DOCUMENT N: COURSE AND PROGRAM DEVELOPMENT COVER SHEET

See Course and Program Development Policy and Procedures for Instructions

SCHOOL: LAW ❑ MSB ❑ YGCLA X❑	**Contact Name:** Peggy Potthast; Ronald Castanzo **Phone:** x5342; x1927
DEPARTMENT / DIVISION: Division of Liberal Studies	
SHORT DESCRIPTION OF PROPOSAL (state name of action item 1-20 and course name, code & number / program affected):	
#8 – New Course BIOL 121 Fundamentals of Biology with LAB	
PROPOSED SEMESTER OF IMPLEMENTATION: Fall X❑ Spring ❑ Year: 2008	

Box 1: TYPE OF ACTION	ADD(NEW) X❑	DEACTIVATE ❑	MODIFY ❑	OTHER ❑
Box 2: LEVEL OF ACTION	Non-Credit ❑	Undergraduate X ❑	Graduate ❑	OTHER ❑

	Box 3: ACTION ITEM (check appropriate boxes)	DOCUMENTS REQUIRED (see box 4 below)	IMPACT REVIEWS (see box 5 on back)	APPROVAL SEQUENCE (see box 6 on back)
	1. Experimental Course [1]	NOP	a, c, e	AC
	2. Course Title	NO		ABCD
	3. Course Credits	NO		ABCD
	4. Course Number	NO		ABCD
	5. Course Level	NO		ABCD
	6. Pre & Co-Requisite	NO		ABCD
	7. Course Description	NOP		ABCDEF
X	8. New Course	NOP		ABCDEF
	9. Deactivate a Course	NO		ABCDEF
	10. Program Requirements	NO	b, c, d, e	ABCDEF
	11a. UG Specialization (24 credits or less)	NO	a, b, c, d, e	ABCDEF
	11b. Masters Specialization (12 credits or less)	NO	a, b, c, d, e	ABCDEF
	11c. Doctoral Specialization (18 credits or less)	NO	a, b, e	ABCDEF
	12. Closed Site Program	NOT	e	ABCDHIK
	13. Program Suspension [9]	NO,5	a, e	ABCDEGIK
	14a. Certificate Program (ug/g) exclusively within existing degree program	NO	a, c, e	ABCDEFHIK
	14b. Certificate Program (ug/g) where degree programs do not exist or where courses are selected across degree programs (12 or more credits)	NOQR, 6	a, c, e	ABCDEFHJL
	15. Off-Campus Delivery of Existing Program	NO, 4	a, b, c, e	ABCDHIL
	16a. UG Concentration (exceeds 24 credit hours)	NO, 5	a, c, d, e	ABCDEFGHJL
	16b. Masters Concentration (exceeds 12 credit hours)	NO, 5	a, c, d, e	ABCDEFGHJL
	16c. Doctoral Concentration (exceeds 18 credit hours)	NO, 5	a, c, d, e	ABCDEFGHJL
	17. Program Title Change	NO, 5	a, c, d, e	ABCDEFGHJL
	18. Program Termination	NO, 10	d, e	ABCDEFGHIK
	19. New Degree Program	NOQR, 3,8	a, c, d, e	ABCDEFGHJL
	20. Other	Varies	Varies	Varies

Box 4: DOCUMENTATION (check boxes of documents included)					
X	N. This Cover Sheet		Q. Full 5-page MHEC Proposal		T. Other
X	O. Summary Proposal		R. Financial Tables (MHEC)		
X	P. Course Definition Document		S. Contract		

1. Approval of experimental course automatically lapses after two offerings unless permanently approved as a new course.
2. Codes: a) Library Services (Langsdale or Law) b) Office of Technology Services c) University Relations d) Admissions
3. Letter of Intent is required by USM at least 30 days before a full proposal can be submitted. Letter of Intent requires only the approval of the dean and the provost and is forwarded to USM by the Office of the Provost.
4. One-page letter to include: Program title & degree/certificate to be awarded; resources requirements; need and demand; similar programs; method of instruction; and oversight and student services (MHEC requirement)
5. One-page letter with description and rational (MHEC requirement)
6. One or two-page document that describes: centrality to mission; market demand; curriculum design; adequacy of faculty resources; and assurance program will be supported with existing resources. (MHEC requirement)
7. Learning objectives, assessment strategies; fit with UB strategic plan
8. Joint Degree Program or Primary Degree Programs require submission of MOU w/ program proposal. (MHEC requirement)
9. Temporary suspension of program to examine future direction; time not to exceed two years. No new students admitted during suspension, but currently enrolled students must be given opportunity to satisfy degree requirements.

