

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

NEW COURSE PROPOSAL

PROGRAM AREA: **BIOLOGY**

- 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 332. CANCER AND SOCIETY (3)

Three hour lecture/discussion per week.

The underlying molecular causes of cancer, the impact of environmental and genetic factors on cancer causation and prevention, recent advances in diagnosis and treatment of the disease, and the impact that this disease, which will affect one in three adults, has on society. No credit given toward the biology major.

GenEd: B2, D, and Interdisciplinary

- 2. Mode of Instruction.**

	Units	Hours per Unit	Benchmark Enrollment
Lecture	___3___	___1___	___30___
Seminar	_____	_____	_____
Laboratory	_____	_____	_____
Activity	_____	_____	_____

- 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]*

This is an upper division General Education course designed to acquaint non-biology majors with the underlying molecular causes of cancer, the impact of environmental and genetic factors on cancer causation and prevention, recent advances in diagnosis and treatment of the disease, and the impact that this disease, which will affect one in three adults, will have on society. The prevalence of cancer in our society justifies the need for a wider understanding of this complex group of diseases and the regimes that are used for diagnosis and treatment.

Students completing this class should be equipped with the knowledge and skills to:

1. Apply inductive and deductive reasoning to evaluate the biological mechanisms that lead to the induction of cancer.
2. Assess the contribution of environmental and genetic factors to cancer causation.
3. Describe the latest techniques in the diagnosis and treatment of cancer.
4. Identify public health issues and concerns attributable to cancer.
5. Evaluate realistically information derived from current literature, news media and on-line sources on the causes, prevention and treatment of cancer..

- 4. Is this a General Education Course** **YES**

If Yes, indicate GE category:

A (English Language, Communication, Critical Thinking)	
B (Mathematics & Sciences)	B2
C (Fine Arts, Literature, Languages & Cultures)	
D (Social Perspectives)	X
E (Human Psychological and Physiological Perspectives)	

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

- Introduction
- Characteristics of human cancer
- The genetic basis of cancer

- Environmental factors in cancer
- Diagnosis and treatment of cancer
- Cancer Immunology
- Prevention of cancer
- Cancer epidemiology
- The societal impact of cancer

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

1. **Cancer Biology**, by R.W. Ruddon, Oxford, 3rd Ed, 2001, ISBN 0-1950-9691-6
2. **Biology of Cancer** by R. Phillis, S. Goodwin and M. Palladino, Addison Wesley & Benjamin Cummings, 2003, ISBN 0-8053-4687-0
3. **Cancer The Evolutionary Legacy**, by M. Greaves. Oxford, 2000, ISBN 0-1926-2834-8
4. **American Cancer Society: Informed Decisions, the Complete Book of Cancer Diagnosis, Treatment and Recovery**, by GP Murphy, LB Morris and D Lange, Viking, 1997, ISBN 0-6708-5370-4.

7. List Faculty Qualified to Teach This Course.

Louise Lutze-Mann
Biology Faculty

8. Frequency.

a. Projected semesters to be offered: Fall x 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.

Louise Lutze-Mann	1-3-03
Proposer of Course	Date