**Color Code:**

**Black: Class content for that day**

**Grey: Pre-class Prep (2-4 hours)**

**Purple: Required Pre-Class Material**

**Blue: Boards and Beyond**

**Green: Anki**

**Turquoise: Pixorize**

**Pink: Consolidation (2-4 hours)**

**Red: Exam**

**Orange: Syllabus Review (1 hour)**

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**Saturday, September 5, 2020**

**Pre-class Prep for:** 121, 122, 123, 124**: (2-4 hours)**

Optional: (121) Review Library resources and other links.

(121) Review the PowerPoint that we will go over in class.

(121) Read Goodings

(121) Review 6 tips for study

Req. Video: (121) MCBD Grading Overview Video (7:32)

(121) Other Resources (Video)

Req. Reading: (122) Pre-Class Syllabus (PDF)

(123) Pre-Class Syllabus (PDF)

(124) Pre-Class Syllabus (PDF)

B&B: (122) Biochemistry (Amino Acids) – Amino Acids (18 minutes)

(122) Biochemistry (Molecular Biochemistry) – DNA Structure (13 minutes)

(123) Cell biology (molecular biology) – Transcription (23 minutes)

(124) Cell biology (molecular biology) – Translation (20 minutes)

(124) Cell biology (molecular biology) – DNA mutations (15 minutes)

Anki: Lightyear Deck: Amino Acids, DNA Structure, Transcription, Translation, DNA mutations

**Sunday, September 6, 2020**

**Monday, September 7, 2020**

**Pre-class Prep for:** 131, 132, 133, 134**:**

Req. Video: (131) Summary Video (8 minutes)

(133) Endomembrane System Video (10 minutes)

(134) Membrane Pre-class video 1 (9 minutes)

(134) Cell Membranes & Transport Machinery Video (8:21 minutes)

(134) ATPase Pumps and Active Transport Video (9:41 minutes)

TBL exercise: (transporter and ATPase)

Req. Reading: (131) Syllabus (PDF)

(132) Pre-Class Syllabus (PDF)

(133) Pre-Class Syllabus (PDF)

(134) Pre-Class Syllabus (PDF)

(134) What to Study for all Physiology Sessions (Image)

(134) TBL transporter (To Preview before class)

(134) TBL ATPase (To Preview before class)

B&B: (131) Genetics (Genetic Concepts) – Genetic Principles (6 minutes)

(132) Cell Biology (Cell Biology) – Cell structure (21 minutes)

(132) Cell Biology (Cell Biology) – Cytoskeleton (15 minutes)

Anki: Lightyear Deck: Genetic Principles, Cell Structure, Cytoskeleton

Syllabus Review: 121, 122, 123, 124 ( < than 1 hour)

**Tuesday, September 8, 2020**

In Class: 121, 122, 123, 124

**Pre-class Prep for:** 141, 142, 143, 144**:**

Req. Video: (141) Cell Biology and Ultrastructure Video (27 minutes)

(141) Cell Biology and Ultrastructure Video (21 minutes)

(142) Epithelial Cells Video

(143) Biological Techniques Video (13 minutes)

(143) Mutations Video (14 minutes)

(144) Cystic Fibrosis Video (10:15 minutes)

Req. Reading: (141) Junqueira’s Basic Histology Chapters 1 & 2

(141) Intro to Interpreting Images PDF

(142) Virtual Lab PDF

(144) The Bell Curve

(144) Four box method - complete activity

B&B: (141) Cell Biology (Cell Biology) – Cell structure (21 minutes)

(141) Cell Biology (Cell Biology) – Cytoskeleton (15 minutes)

(142) Dermatology (General Topics) – Skin (14 minutes)

(142) Dermatology (General Topics) – Epithelial Cells (13 minutes)

(144) Pulmonary (other pulmonary topics) – Cystic Fibrosis (13 minutes)

(144) Behavioral Science - Ethics Principles (11 minutes)

Anki: Lightyear Deck: Cell Structure, Cytoskeleton, Skin, Epithelial Cells, Cystic Fibrosis, Ethics Principles

Pixorize: (144) Cystic Fibrosis Overview (9 minutes)

**Wednesday, September 9, 2020**

Syllabus Review: 131, 132, 133, 134 ( < than 1 hour)

**Thursday, September 10, 2020**

In Class: 131, 132, 133, 134

Syllabus Review: 141, 142, 143, 144 ( < than 1 hour)

Consolidation: 121, 122, 123, 124 (2 -4 hours)

