

# BIOLOGY - HUMAN (BIOH)

## **BIOH 104N - Basic Human Biology. 3 Credits.**

Offered autumn and spring. Missoula College. A one semester course with laboratory focusing on learning scientific principles and a general understanding of human functional anatomy and physiological processes.

Gen Ed Attributes: Natural Science

## **BIOH 105N - Basic Human Biology Laboratory. 1 Credit.**

Missoula College. Basic human biology lab is required laboratory for students enrolled in BIOH 104N. Lab activities provide hands-on, investigative instruction in the fundamentals of anatomy and physiology of the human body. Exploration of anatomy using models, preserved materials and demonstrations reinforces principals taught in accompanying lecture.

Gen Ed Attributes: Natural Science Lab Course, Natural Science

## **BIOH 112 - Human Form and Function I. 3 Credits.**

Offered autumn. Explores the fundamentals of structure and function at basic cellular and tissue levels, in addition to the anatomy and physiology of the integumentary, musculoskeletal, and nervous systems.

## **BIOH 113 - Human Form and Function II. 3 Credits.**

Offered spring. Explores the fundamental structures and functions of the endocrine, cardiovascular, respiratory, digestive, urinary and reproductive systems.

## **BIOH 191 - Special Topics. 1-6 Credits.**

Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

## **BIOH 201N - Human Anatomy & Physiology I. 4 Credits.**

Offered autumn and spring. Offered at Missoula College. Restricted to students in the following majors: Missoula College Health Professions and Pre-Health Professions majors, Medical Information Technology, Pre-Physical Therapy, Athletic Training, Integrative Physiology, and Health & Human Performance. Introductory science course or college-prep high school biology course recommended. Comprehensive knowledge of human form and function necessary for students preparing for health-related professions. Emphasis on structure, function and homeostatic regulation of body systems with presentation of basic concepts in chemistry and microbiology as they relate to human anatomy and physiology. Covers tissues through nervous system. Required, integrated laboratory includes some dissection.

Gen Ed Attributes: Natural Science Lab Course, Natural Science

## **BIOH 202N - Human Anatomy and Physiology I Lab. 0 Credits.**

Offered autumn and spring. Offered at Missoula College. Coreq., BIOH 201N. Restricted to students in the following majors: Missoula College Health Professions and Pre-Health Professions majors, Medical Information Technology, Pre-Physical Therapy, Athletic Training, Integrative Physiology, and Health & Human Performance. Gen Ed Attributes: Natural Science Lab Course (N) Required companion laboratory for BIOH 201N. Comprehensive study of tissues and gross human anatomy necessary for students in health-related programs. Emphasis on typical structure and function as they relate to health. Topics include tissues through nervous system. Laboratory activities include some dissection and study of human cadaver.

Gen Ed Attributes: Natural Science Lab Course, Natural Science

## **BIOH 211N - Human Anatomy and Physiology II. 4 Credits.**

Offered autumn and spring. Offered at Missoula College. Prereq., BIOH 201N/202N. Comprehensive knowledge of human form and function necessary for students in health-related programs. Emphasis on structure function and homeostatic regulation of body systems with presentation of basic concepts in chemistry and microbiology as they relate to human anatomy and physiology. Covers endocrine through reproductive systems. Required integrated laboratory includes frequent dissection. Restricted to students in the following majors: Missoula College Health Professions and Pre-Health Professions majors, Medical Information Technology, Pre-Physical Therapy, Athletic Training, and Health & Human Performance. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Lab Course, Natural Science

## **BIOH 212N - Human Anatomy and Physiology II Lab. 0 Credits.**

Offered autumn and spring. Offered at Missoula College. Prereq., BIOH 201N/202N. Coreq., BIOH 211N. Required companion laboratory for BIOH 211N. Basic knowledge necessary for students in health-related programs. Emphasis on normal anatomy and physiology with presentation of basic concepts in chemistry and microbiology as they relate to human anatomy and physiology. Covers endocrine through reproductive systems. A cadaver lab is included. Restricted to students in the following majors: Missoula College Health Professions and Pre-Health Professions majors, Medical Information Technology, Pre-Physical Therapy, Athletic Training, and Health & Human Performance. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Lab Course, Natural Science

## **BIOH 291 - Special Topics. 1-6 Credits.**

(R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

## **BIOH 292 - Independent Study. 1-6 Credits.**

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

## **BIOH 295 - Student Teaching. 1-6 Credits.**

(R-6) Offered intermittently. Offered at Missoula College. Organized student teaching.

## **BIOH 365 - Human Anatomy and Physiology for Health Professions I. 3 Credits.**

Offered autumn. Prereq., CHMY 121N or CHMY 141N; BIOB 160N or BIOH 112 or 113. Introduction to basic cellular structure and function. The fundamental facts and concepts of the anatomy and physiology of cells and tissues, the integumentary, musculoskeletal, nervous and special senses with an emphasis on clinical application for students preparing for careers in health care. Laboratory component includes presentation of cadaver prosections and models.

## **BIOH 366 - Human Anatomy and Physiology for Health Professions I Laboratory. 1-2 Credits.**

Offered autumn. Prereq., or Coreq., BIOH 365. Laboratory-based instruction in the fundamental facts and concepts of the anatomy and physiology of cells and tissues, the integumentary, musculoskeletal, nervous and special senses with an emphasis on clinical application for students preparing for careers in health care. The laboratory uses cadavers and models.

**BIOH 370 - Human Anatomy and Physiology for Health Professions II. 3 Credits.**

Offered spring. Prereq., BIOH 365. The fundamental facts and concepts of the anatomy and physiology of the endocrine, circulatory, respiratory, digestive, urinary and reproductive systems with an emphasis on clinical application for students preparing for careers in health care.

