

BIO 31: INTRO HUMAN PHYSIOLOGY

In Workflow

1. BIO Committee Chair (ballerini@csus.edu)
2. BIO Chair (lindgren@csus.edu)
3. NSM College Committee Chair (mikkel.jensen@csus.edu)
4. NSM Dean (datwyler@csus.edu)
5. Academic Services (catalog@csus.edu)
6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
7. Dean of Undergraduate (gardner@csus.edu)
8. Dean of Graduate (cnewsome@skymail.csus.edu)
9. Catalog Editor (catalog@csus.edu)
10. Registrar's Office (k.mcfarland@csus.edu)
11. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Sat, 04 Jan 2025 00:11:56 GMT
Evangeline Ballerini (ballerini): Rollback to Initiator
2. Tue, 28 Jan 2025 21:12:31 GMT
Evangeline Ballerini (ballerini): Rollback to Initiator
3. Thu, 20 Feb 2025 00:54:36 GMT
Evangeline Ballerini (ballerini): Approved for BIO Committee Chair
4. Thu, 20 Feb 2025 01:08:23 GMT
Susanne Lindgren (lindgren): Approved for BIO Chair
5. Wed, 05 Mar 2025 23:32:58 GMT
Mikkel Jensen (mikkel.jensen): Approved for NSM College Committee Chair
6. Thu, 06 Mar 2025 15:55:58 GMT
Chris Taylor (ctaylor): Approved for NSM Dean

Date Submitted: Thu, 30 Jan 2025 22:51:28 GMT

Viewing: BIO 31 : Intro Human Physiology

Last edit: Thu, 20 Feb 2025 00:52:46 GMT

Changes proposed by: Jennifer Lundmark (101045083)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Jennifer Lundmark	lundmark@csus.edu	916-278-6659

Catalog Title:

Intro Human Physiology

Class Schedule Title:

Intro Human Physiology

Academic Group: (College)

NSM - Natural Sciences & Mathematics

Academic Organization: (Department)

Biological Sciences

Will this course be offered through the College of Continuing Education (CCE)?

No

Catalog Year Effective:

Spring 2026 (2026/2027 Catalog)

Subject Area: (prefix)

BIO - Biological Sciences

Catalog Number: (course number)

31

Course ID: (For administrative use only.)

105726

Units:

4

Is the ONLY purpose of this change to update the term typically offered or the enforcement of existing prerequisites at registration?

No

In what term(s) will this course typically be offered?

Fall, Spring

Does this course require a room for its final exam?

Yes, final exam requires a room

This course complies with the credit hour policy:

Yes

Justification for course proposal:

Reactivating this course will help to address the Bio 25/26 (Anatomy & Physiology - I and II) backlog, which shows no sign of slowing (new data indicate that more than 3000 students are waiting to enroll in EACH of these courses). There are several reasons for this backlog: 1) According to the Health Science department (largest major on campus, which requires 25/26), about 80-100 students/year transfer to Sac State having completed a lower division anatomy (only) course; we have no complementary lower division physiology course, so their only recourse is to take the entire 25/26 series again here. 2) There are also students who take Bio 22 (Intro Human Anatomy), then switch majors (usually because of chemistry issues) and need an intro level physiology course, but without something like the course being proposed, they must take the entire 25/26 sequence. 3) Adding Bio 31 as a complementary course to Bio 22 provides another, separate mechanism by which students can meet the "anatomy and physiology" requirement for health professional programs. Removing all of these students from the 25/26 queue will help to improve progress to degree for everyone connected to these courses.

Notes: Bio 131, an upper division human physiology course, has a 2-semester chemistry pre-requisite, and upper division rigor that is incompatible with the needs of students who normally take Bio 25/26.

Course Description: (Not to exceed 90 words and language should conform to catalog copy.)

Bio 31 provides an introduction to the physiological mechanisms underlying homeostatic control, with an emphasis on the interdependent functions of the nervous, endocrine, cardiovascular, respiratory, renal, and digestive systems. Laboratory work involves authentic data and measurement techniques with an emphasis on critical thinking and problem-solving. Lecture three hours, laboratory three hours. Fee course.

Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

No

Is this course designated as Curricular Community Engaged Learning?

No

Does this course require safety training?

No

Does this course require personal protective equipment (PPE)?

No

Course Note: (Note must be a single sentence; do not include field trip or fee course notations.)

Not open to students who have successfully completed BIO 25 and BIO 26, or an equivalent combination of anatomy and physiology courses.

Does this course have prerequisites?

No

Does this course have corequisites?

No

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Laboratory
Lecture

Laboratory Classification

CS#16 - Science Laboratory (K-factor=2 WTU per unit)

Laboratory Units

1

Lecture Classification

CS#02 - Lecture/Discussion (K-factor=1WTU per unit)

Lecture Units

3

Is this a paired course?

No

Is this course crosslisted?

No

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term?

No

Description of the Expected Learning Outcomes and Assessment Strategies:

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre- and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

	Expected Learning Outcome	Assessment Strategies
1	Effectively communicate physiological concepts and laboratory findings with appropriate vocabulary.	Quizzes, exams, practice problems, Laboratory assignments/activities, group project
2	Describe the mechanisms by which cells of the body acquire and use biological energy and explain how actions of body systems influence these processes.	Exams, quizzes, laboratory assignments/activities
3	Describe how cells use transport processes to perform their intrinsic functions and explain the intracellular mechanisms by which cells convert signals into measurable physiological changes (e.g., heart rate).	Quizzes, exams, and practice problems
4	Discuss the normal physiology of basic body systems (including nervous, musculoskeletal pulmonary, cardiovascular, renal, digestive, reproductive, endocrine, and immune) and predict how alteration to normal physiology will affect homeostasis.	Exams, quizzes, laboratory assignments/activities
5	Construct evidence-based arguments to demonstrate the interdependence of organ systems in maintaining homeostasis.	Laboratory assignments/activities, group project, exams
6	Analyze how exercise and nutrition affect human physiology and wellness.	Practice problems, quizzes, and exams

7	Evaluate the effects of external factors such as gender, age, and environment on physiological health.	Laboratory assignments/activities, exams
8	Demonstrate critical thinking, communication, and collaboration skills to solve physiological problems.	Laboratory assignments/activities, group project
9	Employ scientific tools and methods to investigate physiological phenomena, analyze experimental data, and present findings.	Laboratory assignments/activities, exams and quizzes

Attach a list of the required/recommended course readings and activities:

BIO 31 schedule.doc
Bio 31 Course Activities.docx
Bio 31 syllabus.docx

Is this course required in a degree program (major, minor, graduate degree, certificate?)

No

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

Yes

Indicate which department(s) will be affected by the proposed course:

Department(s)

Kinesiology

Health & Human Services

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Undergraduate Learning Goals:

Competence in the disciplines
Intellectual and practical skills
Personal and social responsibility

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

No

Please attach any additional files not requested above:

Email from Kins Chair.pdf
Email with Health Science Chair.pdf

Reviewer Comments:

Evangeline Ballerini (ballerini) (Sat, 04 Jan 2025 00:11:56 GMT): Rollback: This is being rolled back so that suggested edits from the BIO C&A Committee can be made by J. Lundmark

Evangeline Ballerini (ballerini) (Tue, 28 Jan 2025 21:12:31 GMT): Rollback: rollback at request of submitter for further edits

Key: 5351