1. Catalog Description of the Course. [Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of ___ units); time distribution (Lecture ___ hours, laboratory ___ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]

BIOL 424. HUMAN PHYSIOLOGY (3)
Three hours of lecture per week.
Prerequisite: CHEM 122; BIOL 300 with a grade of C better.
Study of human physiology at both the cellular and organ system levels including neurophysiology, muscle physiology, cardiovascular physiology, respiration, kidney function, hormone function and reproduction.

2. Mode of Instruction.

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Units</th>
<th>Hours per Unit</th>
<th>Benchmark Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>30</td>
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</tbody>
</table>

3. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) [Use as much space as necessary]

BIOL 424 is an elective course for Biology majors. This is an advanced course in human physiology which will be of interest to students desiring a well-rounded education in biology as well as pre-professional students.

Students who successfully complete this course will be able to:
- Describe the function and structure of cells including the metabolic reactions that occur in cells
- Outline, at the molecular level, the transmission of signals in excitable cells
- Explain the structure and function of organ systems in the human body

4. Is this a General Education Course

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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</table>

If Yes, indicate GE category:

- A (English Language, Communication, Critical Thinking)
- B (Life Sciences)
- C (Fine Arts, Literature, Languages & Cultures)
- D (Social Perspectives)
- E (Human Psychological and Physiological Perspectives)

5. Course Content in Outline Form. [Be as brief as possible, but use as much space as necessary]

- Homeostasis
- Cellular structure
- Cellular metabolism
- Membrane transport
- Endocrine signaling
- Nerve cells and electrical signaling
The nervous system
Muscle physiology
The cardiovascular system
The respiratory system
The urinary system
The digestive system
The reproductive system
The immune system

6. References. [Provide 3 - 5 references on which this course is based and/or support it.]


7. List Faculty Qualified to Teach This Course.
Nancy Mozingo, other biology faculty

8. Frequency.
a. Projected semesters to be offered: Fall ___x____ Spring _____ Summer ______

9. New Resources Required.
a. Computer (data processing), audio visual, broadcasting needs, other equipment
b. Library needs
c. Facility/space needs

10. Consultation.
Attach consultation sheet from all program areas, Library, and others (if necessary)

11. If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

____ Nancy Mozingo ___________________________ 6 January 2003 __________________________
Proposer of Course Date