Introduction to Human Biology Human Biology 102 2018-2019

Instructor: *Hope Mikkelson* Phone: 608-845-4666 email: <u>mikkelsh@verona.k12.wi.us</u> Room F136 Verona Area High School, 300 Richard Street, Verona, WI 53593 Office Hours ODD DAYS M-Th 3:38-4:22 and by appointment. *Welcome to Bio 2. This course is an advanced science course designed for motivated students who have a desire to pursue biology in greater depth. This course provides the student with a broad overview of biology with respect to humans. It is designed to explore human biology as a process, evolution, energy transfer, continuity and change, relationship of structure to function, regulation, interdependence in nature, and the unified understanding of the human biology as it pertains to science, technology, and society. The expectations of this course may be greater than those of your previous science classes. This is a college prep course and /or designed to receive college credit in the high school.*

Length of Course: 38 weeks Recommended Grade Level: 10, 11 or 12 Prerequisite: Biology Course Credit: 3 credits - UWGB (student meets grade level criteria, 11-12) 1 credit -Verona Area High School

Text will be provided by the school and may be purchased (See instructor for details.) *Johnson, M. (2012). Human Biology: Concepts and current issues.* 6thEd. San Francisco: Pearson

Lectures include an overview of information for which students are responsible, plus additional information on difficult concepts or those not covered extensively in the textbook. Investigative labs, discussion, and demonstrations relating to class topics are also part of the curriculum. Students will develop skills in observation and objective analysis; scientific inquiry; data collection; statistical analysis; and oral and written communications.

Exams cover information from the lecture, investigative labs, demonstrations, and discussions along with information from assigned reading, and assigned terminology. Exams include multiple choice questions, true-false questions, matching questions, short answer, and critical thinking questions.

Lab assessments may include both oral and written lab reports to evaluate student success in attaining the objectives of this course. Generally, lab reports are due the following Tuesday after the start of a lab. Quality of Laboratory write-ups include organization & presentation as well as experimental design and discussion of phenomena investigated. ALL labs will be recorded in a sewn spine lab notebook.

Human Biology Programmatic Outcomes

- 1. Demonstrate a basic knowledge of molecular / biochemical processes.
- 2. Demonstrate a basic knowledge of cell structure, organelles and cellular processes.
- 3. Demonstrate a basic knowledge of the anatomy and physiology of human organs and organ systems.
- 4. Demonstrate an understanding of the impact of evolutionary forces on the human organism.
- 5. Demonstrate an understanding of the ecological context of humans.
- 6. Demonstrate an understanding of the impact of nutrients on human physiology.
- 7. Demonstrate an understanding of the interactions of exercise and human physiology.
- 8. Demonstrate an understanding of scientific processes, including inductive and deductive reasoning, formulation of hypotheses and experimental design.
- Demonstrate an understanding of research methodologies and the relative value of information obtained from experiments involving observation, correlation and examination of cause/effect relationships.
- 10. Know and execute state-of-the-art laboratory techniques.
- 11. Analyze and interpret scientific information.
- 12. Demonstrate an appreciation for the ethical and social dimensions of science, as well as weaknesses/limitations and assumptions of science as practiced in the US.
- 13. Demonstrate the awareness, understanding and skills necessary to work in a diverse world.

We will follow the Verona Area High School Grading scale. Grading Scale UWGB Equivalent Grade.

A 100 – 93	UWGB Grade Scale	A (Excellent)
A- 93-90	A 100%-94%	AB (Very Good)
B+ 90-87	AB 93%-87% B 86%-83%	B (Good)
B 87-83	BC 82%-76%	BC (Above Average)
B- 83-80	C 75%-72% CD 71%-68%	C (Average)
C+ 80-77	D 67%-63%	CD (Below Average)
C 77-73	P 02/0-070	└D (Poor)
C- 73-70		F (Unacceptable)
D+ 70-67		
D 67-63		
D- 63-60		
F <60		

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Grading:	Based on approximately 400 points per Quarter		

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Exams 40 %	Exams 40 % (Includes the Cat Dissection Lab Practical Exam)
Lab 40 %	Lab 40 % (Includes the Cat Dissection)
Discussion and Quizzes 10%	Discussion and Quizzes 10%
Initiative and Safety 10%	Initiative and Safety 10%
Semester Exam 1 14% of SEM 1 Overall grade	Semester Exam 2 14% of SEM 2 Overall grade
Monthly Assignment EXCR option +1% Q2	Monthly Assignment EXCR option +1%Q4

Required Materials

- · Pen or pencil
- Bio 2 binder and composition notebook
- · Loose leaf paper
- · Bio 2 book, Human Biology

Requirements

1. Be prepared for class. Have materials needed for class out of backpacks/bags before class starts. Backpacks/bags are not allowed in the science classroom or science laboratories due to safety, theft, and space needs. Use your locker to store extra materials not needed for class. Or place backpacks on the assigned tables within the room.

2. You must practice safe lab procedures. Unsafe lab practices can cause injury to yourself and others, or damage to lab materials. Unsafe practices, or failure to follow guidelines will result in dismissal from lab—no credit will be given for the lab/lab report. You must sign a safety contract before participating in any laboratory activities.

3. Be timely in your assignment completion which includes reading. Find a lab partner that you will be able to work with and who will be willing to explain classroom activities/agenda if you happen to be absent. Please note that email is not an effective mode of conversation for me--I would rather talk with you face-to-face.

4. Exams will be announced in writing and verbally days (usually weeks) before the Exam day (see the calendar.) If you are absent the day before the Exam you are expected to take the Exam on the scheduled day. An unexcused absence on the day of an Exam will result in a 30% reduction on that Exam. If you are present the day of an Exam, you are expected to take the Exam. If you can not be available for an Exam, you must contact me in advance to work out a suitable alternative date. Make up exams will only be given for verifiable emergencies. Please contact me as soon as possible if a situation comes up that prohibits you from taking the exam as scheduled.

Expectations

- 1. Respect yourself and others.
- 2. Be in your seat when the bell rings with materials you will need for class.
- 3. Electronic media is not allowed in our classroom unless given teacher permission.
- 4. No eating or drinking in the classroom or laboratory facilities.
- 5. Extra credit is rarely an option but it is available.
- 6. Active Participation is encouraged.
- 7. Full Participation of the Cat Dissection, Quarter 4.

I look forward to a working with you in Biology 2. Aloha~ Mrs Mikkelson