TITLE: MOLECULES AND CELLS, UNIT 1A

Week #1: Monday July 21, 2014 - Friday July 25, 2014

Time	Monday 21	Tuesday 22	Wednesday 23	Thursday 24	Friday 25
8:00 – 8:50 a.m.			**Opening Exercises College of Medicine**	**TBL 1A** Biological Molecules Dr. Byrnes [3]	**TBL 2 :** Bioenergetics Dr. Broome [6]
9:00 – 9:50 a.m.			**MOLECULES & CELLS I** Introduction (Gondré-Lewis& Broome) Acid-Base Balance and Disturbances I Dr. Byrnes [1]	**TBL 1B:** Acid-Base Balance Dr. Byrnes [4]	Proteins I Dr. Byrnes [7]
10:00 – 10:30 a.m.			**BREAK**	**BREAK**	**BREAK**
10:30 – 11:20 a.m.			Acid-Base Balance and Disturbances II Dr. Byrnes [1]	Bioenergetics of Metabolism Dr. Broome [5]	Proteins II Dr. Byrnes [7]
11:30 – 12:20 p.m.	**Freshman Orientation**	**Freshman Orientation**	Introduction to Nutrition Dr. Fang [2]		Proteins III Dr. Byrnes [7]
12:30 – 1:00 p.m.			**LUNCH**	**LUNCH**	**LUNCH**
1:00 – 1:50 p.m.			Independent Study	Independent Study	Independent Study
2:00 – 2:50 p.m.					
3:00 – 3:50 p.m.					
4:00 – 4:50 p.m.					

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES & CELLS UNIT 1A
Week #2: Monday, July 28, 2014 - Friday August 1, 2014

Time	Monday 28	Tuesday 29	Wednesday 30	Thursday 31	Friday 1
8:00 – 8:50 a.m.	Proteins IV Dr. Byrnes [7]	**TBL 3A** Proteins Dr. Byrnes [8]	**TBL 4A:** Hemoglobin Dr. Byrnes [11]	**Quiz 1 and Discussion**	**TBL 5A** Enzymes Dr. Sherif [15]
9:00 – 9:50 a.m.	Proteins V Dr. Byrnes [7]	**TBL 3B** Proteins Dr. Byrnes [9]	**TBL 4B:** Hemoglobin Dr. Byrnes [12]	Enzymes II Dr. Sherif [13]	**TBL 5B** Enzymes Dr. Sherif [16]
10:00 – 10:30 a.m.	**BREAK**	**BREAK**	**BREAK**	**BREAK**	**BREAK**
10:30 – 11:20 a.m.	**TBL Self Study**	Hemoglobin Dr. Byrnes [10]	Enzymes I Dr. Sherif [13]	Enzymes III Dr. Sherif [13]	Blood Coagulation Dr. Kwabi-Addo [17]
11:30 – 12:20 p.m.		**TBL Self study**	**Clinical Application** Acid-Base Disturbances [14]	**TBL Self study**	**Clinical Application** Sickle Cell Disease Dr. O'Neal [18]
12:30 – 1:00 p.m.	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
1:00 – 1:50 p.m.	Independent Study	**Medicine & Society Unit One** **Course Overview** Professionalism Health Care Ethics	Independent Study	Independent Study	Independent Study
2:00 – 2:50 p.m					
3:00- 3:50 p.m.					
4:00 – 4:50 p.m.					**White Coat Ceremony**

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES AND CELLS, UNIT 1A
Week #3: Monday August 4, 2014 - Friday August 8, 2014

Time	Monday 4	Tuesday 5	Wednesday 6	Thursday 7	Friday 8
8:00 – 8:50 a.m.	**TBL 6** Blood Coagulation Dr. Kwabi-Addo [19]	Electron Transport and Oxidative Phosphorylation Dr. Broome [23]	**TBL 7A** Glycolysis Dr. Broome [25]	**TBL 8A** Electron Transport and Oxidative Phosphorylation Dr. Broome [28]	**Quiz 2 and Discussion**
9:00 – 9:50 a.m.	Glycolysis Dr. Broome [20]	Gluconeogenesis and Pentose Phosphate Pathway Dr. Broome [24]	**TBL 7B** Citrate Cycle Dr. Broome [26]	**TBL 8B** Gluconeogenesis and Pentose Phosphate Pathway [29] Dr. Broome	**TBL 9** Glycogen, Galactose, Fructose Metabolism [30] Dr. Broome
10:00 – 10:30 a.m.	**BREAK**	**BREAK**	**BREAK**	**BREAK**	**BREAK**
10:30 – 11:20 a.m.	Citrate Cycle Dr. Broome [21]	Gluconeogenesis and Pentose Phosphate Pathway Dr. Broome [24]	Glycogen Metabolism Dr. Broome [27]	**TBL self study**	**Clinical Application** Carbohydrates Dr. Naab [31]
11:30 – 12:20 p.m.	**Clinical Application** Drugs as Enzyme Inhibitors Dr. Lombardo [22]	**TBL self study**	**TBL self study**		Q&A – All Lecturers
12:30 – 1:00 p.m.	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
1:00 – 1:50 p.m.	Independent Study	**Medicine & Society Unit 1** Overview of U.S. Health Care/Medical Economics	Independent Study	Independent Study	Independent Study
2:00 – 2:50 p.m.					
3:00 – 3:50 p.m.					
4:00 – 4:50 p.m.					

