#### **COURSE DESCRIPTION:**

This is a one-semester, 5 unit, 3 hour lecture, 6 hour lab per week course in human physiology. It is intended for students in biology, physical education, and medical health programs, such as nursing respiratory therapy, and radiology. This course transfers to the UC and CSU undergraduate systems.

Lectures cover homeostasis, tissues, biochemistry, and major organ systems - nervous, endocrine, cardio-vascular, muscular, immune, respiratory, renal, fluid and ion blance, digestive, and reproductive.

Lab work correlates theory to aplication, with wet lab experiments and computer simulations. Labs focuses on lab protocol, equipment handling, observational skills, data analysis, and computer graphs.

An original research project is required in the course, to see how basic research is implemented. The focus is the scientific method, teamwork, self-organization, on-time work, and presentation skills.

**PREREQUISITES:** Bio 250 or equivalent; Chem 192, 210, 410 or equivalent

**RECOMMENDED:** Eligibility for English 836 or equivalent

TRANSFER CREDIT: UC, CSU (B2, B3)

Required Text: Human A&P Custom Text Package, 10th ed ISBN 978-0134612362

(package: Human A&P text custom 10th ed + atlas + IP CD + PAL CD) (Marieb 10th ed, 2016)

Required Lab Manual: Human Physiology Custom Lab Package, 6th ed, ISBN 1-323403523

(package: Human A&P Lab, custom 6th ed + Physio-Ex 9.1 CD) (Marieb 11th ed, 2016)

# EXPECTED STUDENT LEARNING OUTCOMES (SLO)

- 1) Demonstrate an understanding of the functions and interactions of the major organ systems.
- 2) Perform and analyze experiments (wet labs & computer simulations) in human physioloy.
- 3) Demonstrate an understanding of major concepts in human physiology & experimental approaches.
- 4) Apply the scientific method in performing research on selected topics in physiology.

#### **CLASSROOM CONDUCT:**

Students are expected to attend all lectures and labs, to do their own work, and to turn off all electronics in class. Laptops are only allowed for classroom related activities. There is a penalty for absences, cheating, allowing cheating, or unauthorized electronic use in class.

### **TESTS & ASSIGNMENTS:**

Without a documented legal or medical reason, there is no test makeup or late assignments.

## **Grading Policy:**

3 Exams	300	A	90-100%
2 Lab Practicals	200	В	80-89%
Assignments	50	C	65-79%
Attend. & Participation	25	D	50-64%
Research Project	100	F	0-49%
Total	675		

Biol 260 Human Physiology Biology Dept, Skyline College SCHEDULE

**LECTURE:** Tues & Thurs 12:35 - 1:50 pm (7-106)

EARLY LAB: Mon & Wed 10:40-1:20 pm (7-210, 2-117B)

LATE LAB: Mon & Wed 2:10 - 4:50 pm (7-210, 2-117B)

Lab	Laboratory (M, W)	Due	Lec	Lecure (T, R)
8/16w	Lab Protocol; Wet: Get Started #1	-	8/17r	Introduction
8/21m	Wet: Microscope #2	8/29t	8/22t	Homeostasis #1
8/23w	Wet: Cell #3	8/29t	8/24r	"
8/28m	Sim: Excel (graphs)	9/5t	8/29t	Biochemistry #2
8/30w	Wet: Cell Transport #4	9/5t	8/31r	"
9/4m	Labor Day (no school)	-	9/5t	Cell Bio #3
9/6w	Wet: Reflex#5	9/12t	9/7r	"
9/11m	Sim: Cell Transport #1 (graphs)	9/19t	9/12t	Nervous #11-14
9/13w	Wet: Vision #6, Hearing #7	9/19t	9/14r	"
9/18m	Sim: Muscle #2 (graphs)	9/26t	9/19t	Midterm #1
9/20w	Wet: Smell&Taste #8	9/26t	9/21r	Vision #15
9/25m	Research Project	-	9/26t	"
9/27w	Wet: Endoc #9; PhEx: Endoc #4	10/3t	9/28r	Endocrine #16
10/2m	Sim: Neural #3 (graphs)	10/10t	10/3t	"
10/4w	Practicum I Review	-	10/5r	Muscular Sys #9
10/9m	Practicum #1	-	10/10t	"
10/11w	Flex Day (no school)	-	10/12r	"
10/16m	Research Dry Run	-	10/17t	CV Sys #18-19
10/18w	Wet: BP & Pulse #10	10/24t	10/19r	"
10/23m	Sim: CV Dynamics #5 & Frog #6 (graphs)	10/31t	10/24t	Midterm #2
10/25w	Wet: Blood #12; Sim: Blood #11	10/31t	10/26r	Immune Sys #21
10/30m	Wet: ECG #11 & Immune #13	-	10/31t	"
11/1w	Sim: Resp. #7 (graphs)	11/7t	11/2r	Resp. Sys #22
11/6m	Sim: Research Graphs & Powerpoint	11/14t	11/7t	"
11/8w	Wet: Resp #14	11/14t	11/9r	Dig. Sys. #23
11/13m	Research #1 & 2; Sim: Dig. #8	11/21t	11/14t	"
11/15w	Wet: Digestion #15	11/21t	11/16r	Renal Sys. #25
11/20m	Research #3 & 4; Sim: Renal #9	11/28t	11/21t	"
11/22w	Wet: Urinanalysis #16 & Heredity #17	11/28t	11/23r	Thanksgiving (no school)
11/27m	Research #5 & 6; Sim: Acid #10	12/5t	11/28t	Fluid & Elec. #26
11/29w	Practicum II Review	-	11/30r	"
12/4m	Practicum #2	-	12/5t	Reprod. Sys. #27
12/6w	Catchup!	-	12/7r	"
	8/29/17 - Drop without "W"			9/4/17 - Drop with "W"