



SUNY Downstate College of Medicine

Integrated Pathways Curriculum, Class of 2022

Unit 1: Human Structure and Function

August 13 – October 5, 2018

UNIT 1: Human Structure and Function

Calendar for 2018

We are pleased to offer a preview of the Unit 1 calendar for the Integrated Pathways Curriculum at the SUNY Downstate College of Medicine.

- **This version of the calendar is current as of July 10 2018**, but there may be changes – including the dates and times of activities or assessments – before or after implementation of the Unit.
- Any future changes to the calendar are likely to be minor, and the dates and times for most activities will not change.
- The calendar will be posted and available online via the Blackboard/ilios system in early August, and we hope to send you a link to the online version about a week before Orientation begins. You'll be using the online version extensively throughout the Foundations Units.
- Any changes or updates will be included in the online version.
- We hope that this preview is helpful, and we look forward to meeting you at Orientation on Monday August 6th. We are pleased and privileged to be working with you in Unit 1.
- Please feel free to contact me with any questions or concerns – keith.williams@downstate.edu

A handwritten signature in blue ink, appearing to read "Keith Williams".

Dr. Keith Williams

Distinguished Teaching Professor

on behalf of the Unit 1 faculty & staff

June, 2018

UNIT 1

Systems Overview: Human Structure and Function

2018

January

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

March

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

June

Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

August

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Orientation August 6 to 10, 2018

Unit 1: August 13 to
October 5, 2018

October

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

November

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Unit 2: October 9 to December 21

UNIT 1

Key to Modalities



Class Information & Discussion



Interactive Lecture



Problem-Based Learning (PBL)



Clinical Skills (CS) Small Group



Clinical Skills (CS) Lab



Radiology Lab (RRE)



Patient-Oriented Problem Solving (POPS)



Patient Presentation



Gross Anatomy Lab



Histology/Histopathology Lab



Independent Learning activity



Formative Assessment *



Summative Assessment

Please note that some activities (e.g., most Interactive Lectures) include the entire class. Other activities (e.g., PBL, CS Small Group, CS Lab, RRE, POPS, Gross Anatomy Lab) typically include half the class or some other division, e.g., one quarter of the class, in any given session. Those sessions are repeated, either on the same day or on different days, so as to eventually encompass the entire class. For example, Ms. Alvarez Session 1 (PBL, # 2) is taken by Half I of the class on the morning of August 13th and by Half II of the class on the afternoon of the same day; the Thorax anatomy lab (# 21) is taken by half of Half I (a quarter of the class) at 10:00 a.m. on August 21st, by the other half of Half I at 11:00 a.m., and by Half II at 12:00 noon or 2:30 p.m. that day. A particular student will only be in Half I or Half II, and we'll let you know your final assignments during Orientation Week.

All sessions have a Unique ID number shown in blue (1, 2, 3, 119, 5, 7, 6, etc.). The numbers are not necessarily in sequence — they are for reference and are key for calendaring and administrative support.

* Weekly formative assessments open on Friday and are due by 9 a.m. the following Tuesday. The scores do not count toward the Unit grade, but formative assessments are a required activity and a valuable study tool, and are part of the Professionalism competency.

		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2018		Monday August 13		Tuesday August 14		Wednesday August 15		Thursday August 16		Friday August 17	
9:00	9:00 a.m.	1 Unit 1 Overview		119 Vitals are Vital				31 Ms. Alvarez Session 2		221 Circulation in Specific Organs	
9:30	9:30 a.m.										
10:00	10:00 a.m.	2 Ms. Alvarez Session 1	5 Principles of Circulation		111 Overview of the Nervous System				114 General Discussion; Orientation to POPS		
10:30	10:30 a.m.										
11:00	11:00 a.m.		8 Regulation of the Cardiovascular System								
11:30	11:30 a.m.										
12:00	12:00 p.m.	7 Cardiac Function						16 Acute Regulation of Cardiovascular Function			
12:30	12:30 p.m.										
13:00	1:00 p.m.	3 Introduction to the Medical Encounter		104 ANS signaling		31 Ms. Alvarez Session 2					
13:30	1:30 p.m.										
14:00	2:00 p.m.	6 Vital Signs	9 The Cardiac Exam								
14:30	2:30 p.m.							2 Ms. Alvarez Session 1			
15:00	3:00 p.m.	6 Vital Signs		9 The Cardiac Exam							
15:30	3:30 p.m.						E00 ExamSoft practice				
16:00	4:00 p.m.										
16:30	4:30 p.m.										
Independent Learning		77a Money Matters 1									