**Pre-class Prep for: 211, 212, 213, 214**

Optional: (211) Roadmap: Intro to Metabolism (10 min)

(211) Glucose Metabolism: glycolysis (17 min)

Req. Video: (212) Basic Concepts of Blood cells and their function 1 (17 min)

(212) Basic Concepts of Blood cells and their function 2 (25 min)

Req. Reading: (212) Junqueira's Basic Histology, chapter 12

(212) Virtual Lab PDF

B&B: (212) Biochemistry – (Amino Acids) Amino Acids (18 minutes) \*already watched

(212) Pulmonary – Intro to Pulmonary Med – Hemoglobin (17 minutes)

(213) Hematology (Red blood cells) – Thalassemias (21 minutes)

(213) Hematology (Red blood cells) – Sickle Cell Anemia (23 minutes)

(214) Biochemistry – Glucose (8 minutes)

(214) Biochemistry – Glycolysis (31 minutes)

(214) Biochemistry – Pyruvate Dehydrogenase (18 minutes)

(214) Biochemistry – Ethanol Metabolism (19 minutes)

Anki: Lightyear Deck: Amino Acids, Hemoglobin, Thalassemias, Sickle Cell Anemia, Glucose, Glycolysis

Pixorize: (214) Ethanol Metabolism (13 minutes)

**Friday, September 11, 2020**

In Class: 141, 142, 143, 144

Consolidation: 131, 132, 133, 134 (2 -4 hours)

**Pre-class Prep for: 221, 222, 223, 224**

Optional: (221) TCA Cycle Video (13 minutes)

(221) Electron Transport System (9 minutes)

(222) Rules of Electricity Pre-Class Video (9 minutes)

(222) Origin of Membrane Potentials Pre-Class Video (11 minutes)

Req.Video: (223) Histology Nervous System Video Part 1 (22 minutes)

(223) Histology Nervous System Video Part 2 (15:35 minutes)

(223) Histology Nervous System Video Part 3 (10:31 minutes)

(223) Histology Nervous System Video Part 4 (17:34 minutes)

(224) Histology Connective Tissue Video Part 1

(224) Histology Connective Tissue Video Part 2

(224) Histology Connective Tissue Video Part 3

Req.Reading: (222) Keywords to Review (PDF)

(222) (Electric Keywords to Review (PDF)

(222) TBL Nernst

(224) Review Virtual Lab (PDF)

B&B: (221) Biochemistry – HMP Shunt (14 minutes)

(221) Biochemistry – Fructose and galactose (12 minutes)

(221) Biochemistry – TCA cycle (14 minutes)

(221) Biochemistry – Electron Transport Chain (21 minutes)

(223) Endocrinology (other Topics) – Signaling Pathways (17 minutes)

(223) Neurology (ANS) – Autonomic Receptors (20 minutes)

Anki: Lightyear Deck: HMP Shunt, Fructose and galactose, TCA cycle, Electron Transport Chain, Signaling Pathways, Autonomic Receptors

**Saturday, September 12, 2020**

Consolidation: 141, 142, 143, 144 (2 -4 hours)

**Sunday, September 13, 2020**

**Pre-class Prep for: 231, 232, 233, 234**

Optional: (231) GPCR1 Pre-Class Video (8:51 minutes)

(231) GPCR2 Pre-Class Video (10:03 minutes)

(232) RTK Review Video (13:55 minutes)

(233) Gluconeogenesis Video (13:08 minutes)

(233) Glycogen metabolism Video (13:51 minutes)

Req. Video: (232) Nuclear Hormone Receptors Video (7:05 minutes)

(232) Receptor Tyrosine Kinase Video (18:34 minutes)

(234) Introduction to Imaging Video

Req. Reading: (231) Pre-Class Syllabus (PDF)

(232) Pre-Class Syllabus (Word)

(233) Pre-Class Syllabus (PDF)

(234) Pre-Class Syllabus (PDF)

B&B: (231) Biochemistry – gluconeogenesis (17 minutes)

(231) Biochemistry – glycogen (21 minutes)

(232) Basic Pharm – enzymes (14 minutes)

(233) Basci Pharm– enzyme inhibitors (8 minutes)

(234) Pulmonary (Other pulmonary topics) - Chest X-rays (7 minutes) (may not be completely relevant)

Anki: Lightyear Deck: Gluconeogenesis, Glycogen, Enzymes, Enzyme Inhibitors, Chest X-rays

Pixorize: (233) Von Gierke (Type 1) (5 minutes)

(233) Cori Disease (Type III) (5 minutes)

(233) Pompe Disease (Type II) (5 minutes)