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#8 – New Course BIOL 121 Fundamentals of Biology with LAB

10. Provide:
    a. evidence that the action is consistent with UB mission and can be implemented within the existing program resources of the institution.
    b. proposed date after which no new students will be admitted into the program;
    c. accommodation of currently enrolled students in the realization of their degree objectives;
    d. treatment of all tenured and non-tenured faculty and other staff in the affected program;
    e. reallocation of funds from the budget of the affected program; and
    f. existence at other state public institutions of programs to which to redirect students who might have enrolled in the program proposed for abolition.
11. University Council *review* (for a recommendation to the President or back to the Provost) shall be limited to curricular or academic policy issues that may potentially affect the University's mission and strategic planning, or have a significant impact on the generation or allocation of its financial resources.

Box 5: IMPACT REVIEW	SIGNATURES (see procedures for authorized signers)	DATE
a. Library ❑ No impact ❑ Impact statement attached	Director or designee:	
b. OTS ❑ No impact ❑ Impact statement attached	CIO or designee:	
c. University Relations ❑ No impact ❑ Impact statement attached	Director or designee:	
d. Admissions ❑ No impact ❑ Impact statement attached	Director or designee:	
e. Records ❑ No impact ❑ Impact statement attached	Registrar or designee:	

Box 6: APPROVAL SEQUENCE	APPROVAL SIGNATURES	DATE
A. Department / Division	Chair: Margaret J. Pittman	5/1/08
B. Final faculty review body within each School	Chair:	5/19/08
C. College Dean	Dean:	5/22/08
D. Provost and Senior Vice President for Academic Affairs	Provost:	5/23/08
E. Curriculum Review Committee (UFS subcommittee)	Chair:	5/26/08
F. University Faculty Senate (UFS option)	Chair:	
G. University Council (see # 11 above)	Chair:	
H. President	President:	
I. Board of Regents – notification only		
J. Board of Regents – approval		
K. MHEC – notification only		
L. MHEC – approval		
M. Middle States Association notification	Required only if the mission of the University is changed by the action	

UNIVERSITY OF BALTIMORE

DOCUMENT O: SUMMARY PROPOSAL

See Course and Program Development Policy and Procedures for Instructions

SCHOOL: LAW ❑ MSB ❑ YGCLA X❑	**Contact Name**: Peggy Potthast; Ron Castanzo **Phone**: x5342; x1927
DEPARTMENT / DIVISION: Division of Liberal Studies	
SHORT DESCRIPTION OF PROPOSAL (state action item 1-23 and course name & number or program affected):	
#8 – New Course BIOL 121 Fundamentals of Biology with LAB	
PROPOSED SEMESTER OF IMPLEMENTATION: Fall X❑ Spring ❑ Year: 2008	

O-1: Briefly describe what is being requested:

We wish to create a 4-credit course, BIOL 121 Fundamentals of Biology with LAB.

For new courses or changes in existing courses (needed by Registrar)		
OLD Title:	Course # / HEGIS Code:	Credits:
NEW Title: Fundamentals of Biology with LAB (Fund of Biology with LAB)	Course # / HEGIS Code: BIOL 121	Credits: 4

O-2: Set forth the rationale for the proposal:

When we developed the new laboratory biology courses we divided the course into two parts – a 3-credit lecture and a 1-credit laboratory. The decision about how to implement the courses in PeopleSoft leads us to the discovery that it will work best if these are 4-credit courses (lecture and lab rolled into one).

Document P

1. Date Prepared – March 10, 2008

2. Prepared by – Ronald Castanzo and Peggy Potthast

3. Department – Division of Liberal Studies

4. Course Numbers – BIOL 121

5. Course Title – Fundamentals of Biology with LAB

6. Credit Hours – 4 (15 150-minute lecture classes; 15 100-minute lab classes)

7. Prerequisites – none

8. Course Purpose – lab science general education

9. Rationale – this course or a comparable one is required of all undergraduates

10. Catalog Description THIS COURSE SATISFIES THE LABORATORY SCIENCE GENERAL EDUCATION REQUIREMENT.
Introduction to the diversity of life on Earth. Cell structure, reproduction and chemistry are discussed. Provides an overview of the evolution, physiology, and ecology of animals, plants and microbial life, including the impact of human behavior on ecosystems. The laboratory component of the course focuses on the design, practice and reporting of science. Laboratory exercises and experiments include an introduction to light microscopy, cell division, genetics, cellular respiration, photosynthesis, environmental science, and the examination of bacterial, botanical and zoological specimens. Laboratory fee required.

