

**COURSE DESCRIPTION:**

This is a one-semester, 3 unit, 3 hour lecture per week course in human biology. It is a survey course in human anatomy and physiology, and includes an introduction to evolution and ecology. This course introduces students to the human body, and prepares them for kinesiology and allied health programs (LVN, CNA), and later to nursing and medicine.

The lectures first review the scientific method, basic chemistry, cell biology, and tissues. The major focus of the course is the anatomy and physiology of all major organ systems - skeletal, muscular, circulatory, immune, respiratory, nervous, endocrine, digestive, renal, and reproductive. The course culminates in a discussion of 3 current topics: cell development and cancer, the evolution of earth and humans, and ecology with an emphasis on current ecological issues and an exploration of possible sustainable solutions.

There is no laboratory work. A portfolio of drawings will be produced as part of the assignment.

**PREREQUISITES:** None

**RECOMMENDED:** Eligibility for English 836

**TRANSFER CREDIT:** UC, CSU (B2)

**Required Text: Human Biology Cuarom Text Package, 2nd ed ISBN 978-1307-002010**

(package: custom 2nd ed + Connect code) (Mader & Windelspecht, 15th ed, 2018)

**Student Learning Outcomes (SLO):**

1. Demonstrate an understanding of the scientific method and the ability to use scientific knowledge to assess the body and environmental functions.
2. Demonstrate an understanding of the major concepts in human anatomy.
3. Demonstrate an understanding of the major concepts in evolution and ecology.
4. Use the scientific knowledge and skills necessary for active citizenship.

**CLASSROOM CONDUCT:**

Students are expected to attend every lecture & lab and to do their own work and reports. There is a penalty if you miss roll call, copy or allow copying of other people's work and reports.

Students are expected to turn off all electronics (cell phone, beepers, laptops, etc.) before each lecture and lab. Laptops are only allowed for classroom related activities. There is a penalty for each unauthorized electronic sound, and for unauthorized phone or laptop use, in the classroom.

**TESTS & ASSIGNMENTS:**

Without prior arrangements or a documented legal or medical reason, there is no test makeup, and late assignments are not accepted.

**GRADING POLICY:**

4 Exams	400	A	90-100%
Assignments	50	B	80-89%
<u>Attendance &amp; Participation</u>	<u>25</u>	C	65-79%
<u>Total</u>	<u>475</u>	D	50-64%
		F	0-49%

**Lecture: Tues & Thurs 9:35 - 10:50 am (room 7-106)**

**Assignment Label: top right corner, e.g. Assign. #1, Figure 1.2, Levels of Bio. Org.**

<b>Date</b>	<b>Topics &amp; Chap. #</b>	<b>#</b>	<b>Assignments (Figure # Drawings)</b>	<b>Due</b>
8/17r	Introduction	-	none	
8/22t	Human Organization #1	1	1.2 Levels of Bio. Org.	8/22t
8/24r	"	2	1.8 Scientific Method.	8/22t
8/29t	Chemistry #2	3	2.23 Protein - 4 Levels	8/29t
8/31r	"	4	3.4 Eukaryotic Cell	8/29t
9/5t	Cells & Systems #3-4	5	4.8 Epithelial Cell Types	9/5t
9/7r	Circulatory #5-6	6	5.4a Heart	9/5t
9/12t	"	7	5.11 Systemic Arteries&Veins	9/12t
9/14r	<b>Midterm #1</b>	8	6.1 Blood Formation	9/12t
9/19t	Immune #7	9	7.5 Lymphatic Sys	9/19t
9/21r	Digestive #8	10	7.8 Inflammation	9/19t
9/26t	"	11	8.1 Digestive Sys	9/26t
9/28r	Respiratory #9	12	8.4 Swallow & Peristalsis	9/26t
10/3t	"	13	9.1 Respiratory Sys	10/3t
10/5r	Urinary #10	14	9.7 Breathing	10/3t
10/10t	"	15	10.1 Urinary Sys	10/10t
10/12r	<b>Midterm #2</b>	16	10.6 Urine Formation	10/10t
10/17t	Skeletal #11	17	11.2 Skeletal Sys.	10/17t
10/19r	"	18	11.1 Bone Structure	10/17t
10/24t	Muscular #12	19	12.5 Muscular Sys	10/24t
10/26r	"	20	12.6 Skeletal Muscle Structure	10/24t
10/31t	Nervous #13-14	21	13.8 Brain	10/31t
11/2r	"	22	13.16 Spinal Reflex	10/31t
11/7t	Endocrine #15	23	15.2 Endoc. Sys	11/7t
11/9r	<b>Midterm #3</b>	24	15.4 & 15.5 Two Hormone Mech.	11/7t
11/14t	Reproductive #16-17	25	16.2 Male Reprod. Sys.	11/14t
11/16r	"	26	16.6 Female Reprod. Sys.	11/14t
11/21t	Cancer #19	27	19.2 Tumor Development	11/21t
11/23r	Thanksgiving (no school)	-	-	-
11/28t	Cancer #19	28	19E SEM of HeLa Cells	11/21t
11/30r	Evolution #22	29	22.8 Homologous Structures	11/28t
12/5t	"	30	22.14 Primate Evol. Tree	11/28t
12/7r	Ecology #23-24	31	23.4 Energy Flow & Chemical Cycles	12/5t
		32	23.6 Food Web	12/5t
	8/29/17 - Drop without "W"		9/4/17 - Drop with "W"	