(233) McArdle Disease (Type V) (5 minutes)

**Monday, September 14, 2020**

**EXAM 1 (covering 122, 123, 124, 131, 132, 134, 141, 142, 143, 144)**

In Class: 211, 212, 213 ,214

Syllabus Review: 211, 212, 213, 214 ( < than 1 hour) (before class)

Syllabus Review: 221, 222, 223, 224 ( < than 1 hour)

**Tuesday, September 15, 2020**

In Class: 221, 222, 223 ,224

**Pre-class Prep for: 241, 242, 243, 244**

Optional:

Req. Video: (241) Synaptic Transmission at the Neuromuscular Junction Video (7:22 minutes)

(241) Syn Integration and Balance of Excitatory and Inhibitory Signals Video (13:00 minutes)

(242) Receptor Theory & Drug Action Video (8:36 minutes)

(242) Efficacy & Potency Agonists Video (8:59 minutes)

(243) Antagonist & Modulators Video (8:52 minutes)

Req.Reading: (241) Pre-Class Syllabus (PDF)

(241) Electric keywords to review (PDF)

(244) Pre-Class Syllabus (PDF)

Consolidation: 211, 212, 213, 214 (2 -4 hours)

**Wednesday, September 16, 2020**

Syllabus Review: 231, 232, 233, 234 ( < than 1 hour)

Consolidation: 221, 222, 223, 224 (2 -4 hours)

**Thursday, September 17, 2020**

In Class: 231, 232, 233 ,234

Syllabus Review: 241, 242, 243, 244 ( < than 1 hour)

**Pre-class Prep for: 311, 312, 313, 314**

Optional:

Req. Video: (311) The Action Potential Video (11:03 minutes)

(311) The Ionic Basis of the Action Potential (9:18 minutes)

(312) Cholesterol and Lipid Transport Video (14:25 minutes)

(313) & (314) Lipid Metabolism Video (16:02 minutes)

Req. Reading: (311) Pre-Class Syllabus (PDF)

(312) Pre-Class Syllabus (PDF)

(313) & (314) Pre-Class Syllabus (PDF)

B&B: (312) Biochemistry (lipids) – Lipid Metabolism (20 minutes)

(313) Biochemistry (metabolism) – Ketone Bodies (8 minutes)

(314) Biochemistry (lipids) – Hyperlipidemia (10 minutes)

(314) Biochemistry (lipids) – Lipid drugs (23 minutes)

(314) Immunology (Pharm) – Glucocorticoids & NSAIDs (15 minutes)

Anki: Lightyear Deck: Lipid Metabolism, Ketone Bodies, Hyperlipidemia, Lipid Drugs, Glucocorticoids & NSAIDS

Pixorize: (312) Lipids – VLDL Metabolism (17 minutes)

(312) HDL Metabolism (6 minutes)

(312) Chylomicron metabolism (14 minutes)

(312) Familial Hypercholesterolemia (9 minutes)

(313) Biochemical Pathways – Fatty Acid Synthesis (Citrate Shuttle) (5 minutes)

(313) Biochemical Pathways – Fatty Acid Breakdown (Carnitine Shuttle) (7 minutes)

**Friday, September 18, 2020**

In Class: 241, 242, 243 ,244

Consolidation: 231, 232, 233, 234 (2 -4 hours)

**Saturday, September 19, 2020**

**Pre-class Prep for: 321, 322, 323, 324**

Optional: (321) Crill and Palmer Interview Video (9:28 minutes)

(323) Folic Acid & Vitamin B12 Metabolism Video (20:56 minutes)

(324) Optional (but highly encouraged): Early Embryology Week 1 & 2 Video (24:29 minutes)

Req. Video: (321) Control of the Resting Potential Video (6:41 minutes)

(321) Action Potential Propagation Video (10:21 minutes)

(322) ANS Synapses Video (11:11 minutes)

(322) ANS Receptors Video (7:58 minutes)

(323) B12, SAM and the Folates Single Carbon Transfer Video (14:13 minutes)

(324) Early Embryology and the Basic Body Plan Video Part 1 (23:39 minutes)

(324) Early Embryology and the Basic Body Plan Video Part 2 (21:44 minutes)

(324) Early Embryology and the Basic Body Plan Video Part 3 (17:12 minutes)

Req. Reading: (321) Pre-Class Syllabus (PDF)

(322) Pre-Class Syllabus (PDF)

(323) Pre-Class Syllabus (PDF)

(324) Pre-Class Syllabus (PDF)

B&B: (322) Neurology (ANS)– Autonomic Nervous System (39 minutes)

