CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

NEW COURSE PROPOSAL

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 214. FROM EGG TO ORGANISM (3)
Three hours of lecture per week.
How does a single cell give rise to a complex organism? How are stem cells produced and what are possible uses of stem cell lines? How are clones produced and what are the ethical considerations for cloning human beings? How are test tube babies produced? This course will explore answers to these questions by presenting an overview of developmental biology and then focusing on the impact of biotechnology on humankind. No credit given toward the major in biology.
GenEd: B2

2. Mode of Instruction.

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<th>Units</th>
<th>Hours per Unit</th>
<th>Benchmark Enrollment</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>3</td>
<td>1</td>
<td>60</td>
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<td>Seminar</td>
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<td>Laboratory</td>
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<td>Activity</td>
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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 214 is a biology course for non-majors that is designed to introduce students to developmental biology and some of the emerging issues associated with this field such as stem cell research, cloning and reproductive technologies.

Students who successfully complete this course will be able to:
- Outline stages in the developmental of a human being
- Explain the process of cell division in both somatic and germ cells
- Describe the process by which embryonic stem cell lines are produced and their potential uses in curing disease.
- Explain how clones are produced and discuss the ethical consideration for cloning human beings
- Identify and interpret subject appropriate scientific literature

4. Is this a General Education Course

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<tr>
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<th>YES</th>
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<td>If Yes, indicate GE category:</td>
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<tr>
<td>A (English Language, Communication, Critical Thinking)</td>
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<td>B (Life Sciences)</td>
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<td>C (Fine Arts, Literature, Languages &amp; Cultures)</td>
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<td>D (Social Perspectives)</td>
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<td>E (Human Psychological and Physiological Perspectives)</td>
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5. Course Content in Outline Form. [Be as brief as possible, but use as much space as necessary]

Early Development and The Fetal-Maternal Relationship
Transport of Gametes and Fertilization
Cleavage and Implantation
The Formation of Germ Layers and Early Derivatives
Establishment of the Basic Embryonic Body Plan
Placenta and Extraembryonic Membranes
Developmental Disorders -- Causes, Mechanisms, and Patterns
Development of the Body Systems
Reproductive technologies
Embryonic stem cell technologies
Cloning

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, Louise Lutze-Mann

8. Frequency.
a. Projected semesters to be offered: Fall _____ Spring ____x_ 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

NEWCRSFR 9/30/02