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES AND CELLS, UNIT 1A

Week #4: Monday August 11, 2014 - Friday August 15, 2014

Time	Monday 11	Tuesday 12	Wednesday 13	Thursday 14	Friday 15
8:00 – 8:50 a.m.	Independent Study	Chemical Properties of Lipids, Lipid Digestion Dr. Southerland[32]	Fatty Acid Oxidationand Ketone Bodies Dr. Southerland [36]	**TBL 10A** Digestion of dietary fats and transport of lipid-based energy during fed and fasted states Dr. Southerland [39]	**TBL 11A** Mechanisms of carnitine deficiency and alternative mechanisms of fatty acid oxidation Dr. Southerland[42]
9:00 – 9:50 a.m.	Independent Study	Synthesis of fatty acid and triacylglycerol Dr. Southerland [33]	Phospholipids and Cholesterol Dr. Southerland [37]	**TBL 10B** Plasma Lipoproteins: structure and properties Dr. Southerland [40]	**TBL 11B** Phospholipid remodeling, plasmologens, and reverse transport of cholesterol Dr. Southerland [43]
10:00 – 10:30 a.m.	**M&C UNIT 1A** **1st WRITTEN EXAMINATION** **10:00-12:00**	**BREAK**	**BREAK**	**BREAK**	**BREAK**
10:30 – 11:20 a.m.		Synthesis of fatty acid and triacylglycerol Dr. Southerland [34]	Sphingolipids, Prostaglandins and Leukotrienes Dr. Southerland [38]	Purine and PyrimidineMetab. Dr. Southerland [41]	Heme Metabolism Dr. Southerland [44]
11:30 – 12:20 p.m.		TAG Utilization & Lipoprotein Metabolism Dr. Southerland [35]	**TBL self study**	**TBL self study**	**Clinical Application** Lipid Malabsorption Dr. Scott [45]
12:30 – 1:00 p.m.	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
1:00 – 1:50 p.m.	Independent Study	**Medicine & Society** **Unit 1** Health Disparities Community Health	Independent Study	Independent Study	Independent Study
2:00 – 2:50 p.m.					
3:00 – 3:50 p.m.					
4:00 – 4:50 p.m.					

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES & CELLS UNIT 1A

Week #5: Monday August 18, 2014 - Friday August 22, 2014

Time	Monday 18	Tuesday 19	Wednesday 20	Thursday 21	Friday 22
8:00 – 8:50 a.m.	**Quiz 3 and Discussion** **Lipids**	**TBL 12A** Synthesis of sphingolipids and physiological effects of prostaglandins and leukotrienes Dr. Southerland [48]	**TBL 13A** Amino AcidMetabolism IV Dr. Sharma [50]	**TBL self study**	**Quiz 4 and Discussion**
9:00 – 9:50 a.m.	Amino Acid Metabolism I Dr Sharma [46]	**TBL 12B** Chemotherapeutic Agents and Nucleoside analogs, mechanisms of immunodeficiency, and the Porphyrias Dr. Southerland [49]	**TBL 13B** Amino Acid Metabolism V Dr. Sharma[51]		**Clinical Application** Inborn Errors of Amino Acid Metabolism Dr. Naab [55]
10:00 – 10:30 a.m.	**BREAK**	**BREAK**	**BREAK**	**BREAK**	**BREAK**
10:30 – 11:20 a.m.	**Clinical Application** Dr. Randall [47]	Amino Acid Metabolism II and III Dr. Sharma [46]	Integration of Metabolism; Normal, Starved and Diabetic States Dr. Broome [52]	**TBL 14A** Integration of Metabolism Dr. Broome [53]	**Clinical Application** Sugar Babies Dr. Nunlee-Bland [56]
11:30 – 12:20 p.m.	**TBL self study**			**TBL 14B** Integration of Metabolism Dr. Broome [54]	Q&A – All Lecturers
12:30 – 1:00 p.m.	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
1:00 – 1:50 p.m.	Independent Study	**Medicine And Society Unit 1** Evaluating the Health Literature	Independent Study	Independent study	Independent Study
2:00 – 2:50 p.m.		**M&S 1** **Community Health Group Project Small Group**			
3:00 – 3:50 p.m.					
4:00 – 4:50 p.m.					

