

**PHYSO 101 – HUMAN PHYSIOLOGY
– SPRING 2020 TTH Lec –
T Lab (sec 9264) / TH Lab (sec 9263)**

[\[Synopsis of Physiology for Allied Health \]](#)

[\[Laboratory Exercises for Physiology \]](#)

[\[Course Outline \]](#)

PHYSO 101—INTRODUCTORY HUMAN PHYSIOLOGY 4 Units

54.00 Lecture Hours, 54.00 Lab Hours

Prerequisite: Satisfactory completion of ANAT 125 and CHEM 143)

Study of physiological principles, function, and homeostasis of the human body in health and disease; at the biochemical, cellular, tissue, organ, and system levels: integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, urinary, digestive, and reproductive. Includes cellular communication, sensory reception, and neural and hormonal control: body movement, oxygen and nutrient delivery, immunity, fluid and electrolyte balance, metabolism and reproductive function.

Intended primarily for Nursing, Allied Health, Kinesiology, and other health related majors. Field trips are not required. (A-F or P/NP)

Transfer: (CSU, UC) (CC: BIOL 60; BIOL 60 + BIO 10 = PHYSO 101 + ANAT 125) **General**

Education: (MJC-GE: A) (CSU-GE: B2, B3) (IGETC: 5B, 5C)

Instructor:

David G. Ward, Ph.D.

Office: Science Community Center Rm. 239 (shared office)

e-mail: wardd@mjc.edu or wardd@yosemite.edu

website: <https://dgward.com/>

Office Hours:

By arrangement, before or after class

Textbooks / Material Required:

Ward, D. G. (2019) Synopsis of Physiology for Allied Health. Available free from my website:

https://dgward.com/pdf/physo101/pdf_text_physo101.htm

Ward, D. G. (2019) Laboratory Exercises for Human Physiology. Available free from my website:

https://dgward.com/pdf/physo101/pdf_labs_physo101.htm

Expected Learning Outcomes:

Upon satisfactory completion of this course, the student should be prepared to

1. Define homeostasis, and explain how homeostasis is maintained in cells, in organs, and in the body.
2. Explain how cells communicate with and control each other, using neural, humoral, and cellular signaling.
3. Describe key functions of the major organ systems and explain how they are integrated and regulated.
4. Explain how disease states critically involve abnormal cellular communication, homeostatic control, and metabolism in organ systems.
5. Apply the scientific method, analyze experimental data, and interpret biomedical literature, to solve problems in physiology and medicine.

Grading:

Grades are assigned based on points earned in quizzes, written exams, laboratory exercises, summaries of current research, and a final exam as follows (also see course outline):

1. 630 points – Exams 1-7 (90 points total for each exam: 70 Scantron questions [Scantron® 882 required], 70 points; 20 fill-in questions, 20 points.) All exams are in SCC 227.
2. 110 points – Quizzes in Lecture (except first day) (5 points for each of following 22 full lecture meetings, no quizzes on exam days).
3. 105 points – Completion of the laboratory exercises, and turning in answers to discussion questions for 21 lab exercises (5 points each exercise).
4. 20 points – Completion of two (2) typed summaries of two (2) peer reviewed journal articles, located using PubMed at the National Library of Medicine. The link to PubMed is on my website and is also listed here: <https://pubmed.ncbi.nlm.nih.gov>

Each summary must be two (2) pages long, double spaced, and must include the first two pages of the article. Summaries + first two pages of articles are due at last meeting in SCC 210. Each student will share their two summaries orally at that meeting, and will be given about 90 sec for each summary. Each summary + first two pages of article is worth 10 points. The assignment is described more the first day of class.

5. 135 points – Comprehensive Final exam (135 Scantron questions – I will cut and paste 25 from each of exams 1-3 and 20 Scantron questions from each of exams 4-6); There are no fill-in questions on the final [Scantron® 884 required]. The final exam is in SCC 227.
6. Exams cannot be made up.

Grade distribution:

A: 89.5 - 100. % = 895 - 1000 points Lose up to 105 points
B: 79.5 - 89.4 % = 795 - 894 points Lose up to 205 points
C: 69.5 - 79.4 % = 695 - 794 points Lose up to 305 points
D: 59.5 - 69.4 % = 595 - 694 points Lose up to 405 points
F: 00.0 - 59.4 % = 000 - 594 points Lose over 405 points

Suggestions for success:

- Read the text: Synopsis of Physiology for Allied Health.
- Answer all Quiz Yourself and Supplemental Practice questions.
- Do the labs: Laboratory Exercises for Human Physiology.
- Answer and turn in the Discussion questions for each lab.
- Visualize physiological processes by drawing diagrams.
- Establish study groups.
- Avoid absences and leaving early.

Attendance:

- It is the responsibility of the student to drop a course that she/he are no longer attending.
- The instructor may drop a student after two consecutive days of non-attendance unless arrangements are made in advance.

Cell phones and wrist devices:

- Turn off and do not use cell phones and wrist devices unless their use is integral to the class.
- Use of a cell phone or a wrist devices for any reason during an exam will result in zero (0) points for that exam (SME Policy).

Classroom environment:

- Students are entitled to and deserve a classroom environment that is safe and conducive to learning.
- Disruptive behaviors are not permitted; this includes, but is not limited to, talking and using cell phones when not integral to the class.
- Students are required to obey generally accepted protocols for handling sharps and biohazardous fluids and materials.
- Eating and drinking are not permitted in the classrooms nor in the lab rooms.

Academic Integrity:*

The Academic Senate at MJC shares the original jurisdiction for conduct violations in the area of academic integrity. The Academic Senate at MJC has defined academic integrity and identified possible means for maintaining academic integrity at the College. The following are violations of academic integrity.

- **Cheating** - Intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise; misrepresenting or non-reporting of pertinent information in all forms of work submitted for credit.
- **Facilitating Academic Dishonesty** - Intentionally or knowingly helping, or attempting to help, another to violate a provision of the institutional code of academic integrity.
- **Plagiarism** - The deliberate adoption or reproduction of ideas, words or statements of another person as one's own, without acknowledgement. This includes all group work and written assignments.

Consequences of Violations:*

The grading of a student's work rests on the fundamental idea that an instructor is evaluating a student's own work, so cheating or plagiarism demonstrates a failure to complete this most basic requirement of any course. Thus, a faculty member may administer academic consequences for violating the Academic Integrity Policy ranging from partial credit to an 'F' on the assignment or exam.

The instructor may also consider that a student's violation of academic integrity should be a consideration for disciplinary measures. Disciplinary action for violating academic integrity is administered by the Student Discipline Officer under Board Policy & Procedure 5500 Standards of Conduct.

*Source: MJC - Student Services <https://www.mjc.edu/student-services/freedom-integrity.php>