		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2018		Monday August 20		Tuesday August 21		Wednesday August 22		Thursday August 23		Friday August 24	
9:00	9:00 a.m.	18 Principles of Respiration – Breathing & Ventilation		25 Principles of Resp. Gas Exchange, Transport and Regulation				32 Ms. Alvarez Session 3	28 Respiration	63 The Action Potential and Clinical Correlates	
9:30	9:30 a.m.										
10:00	10:00 a.m.	19 The Patient-Centered Medical Interview		21 Thorax	10 Echo					64 Synaptic Transmission	
10:30	10:30 a.m.										
11:00	11:00 a.m.			21 Thorax			13 Principles of Fluid Balance	62 Signaling & Resting Membrane Potential			
11:30	11:30 a.m.										
12:00	12:00 p.m.			21 Thorax		15 Overview of the Kidneys			11 Patient Presentation		
12:30	12:30 p.m.										
13:00	1:00 p.m.	20 Principles of Respiration – Pulmonary Dynamics		80 Smooth Muscle				28 Respiration	32 Ms. Alvarez Session 3		
13:30	1:30 p.m.										
14:00	2:00 p.m.			23 The Respiratory Exam		23 The Respiratory Exam					
14:30	2:30 p.m.	10 Echo	19 The Patient-Centered Medical Interview		21 Thorax						
15:00	3:00 p.m.										
15:30	3:30 p.m.				23 The Respiratory Exam		23 The Respiratory Exam				
16:00	4:00 p.m.										
16:30	4:30 p.m.										
Independent Learning						121 Physiological Properties of Cells					

		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2018		Monday August 27		Tuesday August 28		Wednesday August 29		Thursday August 30		Friday August 31	
9:00	9:00 a.m.	223 Pharmacology and Therapeutics		224 Drug-Receptor Interactions		225 Pharmacokinetics		130 The Profession		76 How to Learn Gross Anatomy	
9:30	9:30 a.m.										
10:00	10:00 a.m.	38 Mr. Johnson Session 1	26 Homeo- stasis:	112 Capillaries, Lymph and Edema		226 Drug Metabolism		125 Introduction to Musculoskeletal & PNS		37 Principles of Diagnostic Imaging 1	
10:30	10:30 a.m.										
11:00	11:00 a.m.			128 Modalities and Assessments							
11:30	11:30 a.m.										
12:00	12:00 p.m.					227 Pharmacology and Therapeutics		228 Pharmacokinetics		234 Anatomy Intro	
12:30	12:30 p.m.			29 Abdo men							
13:00	1:00 p.m.							231 Histology Intro		234 Anatomy Intro	
13:30	1:30 p.m.	26 Homeo- stasis:		29 Abdo men							
14:00	2:00 p.m.			27 The Abdo minal Exam		29 Abdo men		27 The Abdo minal Exam			
14:30	2:30 p.m.		38 Mr. Johnson Session 1								
15:00	3:00 p.m.					29 Abdo men					
15:30	3:30 p.m.			27 The Abdo minal Exam				27 The Abdo minal Exam			
16:00	4:00 p.m.										
16:30	4:30 p.m.										
Independent Learning		222 Signal Transduction				235 Receptors Revisited					

	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2018	Monday September 3		Tuesday September 4		Wednesday September 5		Thursday September 6		Friday September 7	
9:00 9:00 a.m.	Labor Day		34 Bones & Joints		40 Principles of Diagnostic Imaging 2		48 Mr. Johnson Session 2		230 Back & Spine	50 Shoulder
9:30 9:30 a.m.										
10:00 10:00 a.m.			232 Smooth muscle & blood vessels		41 Vertebral Column, Spinal Cord and PNS					230 Back & Spine
10:30 10:30 a.m.			201 GA Lab						50 Shoulder	
11:00 11:00 a.m.										
11:30 11:30 a.m.										
12:00 12:00 p.m.					D02 Half I → Half II					
12:30 12:30 p.m.							D03 Half II → Half I		44 Back & Spine	
13:00 1:00 p.m.					203 GA Lab		D04 Half I → Half II			
13:30 1:30 p.m.			D01 Half II → Half I				204 GA Lab		48 Mr. Johnson Session 2	
14:00 2:00 p.m.			202 GA Lab		217 Upper Limb					
14:30 2:30 p.m.			217 Upper Limb							
15:00 3:00 p.m.										
15:30 3:30 p.m.										
16:00 4:00 p.m.										
16:30 4:30 p.m.										
Independent Learning					39 Terry Survives (Biostats)					