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES AND CELLS, UNIT 1B
Week #6: Monday August 25, 2014 - Friday August 29, 2014

Time	Monday 25	Tuesday 26	Wednesday 27	Thursday 28	Friday 29	
8:00 – 8:50 a.m.	Independent Study	Overview of Cell Structure and Function Dr. Orlic [1]	Membrane Structure and Function Dr. Heinbockel [5]	Biosynthesis and Anterograde Traffic Dr. Gondré-Lewis [8]	Connective Tissues Dr. Csoka [10]	
9:00 – 9:50 a.m.		Cytoskeleton Dr. Csoka [2]	Membrane Transport Dr. Canada [6]			
10:00 – 10:30 a.m.	**M&C Unit 1A** **2nd WRITTEN EXAMINATION** **10:00 – 12:30 noon**	**BREAK**	**BREAK**	**BREAK**	**BREAK**	
10:30 – 11:20 a.m.		Nucleus Dr. Csoka [3]	How to Identify Tissues Dr. Heinbockel [7]	**Histology Laboratory I** **Tissues I** [9]	**SGL 1: Microscopy** Groups 1-6 [11]	Independent Study Groups 7-12
11:30 – 12:20 p.m.		Mitochondria Dr. Csoka [4]				
12:30 – 1:00 p.m.	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	
1:00 – 1:50 p.m.	Independent Study	**Medicine & Society Unit 1** **Community Health** **Group Project** **Small Group**	Independent Study	Independent Study	Independent Study Groups 1-6	**SGL 1: Microscopy** Groups 7-12 [11]
2:00 – 2:50 p.m.						
3:00 – 3:50 p.m.						
4:00 – 4:50 p.m.		Independent Study				

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES AND CELLS, UNIT 1B

Week #7: Monday September 1, 2014 - Friday September 5, 2014

Time	Monday 1	Tuesday 2	Wednesday 3	Thursday 4	Friday 5
8:00 – 8:50 a.m.	**LABOR DAY** **LEGAL** **HOLIDAY** **NO** **CLASSES**	Cell Digestion and Retrograde Transport Dr. Gondré-Lewis [12]	Cell Signaling and Second Messenger Systems Dr. Heinbockel [15]	Neurocytology Dr. Heinbockel [18]	Blood and Bone Marrow Dr. Baker [20]
9:00 – 9:50 a.m.		Cell Death Dr. Gondré-Lewis [13]	Cell Adhesion Dr. Csoka[16]		
10:00 – 10:30 a.m.		**BREAK**	**BREAK**	**BREAK**	**BREAK**
10:30 – 11:20 a.m.		**Histology Laboratory II** Tissues II [14]	**Histology Laboratory III** Tissues III [17]	**Discussion** Cell Biology I – Tissues [19]	**Clinical Application** Blood Diseases and Fetal Hemoglobin (NIH guest lecturer) [21]
11:30 – 12:20 p.m.					
12:30 – 1:00 p.m.		**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
1:00 – 1:50 p.m.		**Medicine & Society Unit 1** Doctor Patient Relationship: Clinical Decision Making Industry Influence on Prescribing Patterns	Independent Study	Independent Study	Q&A – All Lecturers
2:00 – 2:50 p.m.					
3:00 – 3:50 p.m.					Independent Study
4:00 – 4:50 p.m.					