(323) Biochemistry (vitamins) – B12 & Folate (20 minutes)

(324) Reproductive (Embryology) – Germ Layers (8 minutes)

Anki: Lightyear Deck: Autonomic Nervous System, B12 & Folate, Germ Layers

Pixorize: (322) GPCRs - Alpha-1 Adrenergic Receptors (7 minutes)

(322) GPCRs - M1 Muscarinic Receptors (in progress

(322) GPCRs - Alpha-2 Adrenergic Receptors (8 minutes)

(322) GPCRs - Beta-1 Adrenergic Receptors (6 minutes)

(322) GPCRs - Beta -2 Adrenergic Receptors (9 minutes)

(322) GPCRs - Beta-2 Adrenergic Receptors (3 minutes)

(323) Vitamins - Vitamin B9 (Folate) (4 minutes)

(323) Vitamins – Vitamin B12 (Cobalamin) Biochemistry (7 minutes)

(323) Vitamins – Vitamins B9 and B12 Deficiencies (20 minutes)

Consolidation: 241, 242, 243, 244 (2 -4 hours)

**Sunday, September 20, 2020**

**Pre-class Prep for: 331, 332, 333, 334**

Optional: (331), (332), (333) Nervous System Pre-Lab Video (28:55 minutes)

Req. Video: (334) Cranial Nervous and Skull Video (25:31 minutes)

Req. Reading: (331), (332), (333) Pre-Class Syllabus - Nervous System and Autonomic Nervous System (PDF)

(331), (332), (333) Pre-Class Syllabus - Spine (PDF)

(334) Pre-Class Syllabus (PDF)

**Monday, September 21, 2020**

**EXAM 2 (covering 211, 212, 213, 214, 221, 222, 223, 224, 231, 232, 234, 241, 242, 243, 244)**

In Class: 311, 312, 313 ,314

Syllabus Review: 311, 312, 313, 314 ( < than 1 hour)

Syllabus Review: 321, 322, 323, 324 ( < than 1 hour)

**Tuesday, September 22, 2020**

In Class: 321, 322, 323 ,324

**Pre-class Prep for: 341, 342, 343, 344**

Optional:

Req. Video: (341) Introduction to Sensory Receptors Video (8:41 minutes)

(341) Special Senses Overview Video (9:46)

(342) Nociception Video (6:36 minutes)

(342) Spinal Reflexes Video (5:10 minutes)

(343) Drug Action in the Autonomic Nervous System Video (12:30 minutes)

Req. Reading: (341) Pre-Class Syllabus (PDF)

(342) Pre-Class Syllabus (PDF)

(343) Pre-Class Syllabus (PDF)

(343) ANS Pharmacology Drug List (Excel) or (PDF)

(343) & (443) ANS Pharmacology Drug List (Excel) or (PDF)

(344) Pre-Class Syllabus (PDF)

B&B: (342) Neurology (Intro) – Nerve Damage (11 minutes)

(342) Neurology (Intro) – Dermatomes and reflexes (12 minutes)

(343) Neurology (ANS) – ANS Drugs: Norepinephrine (24 minutes)

(343) Neurology (ANS) – ANS Drugs: Acetylcholine (25 minutes)

(343) Neurology (Anesthesia) - Neuromuscular blockers (9 minutes)

(344) Biochemistry (metabolism) – Exercise and Starvation (22 minutes)

Anki: Lightyear Deck: Nerve Damage, Dermatomes and reflexes, ANS Drugs: Norepinephrine, Acetylcholine, Neuromuscular Blockers, Exercise and Starvation

Consolidation: 311, 312, 313, 314 (2 -4 hours)

**Wednesday, September 23, 2020**

Syllabus Review: 331, 332, 333, 334 ( < than 1 hour)

Consolidation: 321, 322, 323, 324 (2 -4 hours)

**Thursday, September 24, 2020**

In Class: 331, 332, 333 ,334

**Pre-class Prep for: 411, 412, 413, 414**

Optional:: (411) Illustrating the Myosin Gliding Filament Assay Video (0:28 minutes)

(411) Microtubule Dynamics in a Cell (YouTube) (1 minute)

Req. Video: (411) Molecular motors: a brief primer Video (9:32 minutes)

(411) Cytoskeletal Filaments and their Molecular Architectures (11:58 minutes)

(412) Skeletal Muscle Histology Video Part 1

(412) Skeletal Muscle Histology Video Part 2

(412) Cardiac and Smooth Muscle Histology Video

(413) & (414) Summary Video (19:37 minutes)