		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2018		Monday September 10		Tuesday September 11		Wednesday September 12		Thursday September 13		Friday September 14	
9:00	9:00 a.m.	68 The Neuromuscular Junction		81 Excitation–Contraction Coupling In Skeletal Muscle		79 Neural control of movement		69 Mr. Johnson Session 3		55 Elbow and Hand	
9:30	9:30 a.m.										
10:00	10:00 a.m.	60 Professionalism	205 GA Lab	85 Physiological Properties of Skeletal Muscle		120 Sensory Afferents & Spinal Cord Processing		115 Assessment Week - Discussion, Q & A		131 Nerve and Muscle	
10:30	10:30 a.m.										
11:00	11:00 a.m.										
11:30	11:30 a.m.										
12:00	12:00 p.m.			D05 Half II → Half I		D06 Half I → Half II					
12:30	12:30 p.m.			206 GA Lab							
13:00	1:00 p.m.									D07 Half II → Half I	
13:30	1:30 p.m.					207 GA Lab		75 Upper Limb		69 Mr. Johnson Session 3	
14:00	2:00 p.m.			218 Back, spine & Hip							
14:30	2:30 p.m.		60 Professionalism							75 Upper Limb	
15:00	3:00 p.m.										
15:30	3:30 p.m.										
16:00	4:00 p.m.										
16:30	4:30 p.m.			218 Back, spine & Hip		218 Back, spine & Hip				D08 Half I → Half II	
Independent Learning											

	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II						
2018	Monday September 17		Tuesday September 18		Wednesday September 19		Thursday September 20		Friday September 21							
9:00 9:00 a.m.	107 Connective tissue & secretory processes		108 Bone Structure and Function IL		Study Day		86 Mr. Carter Session 2	233 Nerve & muscle	122 Neuromuscular Disease 1							
9:30 9:30 a.m.									123 Neuromuscular Disease 2							
10:00 10:00 a.m.	74 Mr. Carter Session 1	209 GA Lab	109 Bone Development & Homeostasis IL													
10:30 10:30 a.m.																
11:00 11:00 a.m.			D10 Half I → Half II						132 Patient Presentation Sheikin							
11:30 11:30 a.m.																
12:00 12:00 p.m.																
12:30 12:30 p.m.																
13:00 1:00 p.m.																
13:30 1:30 p.m.																
14:00 2:00 p.m.	D09 Half II → Half I						212 GA Lab	86 Mr. Carter Session 2	D12 Half I → Half II							
14:30 2:30 p.m.	210 GA Lab	74 Mr. Carter Session 1	219 Lower Limb						233 Nerve & muscle	213 GA Lab						
15:00 3:00 p.m.																
15:30 3:30 p.m.																
16:00 4:00 p.m.							71 Hip & Thigh		D13 Half II → Half I							
16:30 4:30 p.m.																
Independent Learning	77b Money Matters 2						77c Money Matters 3									

Weekly Formative Assessments

		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II				
2018		Monday September 24		Tuesday September 25		Wednesday September 26		Thursday September 27		Friday September 28					
9:00	9:00 a.m.	94 Knee and Ankle		124 Neuromuscular Disease		92 Lower Limb		240 Intro to EBM		99 Mr. Carter Session 3 & Unit Survey		92 Lower Limb		Study Day	
9:30	9:30 a.m.														
10:00	10:00 a.m.	126 Simulated Patient Interview	110 Bone			214 GA Lab		240 Intro to EBM		216 GA Lab		99 Mr. Carter Session 3 & Unit Survey			
10:30	10:30 a.m.														
11:00	11:00 a.m.														
11:30	11:30 a.m.	SP1 1-on-1 Standardized Patient exercise. Selected students (TBD), 15 min each		220 HDPE		215 GA Lab		D14 Half I → Half II		D15 Half II → Half I					
12:00	12:00 p.m.														
12:30	12:30 p.m.														
13:00	1:00 p.m.	110 Bone		240 Intro to EBM		220 HDPE		216 GA Lab		99 Mr. Carter Session 3 & Unit Survey					
13:30	1:30 p.m.														
14:00	2:00 p.m.														
14:30	2:30 p.m.	126 Simulated Patient Interview		240 Intro to EBM		220 HDPE		215 GA Lab		D16 Half I → Half II					
15:00	3:00 p.m.														
15:30	3:30 p.m.														
16:00	4:00 p.m.			240 Intro to EBM		220 HDPE									
16:30	4:30 p.m.														
Independent Learning															

		Half I		Half II		Half I		Half II		Half I		Half II		Half I		Half II		
2018		Monday October 1		Tuesday October 2		Wednesday October 3		Thursday October 4		Friday October 5								
9:00	9:00 a.m.					Study Day												
9:30	9:30 a.m.																	
10:00	10:00 a.m.	E01 PC OSCE		E02 GA	E03 Rad & Histo			E04 MK Essay Exam		E06 NBME MCQ Exam								
10:30	10:30 a.m.																	
11:00	11:00 a.m.							E05 PC Essay Exam										
11:30	11:30 a.m.			E02 GA	E03 Rad & Histo													
12:00	12:00 p.m.							E07 PC MCQ Exam										
12:30	12:30 p.m.			E03 Rad & Histo	E02 GA													
13:00	1:00 p.m.																	
13:30	1:30 p.m.																	
14:00	2:00 p.m.			E03 Rad & Histo	E02 GA													
14:30	2:30 p.m.																	
15:00	3:00 p.m.																	
15:30	3:30 p.m.																	
16:00	4:00 p.m.																	
16:30	4:30 p.m.																	
Independent Learning																		