

Submit one printed copy of this form with signatures and one printed copy of the syllabus to the Provost/VPAA's Office (Austin Building, Room 309). Initial submissions are due no later than February 15, 2013.

1. College: **Science & Mathematics**
2. Department: **Biology**
3. Course status: **existing; does not require modification**
4. Course prefix and number: **BIO 123**
5. Course title: **Human Biology**
6. Course catalog description: **Four semester hours, three hours lecture per week, two hours laboratory per week. Biological principals for non “science majors. Study of the evolution of man, organ systems, and the human organism, may not be used to meet graduation requirements of students majoring in the College of Sciences and Mathematics or for certification of high school teachers in biology. Required lab fee.**
7. Number of semester credit hours: **4**
8. Estimated total course enrollment per year: **150**
9. Course prerequisites and/or required qualifications for enrolling in the class: **TSI complete in English and Reading**
10. Course **is not/will not be** available online.
11. Foundational Component Area: **Life and Physical Sciences**
12. Explain why this course fits into this foundation component area: **Human Biology will introduce students to the scientific method and how it is used to formulate and test hypotheses, the structure and function of the human body, how humans interact with and the impacts of natural phenomena upon human form and function (for example, evolution) and culture / society (for example, global warming). Students will learn how to think critically, analyze scientific information (both written and visual), make decisions, and understand the implications for modern society.**
13. Core Objectives
 - Critical Thinking - Instruction in Critical Thinking: At least once per week, a critical reading will be assigned that is relevant to a lecture topic discussed that week. Additional critical readings will be assigned to familiarize students with the scientific method, general critical thinking skills, and the types of data scientists use and assess. Activities in Critical Thinking: Upon completion of the critical readings assigned in lecture, students will complete web based exercises (provided by the text book publisher) that require them to draw conclusions from the readings. A laboratory exercise (The Scientific Method; Week 1 in laboratory syllabus) will be conducted in which students are presented with an experimental scenario. They will be required to develop a hypothesis, carry out an experiment, analyze the data, and determine if their hypothesis is supported.
 - Communication Skills - Instruction in Communication Skills: critical readings will be assigned, in lecture, that detail how scientific data is presented in multiple forms. Activities in Communication Skills: During a laboratory exercise (The Respiratory System; Week 9 in laboratory syllabus) students will be required to construct a presentation of data, both visually and written, collected during the measurement and calculation of lung volumes.
 - Empirical and Quantitative Skills - Instruction in Empirical and Quantitative Skills: critical readings will be assigned, in lecture, that detail the types and sources of scientific information. Activities in Empirical and Quantitative Skills: During one laboratory exercise (The Respiratory System; Week 9 in laboratory syllabus), students will be required to observe and calculate lung volumes. In a second laboratory exercise, students will be required to calculate inheritance probabilities, given a family history or pedigree.
 - Teamwork - Instruction in Teamwork: The elements of effective teamwork will be discussed during a laboratory exercise involving the observation and measurement of lung volumes. Activities in Teamwork: Students will be required to function as a team during the data analysis

portion of the laboratory exercise (The Respiratory System; Week 9 in laboratory syllabus) to construct a PowerPoint presentation discussing the collected data.

14. Email the syllabus for this course to brewersj@sfasu.edu. Please include the course prefix, course number and the word "Syllabus" in the file's title (e.g. PSC 141 Syllabus).
- The syllabus must meet the SFASU Course Syllabus Guidelines as published by the Provost/VPAA. A link to these guidelines can be found at <http://www.sfasu.edu/acadaffairs>.
 - Student learning outcomes should be clearly specified in the syllabus. These are course objectives describing what students who complete the course will know or be able to do. Required core objectives (see above and [Appendix 2](#)) should be represented in the student learning outcomes.
 - A course calendar should be included in the syllabus. The calendar should list the topics that the course will cover and indicate the approximate amount of time to be devoted to each, either by percent of course time or number of weeks. The outline should indicate which topics will be required in all sections of the course and which may vary. If time in the course is to be specifically devoted to the required core objectives (see above and [Appendix 2](#)), that should be indicated in the course calendar.

Contact person for questions about this submission:

- a. Robert Wiggers`
- b. 468-2147
- c. rwiggers@sfasu.edu

A separate description of the institution-level assessment procedures to be used for the core curriculum will be distributed by the Core Curriculum Assessment Committee. Course acceptance by the Core Curriculum Advisory Committee does not guarantee acceptance by the Core Curriculum Assessment Committee. Approval by both committees is required for a course to be included in the core.

Department chairperson signature:

_____ Date: _____

College dean signature:

_____ Date: _____

Core Course Application

1. Contact Person: Robert Wiggers 468-2147 rwiggers@sfasu.edu

2. Course Details:

- **College of Sciences and Mathematics, Department of Biology**
- **Course Status:** An existing course which will not require modification approval from College and University Curriculum Committees
- **Estimated total course enrollment per year:** 150
- **Course catalog description:** Four semester hours, three hours lecture per week, two hours laboratory per week. Biological principals for non –science majors. Study of the evolution of man, organ systems, and the human organism, may not be used to meet graduation requirements of students majoring in the College of Sciences and Mathematics or for certification of high school teachers in biology. Required lab fee.
- **Prerequisites:** TSI complete in English and Reading

3. Foundational component area:

Life and Physical Sciences (6 SCH): Courses in this category focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

4. Justification:

Human Biology will introduce students to the scientific method and how it is used to formulate and test hypotheses, the structure and function of the human body, how humans interact with and the impacts of natural phenomena upon human form and function (for example, evolution) and culture / society (for example, global warming). Students will learn how to think critically, analyze scientific information (both written and visual), make decisions, and understand the implications for modern society.

5. Core Objectives:

#1: Critical Thinking

Instruction in Critical Thinking: At least once per week, a critical reading will be assigned that is relevant to a lecture topic discussed that week. Additional critical readings will be assigned to familiarize students with the scientific method, general critical thinking skills, and the types of data scientists use and assess.

Activities in Critical Thinking: Upon completion of the critical readings assigned in lecture, students will complete web based exercises (provided by the text book publisher) that require them to draw conclusions from the readings. A laboratory exercise (The Scientific Method; Week 1 in laboratory syllabus) will be conducted in which students are presented with an experimental scenario. They will be required to develop a hypothesis, carry out an experiment, analyze the data, and determine if their hypothesis is supported.

#2: Communication skills

Instruction in Communication Skills: critical readings will be assigned, in lecture, that detail how scientific data is presented in multiple forms.

Activities in Communication Skills: During a laboratory exercise (The Respiratory System; Week 9 in laboratory syllabus) students will be required to construct a presentation of data, both written and visual, collected during the measurement and calculation of lung volumes.

#3: Empirical and Quantitative skills

Instruction in Empirical and Quantitative Skills: critical readings will be assigned, in lecture, that detail the types and sources of scientific information.

Activities in Empirical and Quantitative Skills: During one laboratory exercise (The Respiratory System; Week 9 in laboratory syllabus), students will be required to observe and calculate lung volumes. In a second laboratory exercise, students will be required to calculate inheritance probabilities, given a family history or pedigree.

#4: Teamwork

Instruction in Teamwork: The elements of effective teamwork will be discussed during a laboratory exercise involving the observation and measurement of lung volumes.

Activities in Teamwork: Students will be required to function as a team during the data analysis portion of the laboratory exercise (The Respiratory System; Week 9 in laboratory syllabus) to construct a PowerPoint presentation discussing the collected data.