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES AND CELLS, UNIT 1

Week #8: Monday September 8, 2014 - Friday September 12, 2014

Time	Monday 8	Tuesday 9	Wednesday 10	Thursday 11	Friday 12
8:00 – 8:50 a.m.	Independent Study	Histology of Blood Vessels Dr. Shaw [22]	Peripheral Nerve Dr. Heinbockel [24]	**Histology Laboratory IV** Blood and Sensory Receptors [27]	Lymph Vessels and Lymph Nodes Dr. Orlic [30]
9:00 – 9:50 a.m.			Muscle I Dr. Baker [25]		**Histology Laboratory V** Blood Vessels [31]
10:00 – 10:30 a.m.	**M&C UNIT 1** **3rd WRITTEN EXAMINATION** **10:00 12:30**	**BREAK**	**BREAK**	**BREAK**	**BREAK**
10:30 – 11:20 a.m.		**Discussion** Cell Biology II Organelles and Connective Tissues [23]	Muscle II Dr. Baker [25]	Lymphoid System Dr.Orlic [28]	**SGL3: Autoimmune Diseases Groups 1-6** [32] Independent Study Groups 7-12
11:30 – 12:20 p.m.			**LUNCH** **SGL 2: Blood Tests and Bloodborne Diseases (Baker) Groups 7-12** [26] Independent Study Groups 1-6		
12:30 – 1:00 p.m.	**LUNCH**	**LUNCH**		**LUNCH**	**LUNCH**
1:00 – 1:50 p.m.	Independent Study	**Medicine & Society Unit 1** Medical Informatics Vital Signs Conducting the Medical Interview		**Discussion** Cell Biology III: Muscle and Nerve [29]	Independent Study Groups 1-6 **Small Group Learning IV: Autoimmune Diseases Groups 7-12** [32]
2:00 – 2:50 p.m.			Independent Study Groups 7-12 **SGL 2: Blood Tests and Bloodborne Diseases (Baker) Groups 1-6** [26]	Independent Study	
3:00 – 3:50 p.m.					Independent Study
4:00 – 4:50 p.m.		Independent Study	Independent Study		

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES AND CELLS, UNIT 1

Week #9: Monday September 15, 2014 - Friday September 20, 2014

Time	Monday 15	Tuesday 16	Wednesday 17	Thursday 18	Friday 19
8:00 – 8:50 a.m.	Nucleic Acid Structures and Replication I Dr. George [33]	Gene Expression and Regulation Dr. George [36]	**TBL 1A & 1B** Nucleic Acid Structures and Replication I [39]	**TBL 2** Gene Expression & Regulation [42]	**TBL 4** Recombinant DNA Methods [45]
9:00 – 9:50 a.m.				**TBL 3** Genetic code and Protein Biosynthesis [43]	**Quiz 5 and Discussion** [46]
10:00 – 10:30 a.m.	**BREAK**	**BREAK**	**BREAK**	**BREAK**	**OPENING CONVOCATION**
10:30 – 11:20 a.m.	Nucleic Acid Structures and Replication II Dr. George [34]	Protein Synthesis Dr. George [37]	Recombinant DNA Methods and Technology Dr. George [40]	Molecular Medicine: Precise and Personalized Medicine. Dr. Ashktorab [44]	
11:30 – 12:20 p.m.	**Histology Laboratory VI** Lymphoid system [35]	Recombinant DNA Methods Dr. George [38]	**LUNCH**		
12:30 – 1:00 p.m.		**LUNCH**	**Discussion** Cell Biology IV and V: Blood Vessels and Lymphoid System [41]	**LUNCH**	
1:00 – 1:50 p.m.	**LUNCH**	**Medicine & Society Unit 1** Clinical Skills Practice Session I: History/Vital Signs Students & SPs small group		Independent Study	Q&A – All Lecturers
2:00 – 2:50 p.m.	Independent Study		Independent Study		
3:00 – 3:50 p.m.					Independent Study
4:00 – 4:50 p.m.		Independent Study			

Active Learning	Independent Study	Examinations	Lecture

TITLE: MOLECULES AND CELLS, UNIT 1

Week #10: Monday September 22, 2014 – Friday September 26, 2014

Time	Monday 22	Tuesday 23	Wednesday 24	Thursday 25	Friday 26
8:00 – 8:50 a.m.	M&C UNIT 1 4th WRITTEN EXAMINATION 9:00-11:30a.m	Molecules & Cells Unit 2			
9:00 – 9:50 a.m.					
10:00 – 10:30 a.m.		BREAK	BREAK	BREAK	BREAK
10:30 – 11:20 a.m.	Independent Study				
11:30 – 12:20 p.m.					
12:30 – 1:00 p.m.	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
1:00 – 1:50 p.m.	M&C UNIT 1 LAB EXAMINATION 1:00-3:00				
2:00 – 2:50 p.m.					
3:00 – 3:50 p.m.	Independent Study				
4:00 – 4:50 p.m.					

Active Learning	Independent Study	Examinations	Lecture