Req. Reading: (411) Pre-Class Syllabus (PDF)

(412) Pre-Class Syllabus

(413) & (414) Syllabus (PDF)

B&B: (411) Cell Biology (Cellular Biology) – Cell Structure (21 minutes)

(411) Cell Biology (Cellular Biology) – Cytoskeleton (15 minutes)

(412) Musculoskeletal (Cell Biology) – Cardiac Muscle (9 minutes)

(412) Musculoskeletal (Cell Biology) – Smooth Muscle (15 minutes)

(413/4) Genetics (Genetic Concepts) – Hardy-Weinberg Law (12 minutes)

(413/4) Genetics (Genetic Concepts) – Pedigrees (18 minutes)

Anki: Lightyear Deck: Cell Structure, Cytoskeleton, Cardiac Muscle, Smooth Muscle, Hardy-Weinberg Law, Pedigrees

Syllabus Review: 341, 342, 343, 344 ( < than 1 hour)

**Friday, September 25, 2020**

In Class: 341, 342, 343 ,344

Consolidation: 331, 332, 333, 334 (2 -4 hours)

**Saturday, September 26, 2020**

Consolidation: 341, 342, 343, 344 (2 -4 hours)

**Pre-class Prep for: 421, 422, 423, 424**

Optional: (421) Brief Movie Summarizing EC Coupling in Skeletal Muscle (YouTube) (2 minutes)

Req. Video: (421) How Skeletal Muscles Contract Video (13:12) (Links to an external site.)

(421) EC Coupling Skeletal Muscle Video (15:30)

(422) Control of Cardiac and Smooth Muscle Video (10:44 minutes)

(422) EC Coupling Cardiac & Smooth Video (12:06 minutes)

(423) Summary Video (19:25 minutes), slides 1-8

(424) Summary Video (12:12 minutes), slides 1-11

(424) Key Concepts Video (7:42 minutes)

Req. Reading: (421) Pre-Class Syllabus (PDF)

(422) Pre-Class Syllabus (PDF)

(423) Syllabus (PDF) , pages 17-26

(424) Syllabus (PDF), pages 27-37

B&B: (421) Musculoskeletal (Cell Biology ) – Skeletal Muscle (20 minutes)

(422) Musculoskeletal (Cell Biology) – Cardiac Muscle (9 minutes)

(422) Musculoskeletal (Cell Biology) – Smooth Muscle (15 minutes)

(423) Genetics (Genetic Disorders) – Trinucleotide Repeat Disorders (10 minutes)

(424) Genetics (Genetic Concepts) – Gene Mapping (12 minutes)

Anki: Lightyear Deck: Skeletal Muscle, Cardiac Muscle, Smooth Muscle, Trinucleotide Repeat Disorders, Gene Mapping

**Sunday, September 27, 2020**

**Pre-class Prep for: 431, 432, 433, 434**

Optional: (432) - (434) Pectoral Region Video (22:17 minutes)

Req. Video: (431) Histology Bone Video Part 1 (30:21 minutes)

(431) Histology Bone Video Part 2 (16:39 minutes)

(431) Histology Bone Video Part 3 (20:04 minutes)

(431) Histology Bone Video Part 4 (8:01 minutes)

Req. Reading: (431) Pre-Class Syllabus (PDF) (Links to an external site.)

(431) Junqueira's Basic Histology, chapter 8 (MCBD Library)

(431) Review Virtual Lab (PDF)

(432) - (434) Pre-Class Syllabus (PDF)

B&B: (431) Musculoskeletal (Cell Biology ) – Bone (21 minutes)

**Monday, September 28, 2020**

**EXAM 3 (covering 311, 312, 313, 314, 321, 322, 323, 324, 331, 332, 334, 341, 342, 343, 344)**

In Class: 411, 412, 413 ,414

Syllabus Review: 411, 412, 413, 414 ( < than 1 hour)

Syllabus Review: 421, 422, 423, 424 ( < than 1 hour)

**Tuesday, September 29, 2020**

In Class: 421, 422, 423 ,424

Consolidation: 411, 412, 413, 414 (2 -4 hours)

**Pre-class Prep for: 441, 442, 443, 444**

Optional: (444) Study Table of Skeletal Muscle Disorders (Word)

(444) Optional Notes on Cardiac and Smooth Muscle Disorders (PDF)

Req. Video: (441) Proteasome and Lysosome Video (11:50 minutes)

(442) Nitrogen Moving Video (12:18 minutes)

(443) Automatic & Neuromuscular Pharmacology Video (10:49)

