

SUNY Downstate College of Medicine

Integrated Pathways Curriculum, Class of 2024

Unit 1: Human Structure and Function

August 10 – October 2, 2020

UNIT 1: Human Structure and Function

Calendar for 2020

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

- **This version of the calendar is current as of August 6th, 2020**, but there may be changes – including the dates and times of activities or assessments – before or after implementation of the Unit.
- The calendar will be available online via the *Leo* system in early August, and we hope to send you a link to the online version 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 3rd. 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



Dr. Keith Williams
Distinguished Teaching Professor
on behalf of the Unit 1 faculty & staff



UNIT 1

Systems Overview: Human Structure and Function

2020

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

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




















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






Orientation August 3 to 7, 2020

Unit 1: August 10 to October 2, 2020

Unit 2 runs October 5 through December 18

UNIT 1











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|--|--|
|   Problem-Based learning (PBL) |   Radiology Lab |
|   Clinical Skills (CS) Small Group |  Asynchronous Lecture |
|   Clinical Skills (CS) Physical Exam Lab |  Asynchronous Module |
|   Patient-Oriented Problem Solving (POPS) |  Class Information & Discussion – Synchronous or Asynchronous |
|   Gross Anatomy Lab |  Protected Student-Directed Learning Time (PSDLT) |
|   Histology Lab |  Summative Assessment |

-   **Synchronous**, In Person on campus, as calendared
-   **Synchronous**, Remote (via computer, at home), as calendared
-  **Asynchronous**, Remote (via computer)

Please note that some activities (e.g., most Lectures) include the entire class. Other activities (e.g., PBL, CS Lab, 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, to eventually encompass the entire class. For example, Ms. Alvarez Session 1 (PBL, # 002) is taken by Half I of the class on the morning of August 10th and by Half II of the class on the afternoon of the same day. A 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 (001, 002, 003, 119, 005, etc.). The numbers are not necessarily in sequence — they are for reference and are key for calendaring and administrative support.

Week 1

Week 1		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2020		Monday August 10		Tuesday August 11		Wednesday August 12		Thursday August 13		Friday August 14	
8:00	8:00 a.m.										
8:30	8:30 a.m.										
9:00	9:00 a.m.	001 Unit 1 Overview		119 Vitals are Vital		111 Autonomic Nervous System		031 Ms. Alvarez		114 Introduction to POPS & Professionalism	
9:30	9:30 a.m.							PSDLT			
10:00	10:00 a.m.	002 Ms. Alvarez		005 Principles of Circulation		008 Regulation of the Cardiovascular System		Session 2		016 Acute Regulation of Cardiovascular Function	
10:30	10:30 a.m.	PSDLT								016 Acute Regulation of Cardiovascular Function	
11:00	11:00 a.m.	Session 1									
11:30	11:30 a.m.										
12:00	12:00 p.m.			007 Cardiac Function		104 Autonomic signaling					
12:30	12:30 p.m.							221 Circulation in Specific Organs		PSDLT	
13:00	1:00 p.m.	003 Introduction to the Medical Encounter									
13:30	1:30 p.m.							PSDLT			
14:00	2:00 p.m.	PSDLT		006 Vital Signs		009 The Cardiac Exam					
14:30	2:30 p.m.	002 Ms. Alvarez									
15:00	3:00 p.m.	Session 1						Session 2			
15:30	3:30 p.m.			006 Vital Signs		009 The Cardiac Exam					
16:00	4:00 p.m.										
16:30	4:30 p.m.										
17:00	5:00 p.m.										
Independent Learning				077 Money Matters 1				222 Signal Transduction		236 Biostats 1	

Weekly Formative Assessments

		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2020		Monday August 17		Tuesday August 18		Wednesday August 19		Thursday August 20		Friday August 21	
8:00	8:00 a.m.										
8:30	8:30 a.m.										
9:00	9:00 a.m.	018 Principles of Respiration – Breathing & Ventilation		025 Principles of Resp. Gas Exchange, Transport and Regulation		PSDLT		032 Ms. Alvarez Session 3		013 Principles of Fluid Balance	
9:30	9:30 a.m.							028 Respiration			
10:00	10:00 a.m.	019 The Patient-Centered Medical Interview		021 Thorax demo.						015 Overview of the Kidneys	
10:30	10:30 a.m.	PSDLT									
11:00	11:00 a.m.			010 Echo						PSDLT	
11:30	11:30 a.m.										
12:00	12:00 p.m.					062 Resting Potential & Action Potential, Part 1					
12:30	12:30 p.m.										
13:00	1:00 p.m.	020 Principles of Respiration – Pulmonary Dynamics		080 Smooth Muscle		063 Resting Potential & Action Potential, Part 2		028 Respiration			
13:30	1:30 p.m.										
14:00	2:00 p.m.	PSDLT		023 The Respiration Exam		PSDLT		023 The Respiration Exam		032 Ms. Alvarez Session 3	
14:30	2:30 p.m.	019 The Patient-Centered Medical Interview				PSDLT					
15:00	3:00 p.m.			023 The Respiration Exam							
15:30	3:30 p.m.					023 The Respiration Exam					
16:00	4:00 p.m.							64 Synaptic Transmission			
16:30	4:30 p.m.										
17:00	5:00 p.m.										