**BIOH 371 - Human Anatomy and Physiology for Health Professions II Laboratory. 1-2 Credits.**

Offered spring. Prereq., or Coreq., BIOH 370. Laboratory-based instruction in the fundamental facts and concepts of the anatomy and physiology of the endocrine, circulatory, respiratory, digestive, urinary and reproductive systems with an emphasis on clinical application for students preparing for careers in health care. The laboratory uses cadaver dissections and models.

**BIOH 398 - Internship. 1-6 Credits.**

Offered every term. Prereq., consent of the Division. Extended classroom experience that provides practical application of learning during placement off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

**BIOH 405 - Hematology. 3 Credits.**

Offered spring, odd numbered years. Prereq., BIOM 360 and junior level or consent of instr. This course is intended to introduce the student to normal and pathologic hematology, with emphasis on blood cell development, cellular components, and normal vs. abnormal morphology. Clinical laboratory testing will be presented as a way to diagnose and monitor disease progression. Normal and pathologic coagulation will likewise be addressed. Treatment options for disease states will also be covered. Laboratory exercises will instruct the student in proper specimen collection, preparation of peripheral blood smears, microscopic examination of blood smears, and other manual tests associated with blood and coagulation studies. Level: Undergraduate-Graduate

**BIOH 424 - TA: Form & Function II. 1-3 Credits.**

(R-4) Offered spring. Prereq., "A" or "B" in BIOH 112 and 113 and/or one year upper division anatomy and physiology coursework with cadaver lab. Consent of instr. This select group of students teaches regularly scheduled cadaver lab dissection experiences for students enrolled in BIOH 113; assists in preparation and grading of lecture and laboratory visit teaching materials; and assists with proctoring and grading exams of undergraduate students enrolled in BIOH 113. Level: Undergraduate

**BIOH 447 - Genes and Development Lab. 3 Credits.**

Offered spring semester odd years. Prereq., BIOB 260. Recommended: BIOB 272, BIOB 301, BIOB 375. This is a laboratory course that will introduce the students to the tools and methods for investigating how genetic information drives animal development and to using model organisms for studying genes associated with human disease. Students will gain practical experience in experimental design, data collection, results analysis, and scientific communication. Students will perform research independently or in a small group as well as attend formal classroom presentations and discussion. Level: Undergraduate

**BIOH 461 - Human Anatomy and Physiology I Tutor/Honors. 3 Credits.**

Offered autumn. Prereq., "A" or "B" in BIOH 365 or equiv. and consent of instr. This select group of students performs tutoring for students enrolled in BIOH 365; assists in preparation and grading of lecture and laboratory course teaching materials to undergraduate students enrolled in BIOH 365. Students enrolled in BIOH 461 have the option of co-enrolling in the cadaver dissection course. Level: Undergraduate

**BIOH 462 - Principles of Medical Physiology. 3 Credits.**

Offered intermittently. Prereq., WRIT 101 or equivalent, and one intermediate writing course, C (2.00) or better in BIOH 365, 370, and either CHMY 123 or 143N or consent of instr. An advanced course in human physiology for students preparing for careers in health care. Level: Undergraduate-Graduate

Gen Ed Attributes: Advanced Writing

**BIOH 463 - Human Anatomy and Physiology II Tutor/Honors. 3 Credits.**

Offered spring. Prereq., "A" or "B" in BIOH 370 or equiv. and consent of instr. This select group of students performs tutoring for students enrolled in BIOH370; assists in preparation and grading of lecture and laboratory course teaching materials to undergraduate students enrolled in BIOH 370. Students enrolled in BIOH 463 have the option of co-enrolling in the cadaver dissection course. Level: Undergraduate

**BIOH 470 - Summer Clinical Laboratory. 12 Credits.**

Offered summer. Prereq., successful completion of medical laboratory science 3+1 on-campus curriculum, admittance into one of our affiliated clinical practicum programs, and consent of instructor. Professional training in clinical laboratory sciences (medical laboratory science). Level: Undergraduate

**BIOH 471 - Professional Training I. 13 Credits.**

Offered autumn. Prereq., BIOH 470. Continuation of BIOH 470. Professional training at clinical site(s). Level: Undergraduate

**BIOH 472 - Professional Training II. 12 Credits.**

Offered spring. Prereq., BIOH 471. Continuation of BIOH 471. Professional training at clinical site(s). Level: Undergraduate

**BIOH 480 - Teaching Anatomy & Physiology I. 3-4 Credits.**

Offered autumn. Prereq., "A" or "B" in BIOH 365 and 370 or equiv. and consent of instr. This select group of students assists in preparation and grading of demonstrations and laboratory teaching materials; and provides laboratory anatomy and physiology instruction to undergraduate students enrolled in BIOH 365. Students enrolling for the 4 credit option will also provide occasional comparable assistance for BIOH 112. Level: Undergraduate

**BIOH 481 - Teaching Anatomy & Physiology II. 3-4 Credits.**

Offered spring. Prereq., "A" or "B" in BIOH 365 and 370 or equiv. and consent of instr. This select group of students assists in the preparation and grading of demonstrations and laboratory teaching materials; and provides laboratory anatomy and physiology instruction to undergraduate students enrolled in BIOH 370. Students enrolling for the 4 credit option will also provide occasional comparable assistance for BIOH 113. Level: Undergraduate

**BIOH 491 - Special Topics. 1-10 Credits.**

(R-10) Offered intermittently. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Undergraduate-Graduate