11. Suggested approximate class size – 30 for lecture; 15 for each associated lab

12. Content Outline

For lecture:

1. Introduction to biology; essential chemistry of biology
2. cell structure and metabolism
3. cellular respiration
4. photosynthesis
5. reproduction and inheritance
6. genetics
7. molecular biology

8. gene regulation; DNA technology
9. evolutionary theory
10. evolution of microbial life
11. evolution of plans and fungi
12. evolution of animals
13. population ecology
14. ecology and ecosystems
15. human impact on the environment

For laboratory:

1. introduction to scientific investigation; microscopy
2. cell structure; single-celled life: prokaryotes and eukaryotes
3. photosynthesis
4. cellular respiration
5. chromosomes, mitosis, and meiosis
6. introduction to genetics; chi-square test
7. human genetics; Hardy-Weinberg equation
8. forensic use of molecular biology
9. microorganisms and disease
10. plant diversity
11. plant classification
12. animal diversity
13. animal behavior
14. population biology
15. environmental science

13. Learning Goals

1. to understand the basic terminology, fundamental concepts, and significant persons in the fields evolutionary biology, genetics, cell biology, botany, zoology and ecology;
2. to be able to extract and summarize information form a peer review journal article dealing with evolutionary biology, genetics, cell biology , biology, zoology, and ecology;
3. to understand how science is conducted (including the construction and testing of hypotheses) and what distinguishes scientific fields from other types of disciplines;
4. to understand the connection between fundamental principles and concepts of the biological science and the natural phenomena we encounter in our everyday lives;
5. to understand how biologists collect scientific data in laboratory and field settings;
6. to learn how to use the basic tools and techniques cell biologists, zoologists, botanist, geneticists, etc., use in research;
7. to be able to analyze scientific data using basic descriptive and inferential statistical techniques;
8. to be able to write a brief scientific report on a laboratory or field study (including a discussion of materials and methods and results).

14. Assessment Strategies

1. frequent quizzes and/or short assignments (e.g., observational studies, completion of take-home questions, etc.);

2. at least two exams including a final exam;
3. writing assignment (stressing scientific format and writing) that require students to utilize on a limited basis the peer review literature (articles chosen by the instructor are suggested);
4. written laboratory reports (stressing scientific format and style) of exercises and/or experiments performed during laboratory sessions;
5. field trip reports, oral presentations, and other kinds of assessment tools are possible, but not essential, for the instruction of the course.

15. Suggested text(s) and Materials (example: textbooks, calculator)

Campbell, N.A., Reece, J.B., Taylor, M.R., and Simon, E.J. 2006. *Essential Biology*. Benjamin Cummings.
Dickey, J.L. 2003. *Laboratory Investigations for Biology*. Benjamin Cummings.

Other appropriate texts:
Campbell, N.A., Reece, J.B., Taylor, M.R., and Simon, E.J. 2006. *Biology: Concepts and Connections*. Benjamin Cummings.
Enger, E. 2007. *Concepts in Biology*. McGraw-Hill.
Gunstream, S.E. 2005. *Explorations in Basic Biology*. Prentice Hall.
Johnson, G.B. and Losos, J. 2008. *Essentials of the Living World*. McGraw-Hill.
Mader, S.S. 2007. *Biology*. McGraw-Hill.
Mader, S.S. 2007. *Lab Manual to Accompany Biology*. McGraw-Hill.
Presson, J.C. and Jenner, J.V. 2008. *Biology: Dimensions of Life*. McGraw-Hill.
Starr, C. 2006. *Basic Concepts in Biology*. Brooks/Cole.
Starr, C. 2007. *Biology: Today and Tomorrow without Physiology*. Brooks/Cole.
Starr, C. and Taggart, R. 2006. *Biology: The Unity and Diversity of Life*. Brooks/Cole.

16. Lab Fees – Required.