Req. Reading: (441) Pre-Class Syllabus (PDF)

(442) Pre-Class Syllabus (PDF)

(343) & (443) ANS Pharmacology Drug List (Excel or PDF)

(444) Pre-Class Syllabus (PDF)

B & B: (441) Biochemistry (Other Topics) – Lysosomal Storage Diseases (31 minutes)

(442) Biochemistry (Amino Acids) – Ammonia (18 minutes)

(442) Musculoskeletal (Pathology) – Gout (13 minutes)

(442) Musculoskeletal (Pathology) – Gout drugs (9 minutes)

(443) Neurology (ANS) – ANS Drugs: Norepinephrine (24 minutes)

(443) Neurology (ANS) – ANS Drugs: Acetylcholine (25 minutes)

(444) Genetics (Genetic Disorders) – Muscular Dystrophy (9 minutes)

(444) Musculoskeletal (Pathology) – Muscle Disorders (12 minutes)

(444) Musculoskeletal (Pathology) – Neuromuscular disorders (12 minutes)

(444) Neurology (Other topics) – Demyelinating diseases (13 minutes)

Anki: Lightyear Deck: Lysosomal Storage Diseases, Ammonia, Gout, Gout Drugs, Norepinephrine, Acetylcholine, Muscular Dystrophy, Muscle Disorders

Pixorize: (441) Lysosomal Storage Disease – Krabbe Disease (5 minutes)

(441) Lysosomal Storage Disease – Hurler and Hunter Syndromes (8 minutes)

(441) Lysosomal Storage Disease – Fabry Disease (6 minutes)

(441) Lysosomal Storage Disease – Tay-Sachs and Niemann-Pick (8 minutes)

(441) Lysosomal Storage Disease – Gaucher Disease (4 minutes)

(441) Lysosomal Storage Disease – Metachromatic Leukodystrophy (5 minutes)

(441) Lysosomal Storage Disease – I-Cell Disease (9 minutes)

(442) Biochemical Pathways - Urea Cycle (13 minutes)

(444) Misc – Duchenne and Becker Muscular Dystrophy (11 minutes)

(444) Anesthetics – Succinylcholine (21 minutes)

(444) Biochemistry - Charcot-Marie-Tooth Disease (8 minutes)

**Wednesday, September 30, 2020**

Consolidation: 421, 422, 423, 424 (2 -4 hours)

Syllabus Review: 431, 432, 433, 434 ( < than 1 hour)

**Thursday, October 1, 2020**

In Class: 431, 432, 433 ,434

**Pre-class Prep for: 511, 512, 513, 514**

Optional:

Req. Video: (511) Cell Adaptation to Stress Video

(512) Cell Injury and Oxidative Damage Video

(513) Necrosis vs Apoptosis Video

(514) Amino Acid Review Video (14:35 minutes)

Req. Reading: (514) Pre-Class Syllabus (PDF)

B&B: (511) Pathology (General topics) – General Adaptation (18 minutes)

(512) Pathology (General topics) – Cell Injury (11 minutes)

(512) Pathology (General topics) – Free Radicals (18 minutes)

(513) Pathology (General topics) – Apoptosis (16 minutes)

(513) Pathology (General topics) – Necrosis (12 minutes)

(514) Biochemistry (Amino Acids) – Phenylalanine and Tyrosine (25 minutes)

(514) Biochemistry (Amino Acids) – Other Amino Acids (19 minutes)

Anki: Lightyear Deck: General Adaptation, Cell Injury, Free Radicals, Apoptosis, Necrosis, Phenylalanine and Tyrosine, Other Amino Acids

Syllabus Review: 441, 442, 443, 444 ( < than 1 hour)

**Friday, October 2, 2020**

In Class: 441, 442, 443 ,444

Consolidation: 431, 432, 433, 434 (2 -4 hours)

**Saturday, October 3, 2020**

Consolidation: 441, 442, 443, 444 (2 -4 hours)

**Pre-class Prep for: 521, 522, 523, 524**

Optional:

Req. Video: (521) Drug Tolerance Quantal Dose Response Drug Safety Video (13:27 minutes)

(522) Bioavailability Video (8:33 minutes)

(522) Volume of Distribution Video (16:19 minutes)

(522) Chest Wall Pre-Lab Video (22:40 minutes)

Req. Reading: (523) & (524) Pre-Class Syllabus (PDF)

B&B: (521) Basic Pharmacology – Dose Response (21 minutes)

(522) Basic Pharmacology – Drug Elimination (17 minutes)