Weekly Formative Assessments

Independent Learning		121 Physiological Properties of Cells		237 Biostats 2	
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Week 3

Week 3		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2020		Monday August 24		Tuesday August 25		Wednesday August 26		Thursday August 27		Friday August 28	
8:00	8:00 a.m.										
8:30	8:30 a.m.										
9:00	9:00 a.m.	223 Pharmacology and Therapeutics		224 Drug-Receptor Interactions		226 Pharmacokinetics & Drug Metabolism 2		125 Introduction to Musculoskeletal		201 Anatomy Intro	
9:30	9:30 a.m.									231 Histology Intro	
10:00	10:00 a.m.	060 Professionalism		112 Capillaries, Lymph and Edema		227 Pharmacology & Ther		PSDLT		076 How to...	
10:30	10:30 a.m.	CS SG		026 Homeostasis: POPS							
11:00	11:00 a.m.			128 Assessments						201 Anatomy Intro	
11:30	11:30 a.m.									231 Histology Intro	
12:00	12:00 p.m.			225 Pharmacokinetics & Drug Metabolism 1				228 Pharmacokinetics		228 Pharmacokinetics	
12:30	12:30 p.m.									201 Anatomy Intro	
13:00	1:00 p.m.					130 Professionalism Grant				PSDLT	
13:30	1:30 p.m.										
14:00	2:00 p.m.	026 Homeostasis: POPS		PSDLT		027 The Abdominal Exam		027 The Abdominal Exam		227 Pharmacology & Ther	
14:30	2:30 p.m.	060 Professionalism								PSDLT	
15:00	3:00 p.m.	CS SG									
15:30	3:30 p.m.					027 The Abdominal Exam		027 The Abdominal Exam			
16:00	4:00 p.m.										
16:30	4:30 p.m.										
17:00	5:00 p.m.										
Independent Learning		222 Signal Transduction		242 Biosynthesis & metabolism ACh & CA		235 Receptors Revisited					

Weekly Formative Assessments

		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2020		Monday August 31		Tuesday September 1		Wednesday September 2		Thursday September 3		Friday September 4	
8:00	8:00 a.m.										
8:30	8:30 a.m.										
9:00	9:00 a.m.	034 Bones & Joints		PSDLT		040 Principles of Diagnostic Imaging 2		048 Mr. Johnson PBL Session 2		044 Back & Spine	
9:30	9:30 a.m.							232 Smooth muscle VM Lab			
10:00	10:00 a.m.	038 Mr. Johnson PBL Session 1	202 GA Lab Half II			041 Vertebral Column, Spinal Cord and PNS				081 Excitation- Contraction Coupling In Skeletal 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.					050 Shoulder				085 Physiological Properties of Skeletal Muscle	
12:30	12:30 p.m.										
13:00	1:00 p.m.			037 Principles of Diagnostic Imaging 1						PSDLT	
13:30	1:30 p.m.							203-204 GA Lab Half II			
14:00	2:00 p.m.					240 EBM	240 EBM	203-204 GA Lab Half I	048 Mr. Johnson PBL Session 2		
14:30	2:30 p.m.	202 GA Lab Half I	038 Mr. Johnson PBL Session 1	232 Smooth muscle VM Lab							
15:00	3:00 p.m.										
15:30	3:30 p.m.					240 EBM	240 EBM				
16:00	4:00 p.m.										
16:30	4:30 p.m.										
17:00	5:00 p.m.										

