Biology 212 – Principles of Biology

Spring 2020

***Tentative*** Schedule

Wk Active date LECTURE TOPICS Readings R&J Bozeman Videos Lab Target Assessments

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| 1 | 4/6 | Course IntroductionWater & Bonds | Chapter 2 | **Water & Life****Water : a polar molecule** | Biochemical Molecules& Calculations | Lab Report Sat noonMoodle Quiz (MQ) -#1Due Sat 11:55 pm 4/11 |
| 2 | 4/13 | Biochemical molecules | Chapter 3 | **Videos: Molecules of Life, Polymers, Proteins, Carbohydrates** | Case Study:IceFish Blood Adaptations | Lab Report Sat noonMQ #2Due Sat 11:55 pm |
| 3 | 4/20 | Cell Structure & Cell membranes | Ch 4 sec 1-7Ch 5 sec 1-3 | **A Tour of the cell, Cellular organelles, Cell membranes** | Cell lab | Lab Report Sat noonMQ #3Due Sat 11:55 pm |
| 4 | 4/27 | Movement of waterCell respiration introExam on Monday(over Ch 2,3,4,5 sec 1-3) | Ch 5, sec 5.4Ch 7 – start 1-3 | **Osmosis, Transport across the cell membrane** | Simbio: OsmosisEgg Demo  | **Exam #1 (Monday)**Lab Report Sat noonMQ #4Due Sat 11:55 pm |
| 5 | 5/4 | Cell Respiration Glycolysis, Kreb Cycle & ETC | Ch 6 sec 3-5Ch 7 sec 4-6  | **Life requires energy, Cell Respiration** | Simbio – Cell respiration | Lab Report Sat noonMQ #5Due Sat 11:55 pm |
| 6 | 5/11 | Plant A&PStart Photosynthesis***Exam #2 on Mon.***(over Ch 5 - 7) | Ch 8 sec1-6Ch 36 | **Photosynthesis & Respiration, & Unit 7-Plant Structure** | Plant Anatomy lab | **Exam #2 (Monday)**Lab Report Sat noonMQ #6Due Sat 11:55 pm |
| 7 | 5/18 | Plant transport& Nutrition (?TBD) | Ch 37 Ch 38  | **Unit 7-Photosynthesis,****Plant nutrition & Transport, Water potential** | HHMI Photosynthesis Case StudyWater potentialequations.  | Lab Report Sat noonMQ #7Due Sat 11:55 pm |
| 8 | 5/25 | Animal unitBlood Circulation & Gas Exchange | Ch 48 & 49 | **Videos: Unit 11 – Circulatory System, Blood types & Respiratory System** | Comparative anatomy & simulated EKG, worksheets | Lab Report Sat noonMQ #8Due Sat 11:55 pm |
| 9 | 6/1 | Muscle contraction& Skeletal system***Exam #3 on Mon.***(over Ch 8, 37,38, 48,49) | Ch 46 | **Skeletal System & Muscular System** | Skeletal SystemOnline demosWorksheets | **Exam # 3 (M)**Lab Report Sat noonMQ #9Due Sat 11:55 pm |
| 10 | 6/8 | Reproduction & DevelopmentFinal Exam (F) | Ch 53 Sec 1-4Ch 47 | **Reproductive System** | Embryology labVG on Pregnancy | Final Exam (F)Lab Report due Thursday noonMoodle Quiz due Thurs 11:55 pm |

Final Exam: Friday - June 12, Time TBD