Anki: Lightyear Deck: Dose Response, Drug Elimination

**Sunday, October 4, 2020**

**Pre-class Prep for: 531, 532, 533, 534**

Optional: (532), (533), (534) Anterior Abdominal Wall Video (16:14 minutes)

(532), (533), (534) Inguinal Canal and Descent of the Testes Video (16:02 minutes)

Req. Video: (531) Amino Acid and Derivatives Cases Video (4:51 minutes)

Req. Reading: (531) Pre-Class Syllabus (PDF)

(532), (533), (534) Pre-Class Syllabus (PDF)

B&B: (531) Biochemistry (Amino Acids) – Phenylalanine and Tyrosine (25 minutes)

(531) Biochemistry (Amino Acids) – Other Amino Acids (19 minutes)

(531) Hematology (Other topics) – Porphyrias (14 minutes)

Anki: Lightyear Deck: Phenylalanine and Tyrosine, Other Amino Acids, Porphyrias

**Monday, October 5, 2020**

**EXAM 4 (covering 411, 412, 413, 414, 421, 422, 423, 424, 431, 432, 434, 441, 442, 443, 444)**

In Class: 511, 512, 513 , 514

Syllabus Review: 511, 512, 513, 514 ( < than 1 hour)

Syllabus Review: 521, 522, 523, 524 ( < than 1 hour)

**Tuesday, October 6, 2020**

In Class: 521, 522, 523 , 524

Consolidation: 511, 512, 513, 514 (2 -4 hours)

**Pre-class Prep for: 541, 542, 543, 544**

Optional: (534 )Cellular Accumulations, Pro Misfolding, and Neurodegenerative Disorders (8:17 minutes)

Req. Video: (541) Half-life, Clearance, & Drug Elimination Video (22:47 minutes)

Req. Reading: (543) Pre-Class Syllabus (PDF)

B&B: (541) & (542) Basic Pharmacology – Pharmacokinetics (27 minutes)

(543) Hematology (White Blood Cells) – Amyloidosis (15 minutes)

(543) Pathology (General Topics) – Pathological calcifications (8 minutes)

(544) Neurology (Other topics) – Parkinson’s, Huntington’s, and Movement Disorders (20 minutes)

Anki: Lightyear Deck: Pharmacokinetics, Amyloidosis, Pathological Calcifications, Parkinson’s Huntington’s and Movement disorders

**Wednesday, October 7, 2020**

Consolidation: 521, 522, 523, 524 (2 -4 hours)

Syllabus Review: 531, 532, 533, 534 ( < than 1 hour)

**Thursday, October 8, 2020**

In Class: 531, 532, 533 , 534

**Pre-class Prep for: 611, 612, 613, 614**

Optional:

Req. Video: (613) Cell Cycle Intro Video (10:30 minutes)

(614) Summary Video (12:02) slides 1-4

(614) Key Concepts Video (9:57)

Req. Reading: (611) Pre-Class Syllabus (PDF)

(612) Pre-Class Syllabus (PDF)

(613) Pre-Class Syllabus (PDF)

(613) Study the slides for the SLOs in the 613 Pre-Class and In-Class Slides (PPT)

(614) Syllabus (PDF), pages 38-44

B&B: (611) Cell Biology (Molecular Bio) – DNA Replication (17 minutes)

(612) Cell Biology (Molecular Bio) – DNA Repair (17 minutes)

(613) Cell Biology (Cellular Bio) – Cell Cycle (14 minutes)

Anki: Lightyear Deck: DNA replication, DNA repair, Cell Cycle

Syllabus Review: 541, 542, 543, 544 ( < than 1 hour)

**Friday, October 9, 2020**

In Class: 541, 542, 543 , 544

Consolidation: 531, 532, 533, 534 (2 -4 hours)

**Saturday, October 10, 2020**

Consolidation: 541, 542, 543, 544 (2 -4 hours)

**Pre-class Prep for: 621, 622, 623, 624**

Optional:

Req. Video: (621) & (622) Summary Video (9:52 minutes), slides 1-5

(621) & (622) Key Concepts Video (12:04 minutes)

(623) Summary Video (4:12 minutes), slides 1-3

(624) Pharmacogenomics Video (9:06 minutes)

Req. Reading: (621) & (622) Syllabus (PDF), pages 45-53

(623) Pre-Class Syllabus (PDF), pages 54-62

(624) Katzung's Basic & Clinical Pharmacology, 14 ed. Section I, Chapter 5

B&B: (621) & (622) Genetics (Genetic Concepts) – Meiosis (16 minutes)

