 Self-Directed Learning Group 2 Doctor & Patient/Societies	Lecture, Discussion, or Laboratory	Self-Directed Learning
4:00 PM	Group 1 Doctor & Patient/Societies Group 2 Self-Directed Learning	Lecture, Discussion, or Laboratory	Group 1 Self-Directed Learning Group 2 Doctor & Patient/Societies	Lecture, Discussion, or Laboratory	Self-Directed Learning

Class of 2021: Pathways in Health & Medicine: Every Monday of the block between 10am - 12pm