Weekly Formative Assessments

Independent Learning	243 Scientific Method			241 Neuromuscular Junction	
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		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2020		Monday September 7		Tuesday September 8		Wednesday September 9		Thursday September 10		Friday September 11	
8:00	8:00 a.m.										
8:30	8:30 a.m.										
9:00	9:00 a.m.	Labor Day		233 Nerve & muscle VM Lab		205-206 GA Lab Half II		079 Neural control of movement		069 Mr. Johnson PBL Session 3	
9:30	9:30 a.m.			075 Upper Limb RRE		233 Nerve & muscle VM Lab					
10:00	10:00 a.m.			131 Nerve and Muscle POPS		131 Nerve and Muscle POPS		075 Upper Limb RRE			
10:30	10:30 a.m.			120 Sensory Afferents & Spinal Cord Processing		115 Assessment Week - Discussion, Q & A		055 Elbow and Hand			
11:00	11:00 a.m.			205-206 GA Lab Half I		217 Upper Limb		207-208 GA Lab Half II		PSDLT	
11:30	11:30 a.m.			217 Upper Limb		217 Upper Limb		207-208 GA Lab Half I			
12:00	12:00 p.m.			217 Upper Limb		217 Upper Limb		069 Mr. Johnson PBL Session 3			
12:30	12:30 p.m.										
13:00	1:00 p.m.										
13:30	1:30 p.m.										
14:00	2:00 p.m.										
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.										
17:00	5:00 p.m.										

Weekly Formative Assessments

Independent Learning					
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Week 6		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2020		Monday September 14		Tuesday September 15		Wednesday September 16		Thursday September 17		Friday September 18	
8:00	8:00 a.m.										
8:30	8:30 a.m.										
9:00	9:00 a.m.		209-212 GA Lab Half II	107 Connective Tissues		071 Hip & Thigh		086 Mr. Carter PBL Session 2	PSDLT Half II		
9:30	9:30 a.m.										213-214 GA Lab Half II
10:00	10:00 a.m.	074 Mr. Carter PBL Session 1		122 Neuromuscular Disease 1		108 Bone Structure and Function				110 Bone VM Lab	
10:30	10:30 a.m.										
11:00	11:00 a.m.			123 Neuromuscular Disease 2		109 Bone Development					
11:30	11:30 a.m.										
12:00	12:00 p.m.					E00 NBME practice					
12:30	12:30 p.m.									PSDLT	
13:00	1:00 p.m.	PSDLT Half I		209-212 GA Lab Half I		210-211 GA Lab Half II		210-211 GA Lab Half I			
13:30	1:30 p.m.										
14:00	2:00 p.m.					218 Back, spin & H		086 Mr. Carter PBL Session 2			
14:30	2:30 p.m.		074 Mr. Carter PBL Session 1			218 Back, spin & H					
15:00	3:00 p.m.										
15:30	3:30 p.m.					218 Back, spin & H					
16:00	4:00 p.m.					218 Back, spin & H					
16:30	4:30 p.m.										
17:00	5:00 p.m.										
Independent Learning								238 Biostats 3			

Weekly Formative Assessments

		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II
2020		Monday September 21		Tuesday September 22		Wednesday September 23		Thursday September 24		Friday September 25	
8:00	8:00 a.m.										
8:30	8:30 a.m.										
9:00	9:00 a.m.	094 Knee and Ankle...		124 NM Disease POPS	124 NM Disease POPS		215-216 GA Lab Half II	099 Mr. Carter PBL		PSDLT / Study day	
9:30	9:30 a.m.					092 Lower Limb RRE		Session 3 & Unit Survey	092 Lower Limb RRE		
10:00	10:00 a.m.	126 Simulated Patient Int.	110 Bone VM Lab								
10:30	10:30 a.m.										
11:00	11:00 a.m.			PSDLT							
11:30	11:30 a.m.										
12:00	12:00 p.m.										
12:30	12:30 p.m.		SP1 1-on-1 SP 15 min								
13:00	1:00 p.m.										
13:30	1:30 p.m.										
14:00	2:00 p.m.	213-214 GA Lab Half I		220 HDPE	219 Lower Limb	219 Lower Limb	220 HDPE	215-216 GA Lab Half I	099 Mr. Carter PBL		
14:30	2:30 p.m.		126 Simulated Patient Int.						Session 3 & Unit Survey		
15:00	3:00 p.m.										
15:30	3:30 p.m.			220 HDPE	219 Lower Limb	219 Lower Limb	220 HDPE				
16:00	4:00 p.m.										
16:30	4:30 p.m.										
17:00	5:00 p.m.										

Weekly Formative Assessments

Independent Learning											
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Week 8



		Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II	Half I	Half II		
2020		Monday September 28		Tuesday September 29		Wednesday September 30		Thursday October 1		Friday October 2			
8:00	8:00 a.m.												
8:30	8:30 a.m.												
9:00	9:00 a.m.	Study Day		PC OSCE		Practical Exams		MK Essay Exam		NBME & PC MCQ Exams			
9:30	9:30 a.m.												
10:00	10:00 a.m.												
10:30	10:30 a.m.												
11:00	11:00 a.m.												
11:30	11:30 a.m.												
12:00	12:00 p.m.												
12:30	12:30 p.m.											PC Essay Exam	
13:00	1:00 p.m.												
13:30	1:30 p.m.												
14:00	2:00 p.m.												
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.												
17:00	5:00 p.m.												
Independent Learning													