The STUDENT is responsible for reading, studying, learning, understanding and explaining when called upon, in open class and lab or on turned in worksheets, the following from Dr. Carman's website, OpenStax, or other academic sources during Week 1 and In Advance of Week 2's Lecture:

Biological Chemistry: http://www.drcarman.info/bio223lx/223lex01.pdf

The Cell: http://www.drcarman.info/bio223lx/223lex02.pdf

Principles of Nutrition: http://www.drcarman.info/kem220lx/nutrchem.pdf

Biological Chemistry: All of Unit 1, http://cnx.org/contents/GFy_h8cu@9.87:rZudN6XP@2/Introduction

The Cell: All of Unit 2 (**EXCEPT for Chapter 8**), http://cnx.org/contents/GFy_h8cu@9.87:rZudN6XP@2/Introduction

Genetics: All of Unit 3, http://cnx.org/contents/GFy_h8cu@9.87:rZudN6XP@2/Introduction

Animal Structure and Function: All of Unit 7, http://cnx.org/contents/GFy_h8cu@9.87:rZudN6XP@2/Introduction

Levels of Organization: All of Unit 1, http://cnx.org/contents/FPtK1zmh@7.30:zMTtFGyH@4/Introduction

Energy, Maintenance and Environmental Exchange: **ONLY Chapter 24** in Unit 5, http://cnx.org/contents/FPtK1zmh@7.30:zMTtFGyH@4/Introduction

	Tuesday 1600-1845	201 ASP Tuesday 1900-2145	Thursday 1600-1845	201 ASP Thursday 1900-2145
Week 1	Pre-Test Assessments and Orientation – Canvas-Based	Lab Safety; Amino Acids and Proteins, Qualitative, Part 1	Introduction to Intermediary Metabolism 313 CED	Amino Acids and Proteins, Quantitative, Part 2: Amino Acid Titration – **NO LINK** – **last week's experiment is a two parter** pK Determination Tutorial; Excel Spreadsheet for Graph Data (Download to desktop for use)
Week 2	Introduction to Intermediary Metabolism	Lipids (Saponification); Cellular Physiology and Mendelian Genetics; Mitosis and Meiosis **(Complete last two experiments before entering lab and turn in entering lab)**	Introduction to Intermediary Metabolism	Carbohydrate Identification; Polarimetry; Nucleic Acids: BUN Determination;
The student is supposed to have already read, studied and learned ALL of UNIT 1 (from the Open Stax A&P Text), per above link. To that end, the student is also responsible for having read and completed, as well as having studied and learned, the content and applications thereof in http://www.drcarman.info/bio223lx/223lex04.pdf in advance of Week 3 -- Dr. Carman will not be lecturing on this in class in Week 3; upon completion of the lecture on Metabolism, the Tissues lecture will follow.				
Week 3	The Language of Anatomy and Physiology; Tissues	Metabolism: Fermentation of Sucrose	Tissues, Cont'd; Integumentary System	SNP-PCR – Start DNA Isolation and Digestion (**This may be a late night**)
Week 4	Canvas Quiz/Exam 1; The Skeletal System; Articulations	SNP-PCR – Amplify DNA – Set up Gels (Store with Humidity Control) – **NO LINK**	Articulations, Cont'd; Human Muscular System	SNP-PCR – Complete Gels, Run Gels, Stain Gels and View Gels – **NO LINK**
Week 5	Human Muscular System	Intro to Microscopy; Throat Swab; Gram Stain	The Human Brain	Skin, Tissues, Osseous and Neuroglia Microscopy; **Use notes to complete** Major Articulations; Human Skeletal System **and turn in as you walk into lab**;

Week 6	The Cranial Nerves and Special Senses	X-Ray Experience – **NO LINK -- Use notes to complete** Human Muscular System **and turn in as you walk into lab**	The Cranial Nerves and Special Senses	Human Muscular System – not all labs are linked – the rest are on the BIOL course webpage on Dr. Carman's Website
Week 7	Canvas Quiz/Exam 2; Spinal Cord and Reflexes: An Introduction; Nervous System Subdivisions	Cranial Nerve Testing; Reflex Testing; Two Point Touch Threshold	Neuroceptors and Neurochemical Transmissions	Scientific Method, Density and Specific Gravity
Week 8	Neuroceptors and Neurochemical Transmissions, CONT'D	Viscometry	Final Exam (Post-Assessment – Canvas-Based)	Theoretical Lab Final Exam – Canvas-Based
Spring Break 2016				
Week 9	Human Circulatory System and Blood 313 CED	Additional NSBE/Q post Spring Break – 331 C CED – 1900-2030 – Will cover Lab Safety as well as BIOL 223 Topics important to BIOL 224	Human Immune System 313 CED	Lab Safety; Blood Vessel Anatomy; Microhematocrit; Blood Grouping and Typing
Week 10	Human Immune System 313 CED	EKG Experience 201 ASP	Canvas Quiz/Exam 1 Cardiology Primer 313 CED Pre-Lecture Reading Assignment (Library!): Dubin, 6th Ed: All of it! There are 4 on reserve in the Library.	EKG Exercise; Pulmonary Function Testing; Orlando ABG Tutorial 201 ASP
Week 11	Cardiology Primer, CONT'D 313 CED	GI Microbiota; Urinalysis; Endocrine Slides; 201 ASP NOTE: May or May Not be A New GI Experiment Here	Reading Assignment: Respiratory System to support Human Pulmonary System (No lecture – students responsible to learn); Begin Digestive System 313 CED	Complete GI Microbiota; Human Reproduction Slides 201 ASP NOTE: May or May Not be A New GI Experiment Here
Week 12	Finish The Digestive System 313 CED	Human Cadaver Dissection 202B ASP	Human Urinary System; Water and Electrolyte Balance 313 CED	Human Cadaver Dissection 202B ASP
Week 13	ABG's 313 CED Pre-Lecture Reading Assignment (Library!): Shapiro, 3d Ed (2d works, too), Chapters 1-3, 5-7, 10-11	Human Cadaver Dissection 202B ASP	Canvas Quiz/Exam 2 ABG's, CONT'D 313 CED	Human Cadaver Dissection 202B ASP
Week 14	Human Endocrine System 313 CED	Human Cadaver Dissection 202B ASP	Human Endocrine System, CONT'D 313 CED	Human Cadaver Dissection 202B ASP
Week 15	Human Reproductive System 313 CED	Human Cadaver Dissection 202B ASP	Human Reproductive System, CONT'D 313 CED	Human Cadaver Dissection 202B ASP
Week 16	Human Reproductive System, CONT'D 313 CED	Cadaver Final Practical Exam 202B ASP	Canvas-based Post-assessment	Canvas-based Lab Final

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