Course Proposal: Modify Course

This proposal will change the following elements of the course.
Course Description

1. Course prefix and number: **BIO 123**

2. Effective Term/Year: **FALL 2014**

3. CIP CODE/10 digit program code: **No Change**

4. Short Course Title: **Human Biology**

   Modified Short Course Title: **Human Biology**

5. What is the primary reason you are modifying this course?
   Bio 123 currently can't be used to meet graduation requirements of students within the college of science & mathematics. The Dept. of Computer Science, which has joined the COSM, allows BIO 123 to count towards two of their degrees. We are changing the course description to reflect this.

6. Enter course description exactly as it now appears in the general/graduate bulletin.
   Four semester hours, three hours lecture, two hours lab per week. Biological principles 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.

   Enter modified course description exactly as it will appear in the general/graduate bulletin?
   Four semester hours, three hours lecture, two hours lab per week. Biological principles 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, except for students seeking a B.B.A. with a major in Computer Information Systems or a B.A. with a major in Information Technology. Required lab fee.

7. Current Prerequisites: **No Change**
   TSI complete in English and Reading

   Modified Course Prerequisites:

8. College: **College of Science and Mathematics**

9. Department Teaching Course: **Biology**

10a. Instruction Type: **Lecture and Lab No Change**

10b. Credit Hours: **No Change**
   Current - Maximum: Minimum: Maximum Hours counted toward degree:
   Modified- Maximum: Minimum: Maximum Hours counted toward degree:

11a. Second Instruction Type: **ns**

11b. Second Credit Hours:
   Current - Maximum: Minimum: Maximum Hours counted toward degree:
   Modified- Maximum: Minimum: Maximum Hours counted toward degree:

12. Maximum contact hours each week fall semester: **No Change**
   Lecture: Lab: Other:

13. May this course be taken more than one time each semester: **No**

14. Grade Type: **Regular: A-F No Change**

15. Describe the place of the modified course within your current curriculum. Will it be elective or required? Part of a major or a minor? (Enter NA if no change is being made.)
   NA

16. How does the modified course differ from similar courses being offered at Stephen F. Austin? (Enter NA if no change is being made.)
   NA

17. Syllabus: Course Learning Goals
   List course objectives; describe what students who complete the course will know or be able

to do.
(Enter NA if no change is being made.)
NA

18. Syllabus: Course Outline
List the topics that the modified course will cover and indicate the approximate proposed amount
of time to be devoted to each, either by percent of course time or number of weeks. Please indicate
which topics will be required in all sections of the course and which may vary.
(Enter NA if no change is being made.)
NA

19. Syllabus: Modified Textbook/Assigned Reading Materials for course.
NA

20. Any Other Information
This change is necessary to accommodate degree requirements of Computer Science, a new member of the COSM.

Dept. Chair _____ Date: _____

College Curriculum Chair _____ Date: _____

College Dean _____ Date: _____

Grad Dean/Univ Curr Chair _____ Date: _____

Biology 123.001 – Human Biology
Dr. Robert J. Wiggers, Dept. Biology

Text (Required): Human Biology, Concepts & Current Issues, 6th ed. By M. Johnson
Supplemental Materials (Required): Access to Mastering Biology website
Supplemental Materials (Suggested): Lecture notes available on Desire 2 Learn
Class Time & Place: MTWR 10:15 – 12:10, S233
Instructor Office: 204S
Office phone / e-mail: 468-2147 / rwiggers@sfasu.edu
Office Hours: MTWR 9 - 10

Course Description: Four semester hours, three hours lecture, two hours lab per week. Biological principles 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.

Pre-requisites: None

Co-requisite: BIO 123L

Program Learning Outcomes: There are no specific program learning outcomes for this major addressed in this course. It is a general education core curriculum course and / or a service course.

General Education Core Curriculum Objectives / Outcomes

- EEO #3: To identify and recognize the differences among competing models of scientific theories
- EEO #4: To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies
- EEO #5: To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution, to modern culture

Student Learning Outcomes:

- An understanding of the biological molecules found in human cells, the ultra-structure of human cells, as well the basic processes cells use to survive and reproduce
- An understanding of the basic human organ systems, including their anatomy and physiology, their control, and their function in the whole organism context.
- An understanding of our place in the animal kingdom, and how we arrived here.