(621) & (622) Genetics (Genetic Disorders) – Down Syndrome (14 minutes)

(621) & (622) Genetics (Genetic Disorders) – Trisomies (7 minutes)

(621) & (622) Genetics (Genetic Disorders) – Deletion Syndromes (5 minutes)

(621) & (622) Genetics (Genetic Disorders) – Turner and Klinefelter Syndromes (13 minutes)

Anki: Lightyear Deck: Meisois, Down Syndrome, Trisomies, Deletion Syndromes, Turner and Klinefelter Syndromes

**Sunday, October 11, 2020**

**Pre-class Prep for: 631, 632, 633, 634**

Optional:

Req. Video: (631) Intro to Neoplasia Video Part 1a (16:31 minutes)

(631) Intro to Neoplasia Video Part 1b (19:44 minutes)

(631) Intro to Neoplasia Video Part 1c (14:04 minutes)

(631) Intro to Neoplasia Video Part 1d (18:44 minutes)

(632) Intro to Neoplasia Video Part 2a (17:22 minutes)

(632) Intro to Neoplasia Video Part 2b (13:44 minutes)

(632) Intro to Neoplasia Video Part 2c (12:36 minutes)

(632) Intro to Neoplasia Video Part 2d (18:08 minutes)

(633) Purine and Pyrimidine Metabolism Video (13:05 minutes)

Req. Reading: (633) Pre-Class Syllabus (PDF)

(634) Reading and videos on the ethics of genetic screening

B&B: (631) & (632) Pathology (General Topics) – Neoplasia (24 minutes)

(633) Biochemistry (Molecular Bio) – Purine Metabolism (19 minutes)

(633) Biochemistry (Molecular Bio) – Pyrimidine Metabolism (22 minutes)

Anki: Lightyear Deck: Neoplasia, Purine Metabolism, Pyrimidine Metabolism

**Monday, October 12, 2020**

**EXAM 5 Pin Test HFF Material**

In Class: 611, 612, 613 , 614

Syllabus Review: 611, 612, 613, 614 ( < than 1 hour)

Syllabus Review: 621, 622, 623, 624 ( < than 1 hour)

**Tuesday, October 13, 2020**

In Class: 621, 622, 623 , 624

Consolidation: 611, 612, 613, 614 (2 -4 hours)

**Pre-class Prep for: 641, 642, 643, 644**

Optional:

Req. Video: (642) Breast Cancer Imaging Video

(643) Unifying Paradigm and Hallmarks of Carcinogenesis Video

(644) Enablers of Malignancy: Inflammation Video

Req. Reading: (641) Please review the Patient Identifiers document

(642) Pre-Class Syllabus (PDF)

B&B:

**Wednesday, October 14, 2020**

Consolidation: 621, 622, 623, 624 (2 -4 hours)

Syllabus Review: 631, 632, 633, 634 ( < than 1 hour)

**Thursday, October 15, 2020**

In Class: 631, 632, 633 , 634

**Pre-class Prep for: 711, 712, 713, 714**

Optional: (711) & (712) Botulism Patient Interview Video (49:13 minutes)

(711) & (712) Myotonia Congenita Patient Interview Video (1:06:57 minutes)

(711) & (712) Hyperkalemic Periodic Paralysis Patient Interview Video (57:54 minutes)

Req. Video:

Req. Reading: (711) & (712) Review materials from past sessions (222), (311), (321), & (421)

B&B:

Syllabus Review: 641, 642, 643, 644 ( < than 1 hour)

**Friday, October 16, 2020**

In Class: 641, 642, 643 , 644

Consolidation: 631, 632, 633, 634 (2 -4 hours)

**Saturday, October 17, 2020**

Consolidation: 641, 642, 643, 644 (2 -4 hours)

**Sunday, October 18, 2020**

**Monday, October 19, 2020**

**EXAM 6 (covering 511, 512, 513, 514, 521, 522, 523, 524, 531, 532, 533, 534, 541, 542, 543, 544, 611, 612, 613, 614, 621, 622, 623, 624)** In Class: 711, 712, 713 , 714

Syllabus Review: 711, 712, 713, 714 ( < than 1 hour)

Syllabus Review: 721, 722, 723, 724 ( < than 1 hour)

**Tuesday, October 20, 2020**

In Class: 721, 722, 723 , 724

Consolidation: 711, 712, 713, 714 (2 -4 hours)

**Wednesday, October 21, 2020**

**Thursday, October 22, 2020**

**Friday, October 23, 2020**

**EXAM 7 100% Cumulative**