Tentative Topic List

Molecules to Organs (25%)	Book Chapters
Biological Molecules	2
Cell Structure & Processes	3
Cells, Tissues, Organs, & Body Organization	4
Organ Systems (50%)	
The Skeletal System	5
The Muscular System	6
The Nervous System	11
The Senses	12
Blood	7
The Cardiovascular System	8
The Lymphatic System	9
The Respiratory System	10
The Digestive System	14
The Urinary System	15
The Endocrine System	13
Organismal Biology (25%)	
Cellular Function & Reproduction	17
Human Reproduction & Development	16 & 21
Genetics	19
Cancer	18
Human Evolution	22

Course Description

BIO 123 is a biological principles course for non – science majors. Human Biology Lab (BIO 123L) is a co-requisite with BIO 123 lecture. This course is designed to give you an introduction to human biology, both at the cellular level and the organismal level. I have broken down all lecture topics into one of three broad categories:

(1). Molecules to Organs. We begin with a discussion of the various types of molecules required for a cell to function properly. We discuss the individual components of a cell, what they are composed of, and their function in the cell. We will discuss the important cellular processes that allow a cell to survive, grow, and divide. We will learn about the various cell types found in the human body and how they are organized into tissues, organs, and finally organ systems. By the time we are finished with this section, you will

- Have become familiar with basic biological terminology as it pertains to human biology
- Be able to describe the basic types of biological molecules and their function found in a cell
- Be able to describe the components of a cell and their function
- Be able to describe important cellular processes such as transport, energy production, protein production, and division
- Know the different types of cells found in the body, their function, and their organization into tissues and organs
- Be able to describe how the body is organized into cavities and planes

***(2). Organ* Systems.** We will discuss the human body's 11 different organ systems. For historical reasons, the integumentary system (the only one not given its own heading) is discussed in the chapter on tissues, organs, and body organization. By the time we have finished with this section, you will

- Have mastered basic biological terminology as it pertains to organs and organ systems
- Have an understanding of each human organ system. This includes
  - The components of each system
  - The structure of each component
  - The function of each component and how this contributes to the function of the entire organ system
- An understanding of some of the more common disorders of each organ system

(3). Organismal Biology. This is the study of how the human organism functions as a whole, as well as how we came to be and how we interact with our environment. We will begin by looking at the central dogma: how cellular functions are controlled, including cellular division. We will then move onto genetics: how all aspects of our bodies are controlled by genes. We will be looking at inherited genetic disorders, as well as developmental defects (birth defects) that may, or may not, be attributable to genetics. We will look at cancer as a cellular process that involves acquired or inherited defects in specific genes and how these defects allow out of control cell growth and division, ultimately affecting the entire body. We will finish out the semester with a look at the basics of evolutionary theory and evolutionary tree of *Homo sapiens* – us! By the time we are finished with this section, you will

- Have mastered basic biological terminology as it pertains to organismal biology
- Understand the central dogma & the different processes that are included in it
- Understand the basics of cellular division (both mitosis & meiosis)
- Understand how meiosis functions to produce sperm and ova
- Understand the basic principles of reproduction and development, from zygote to fetus
- Have a basic understanding of the mechanisms that govern inheritance patterns
- Be able to use basic probabilities to predict the incidence of some common genetic disorders
- Be familiar with the types and causes of birth defects, as well as how to reduce their occurrence
- Have a basic understanding of the cellular processes disrupted in cancer development, as well as the epidemiology of cancer
- Understand basic evolutionary principles and be able to describe the evolutionary history of humans

By the time you are finished with BIO 123, I hope you have gained a greater appreciation of how remarkable the human body is.

Determination of Lecture Grade

Your performance within the lecture portion of BIO 123 will be assessed by the means of:

(1). Exams.

Four lecture exams. These are scheduled for the following Mondays: July 15, July 22, July 29, & August 5. You will be given a maximum of 60 minutes to complete the exam; the rest of the class time will be used for lecture. These exams will be multiple choice in nature and you will be responsible for bringing the scan-trons – you need **Form No. 30423** (it is 8.5 x 11 inches and blue). No other scan-tron form is acceptable. If you show up without a scan-tron, you will be allowed to go the bookstore, get one, then comeback and use whatever amount of time is left to work on the exam. Once the exams have been graded by the testing center, I will post the grades on Desire 2 Learn.

A non-cumulative "final exam"**.** This is no different than a regular lecture exam except it will be given during the scheduled final time slot for this class - August 10 (Friday, 10:30 – 12:30). It will be of the same format as the previous lecture exams and will cover material discussed in class since the third lecture exam. Again, you must bring a scan-tron.

Each exam is worth (100) points. Your scores on the five exams will be averaged to give you an exam grade.

(2). Homework. These are online exercises accessed through the "Mastering Biology" website that accompanies the text; you should have an access code that came with your text. If you purchased a used text, you will have to purchase an access code. There is a homework assignment that covers each lecture topic we are scheduled to talk about. There is no time limit on homework assignments but you must complete each homework topic BEFORE IT IS COVERED ON AN EXAM – this generally means that all homework must be completed before the Monday exam. The grading policy regarding homework is given on the website, but in a nutshell:

- You have unlimited attempts on a question; however, every incorrect response (before your final correct response), on a multiple choice, T/F, or matching question, will result in a 2% reduction in the points received on that question. Incorrect responses on short answer questions will not result in any loss of points (just in case of misspellings or mis-interpretation).

- The correct answers will be shown immediately upon submission of your answer. If the question is a short answer type, MAKE SURE YOU TYPE IN THE CORRECT ANSWER (if you didn't correctly answer before giving up) or that question will be counted as a "0"

- You will be able to go back and look at all the homework as you study for the exams.

Mastering Biology's website is: www.masteringbiology.com. You will need to establish an account using the access code that either came with your book or that you purchase. Once on the site the course ID for Bio 123 is: **BIOLOGY123SUMMER2013**. New books should come with a valid access code – local bookstores were given the ISBN number for a book AND an access code. If your book is used, you may have to purchase an access code once you reach the "mastering biology" website. If you are having trouble with the website, there is student support available, simply choose the "support" option at the bottom of the web page. This is a publisher supported web site – neither I nor SFA tech support can help with MasteringBiology issues; you will have to go through the student support provided by MasteringBiology.

Your scores on all the homework assignments will be averaged to give you a homework grade.

(3). Online quizzes. An online quiz will be assigned after we conclude each syllabus topic. The quiz can be accessed and taken via Desire 2 Learn (d2l.sfasu.edu). Once we finish a topic in class, the quiz will be available for 48 hours – you may take it any time during that 48 hour period and you will typically have 10 – 25 minutes to complete it. Once the 48 hours has passed, the quiz will no longer be available. If, for any reason, you fail to take an assigned online quiz, a grade of "0" will be recorded. We have 19 scheduled syllabus topics; this means there is a possibility of 19 quiz grades (I say "possibility" because we may not

finish the syllabus). No matter how many we end up taking, I will keep the BEST 10 quiz grades to average and give you a quiz grade. If you are having trouble with D2L, student help can be reached at 468-1919.

Each one of the above 3 components will count equally in the determination of your grade in the lecture portion of Bio 123:

$$Biology\ 123\ lecture\ grade = \frac{(exam\ average) + (homework\ average) + (online\ quiz\ average)}{3}$$

Determination of Bio 123 Course Grade

Your course grade will be determined by combining your lecture and laboratory grade as described below:

Biology 123 course grade:

Your grade for Biology 123 will be determined using the following formula:

$$Biology\ 123\ course\ grade = \frac{(3)(Bio\ 123\ lecture\ grade) + (Bio\ 123\ lab\ grade)}{4}$$

Note: your lecture grade accounts for 75% of your overall course grade while lab counts 25%

Letter grades for the course are assigned on the following basis

PERCENTAGE GRADE	LETTER GRADE
90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
0 – 59%	F

Expectations For Student Conduct In Bio 123

1. Attendance is expected but not mandatory. A roll sheet will be passed around each day that you will sign to indicate your presence. Bonus points MAY occasionally be awarded for attendance. Mr. McCord will announce his own attendance policy in lab.

2. I expect each person to be **ON TIME**; tardy students are distracting to both me and those who made it on time and are trying to follow the lecture.

3. If you arrive late for an exam, one of two things will happen: If no one has yet completed the exam or left the room, you will be allowed to take the exam in the time remaining; if any students have left the room, you will not be allowed to take the exam and a grade of "0" will be recorded.

4. Once the exam has begun, you will not be allowed to leave the room for any reason. If you leave, you are done with the exam.

5. Make-up exams will only be allowed in the case of a University approved absence (illness **with a Doctor's note**, a family crisis with verification from another family member, or a religious holiday). ***YOU MUST NOTIFY ME WITHIN 24 HOURS OF A MISSED EXAM TO BE ELIGIBLE FOR A MAKE UP EXAM***. If you will miss an exam due to a University sponsored outing, you must notify me before the exam date. All make-up exams will be arranged at **the instructors earliest convenience**. As per University policy (see policy A-10: Class attendance and excused absences), if you miss one week of class (4 days), you will ***NOT BE ALLOWED TO MAKE UP ANY SUBSEQUENTLY MISSED WORK, EVEN IF THAT PARTICULAR ABSENCE IS EXCUSED.***

6. All pagers and cell phones must be turned off or set to silent mode before entering this class. Further, cell phones must be kept off the desks during class time.

E-mail policy

I will be periodically communicating with you via e-mail. I use your student accounts & addresses for this purpose. It is your responsibility to check your e-mail regularly and, if you have your student account forwarded to some secondary account, to be certain that this is not full and can receive any messages. Due to security and privacy issues, I will not discuss via e-mail any issue regarding class performance (grades, attendance, questions about your exam answers, etc.). For any other correspondence, I check my e-mail once a day – between 8 & 8:30 when I arrive. I will answer e-mail, if possible (I have almost 65 students and simply can't answer all e-mail queries), during the next scheduled office hours block. E-mail should be considered a form of professional communication; as such, all e-mail messages should contain proper spelling and grammar – If I can't figure out what you are trying to tell me, I can't help you (this is an issue more often than you might think). I do not check e-mail in the evening or on weekends.

Phone Policy

If you wish to speak with me via phone, do so during office hours when I am available as I cannot return all phone calls.

Laboratory

I have no control over any policy, either procedural or grading, that may be implemented in BIO 123L (laboratory). Any questions or concerns with BIO 123L must be addressed to your laboratory coordinator.

Academic Integrity (policy A-9.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades (Semester Grades, policy A-54)

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

Students with Disabilities

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Acceptable Student Behavior (Student Conduct Code, policy D-34.1)

Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.