

**ARIZONA STATE UNIVERSITY
PROPOSAL TO ESTABLISH A NEW UNDERGRADUATE DEGREE**

This template is to be used only by programs that have received specific written approval from the Provost's office to proceed with internal proposal development and review. A separate proposal must be submitted for each individual new degree program.

DEGREE PROGRAM INFORMATION

College/School(s) offering this degree: New College

Unit(s) within college/school responsible for program: Mathematical and Natural Sciences

If this is for an official joint degree program, list all units and colleges/schools that will be involved in offering the degree program and providing the necessary resources: NA

Proposed Degree Name:Life Sciences

Undergraduate Degree Type: BA-Bachelor of Arts

If Degree Type is Other, provide proposed degree type:

and proposed abbreviation: Life Sci

Proposed title of major: Bachelor of Arts in Life Sciences

Is a program fee required? Yes No

Requested effective term: Fall and year: 2011

(The first semester and year for which students may begin applying to the program.)

PROPOSAL CONTACT INFORMATION

(Person to contact regarding this proposal)

Name: Pamela A. Marshall

Title: Associate Professor

Phone: 602-543-6143

email: Pamela.Marshall@ASU.edu

DEAN APPROVAL

This proposal has been approved by all necessary unit and College/School levels of review, and the College/School(s) has the resources to offer this degree program. I recommend implementation of the proposed degree program. (Note: An electronic signature, an email from the dean or dean's designee, or a PDF of the signed signature page is acceptable.)

Elizabeth Langland

11/30/10

College Dean name:

College Dean signature



Date: _____

College Dean name:

(if more than one college involved)

College Dean signature _____

Date: _____

**ARIZONA STATE UNIVERSITY
PROPOSAL TO ESTABLISH A NEW UNDERGRADUATE DEGREE**

This proposal template should be completed in full and submitted to the University Provost's Academic Council [<mailto:curriculum@asu.edu>]. It must undergo all internal university review and approval steps including those at the unit, college, and university levels. A program **may not** be implemented until the Provost's Office notifies the academic unit that the program may be offered.

DEGREE PROGRAM INFORMATION

Undergraduate: BA-Bachelor of Arts

**If Degree Type is Other, provide proposed degree type:
and proposed abbreviation: Life Sci**

Proposed title of major: Bachelor of Arts in Life Sciences

1. PURPOSE AND NATURE OF PROGRAM

A. Brief program description (This is a catalog type description. Include the distinctive features of the program that make it unique. Do not include program or admission requirements.)

The intricate connections among biology, chemistry and physics form the basis of the life sciences curriculum. The B.A. program emphasizes interdisciplinary learning of the life and physical sciences, emphasizing the connectedness among disciplines. The organization and flexibility of the B.A. encourages students to deeply study another subject outside their major, by encouraging students to double major or minor in another subject area.

2. STUDENT LEARNING OUTCOMES AND ASSESMENT

A. List the knowledge, competencies, and skills students should have when they graduate from the proposed degree program. (You can find examples of program Learning Outcomes at (<http://www.asu.edu/oue/assessment.html>))

When a student graduates with a BA in Life Sciences they will have the following competencies:

1. Students will understand the scientific method and be familiar with science as a way of knowing.
2. Students will be familiar with several different methods of experimentation, in chemistry and biology.
3. Students will have a foundational knowledge in the cognate areas of mathematics, physics, and chemistry.
4. Students will have an understanding of cell biology, genetics, and ecology.
5. Students will understand how cells, tissues, organs, and organisms work and interact with each other.

B. Describe the plan and methods to assess whether students have achieved the knowledge, competencies and skills identified in the Learning Outcomes. (You can find examples of assessment methods at (<http://www.asu.edu/oue/assessment.html>))

Course Embedded Assessment – Each course in the BA degree in Life Sciences will specify a set of learning objectives and that will be linked to the student competencies listed above. These learning objectives will be put into a series of assessments in context of the course material. We will use course embedded assessment, exams, assignments, and written and oral presentations as a means of assessing students' competence in the given competency areas. Students will be assessed by specific in class activities or exams to determine their understanding and mastery of the materials and skills in the course in parallel with assessment plans for the re-accreditation.

3. CURRICULUM OF THE PROPOSED PROGRAM

Total credit hours must be 120 to include: first year composition, general studies, core/required courses, program specific electives, and any additional requirements.

A. Major Map. Please prepare and attach a Major Map. If there are concentrations in this degree program, prepare a separate Major Map for each one. (Examples of Major Maps can be found at <http://provost.asu.edu/curriculum>) See attached

B. Total credit hours required for this program: 40-44

C. Core/Required Courses.

- i. Total required and/or core course credit hours: 40-44
- ii. List the name, prefix, and credit hours for each required/core class for this program

BIO 181 General Biology I (4)
BIO 182 General Biology II (4)
BIO 320 Fundamentals of Ecology (3)
LSC 347 Fundamentals of Genetics (3)
BIO 353 Cell Biology (3)

CHM 113 General Chemistry I (4)
CHM 116 General Chemistry II w/Qualitative Analysis (4)

MAT 170 Precalculus (3) or higher

ONE OF THE FOLLOWING SEQUENCES

CHM 231 Elementary Organic Chemistry Lecture (3)
CHM 235 Elementary Organic Chemistry Lab (1)

OR

CHM 233 General Organic Chemistry I Lecture (3)
CHM 237 General Organic Chemistry I Lab (1)
CHM 234 General Organic Chemistry II Lecture (3)
CHM 238 General Organic Chemistry II Lab (1)

ONE OF THE FOLLOWING SEQUENCES

PHY 101 Introduction to Physics (4)
GLG 101 Introduction to Geology I (Physical) (3)
GLG 103 Introduction to Geology Lab (1)

OR

PHY 111 General Physics I (3)
PHY 113 General Physics I Lab (1)
PHY 112 General Physics II (3)
PHY 114 General Physics II Lab (1)

D. Program Specific Electives.

- i. Total required program elective credit hours: 15
- ii. List the name, prefix, and credit hours for any program specific electives for this program:

15 credit hours selected from 300-level and 400-level courses with the prefixes BCH, BIO, LSC, MIC, or PLB.

No more than 4 credit hours may be from the following courses:

- LSC 305 Biology Behind the Crime Scene (4)
- LSC 310 Natural History of Arizona (3)
- LSC 311 Field Natural History (1)
- LSC 365 The Human Organism (3)
- IAS415 Life in the Universe (3)
- IAS416 Black Holes and Beyond (3)

No more than 3 credit hours may be from the following courses:

- LSC 394 Careers in the Natural and Health Sciences (1)
- LSC 484 Internship (1-3)
- LSC 499 Directed Research (1-3)

E. Additional Program Requirements, if any. List and describe any capstone experiences, milestone, and/or additional requirements for this degree program:
none

F. Are any concentrations to be established under this degree program? Yes No

i. If "Yes", please check one:

- Students must select a concentration as part of this degree program
- Concentrations are optional

ii. List courses & additional requirements for the proposed concentration (s):

Concentration Name	Total credit hours	Core/Required Courses for Concentration (include course name and prefix)	Total Core credit hours	Program Specific Electives (include course name and prefix)	Total Elective credit hours	Additional Requirements (i.e. milestones, capstones)

(Please expand table as needed. Right click in white space of last cell. Select "Insert Rows Below")

4. NEW COURSE DEVELOPMENT

A. Will a new course prefix(es) be required for this degree program? Yes No

If yes, complete the [request for establishment of a new prefix](#) for each prefix and submit with this proposal.

B. New Courses Required for Proposed Degree Program. List all new courses required for this program, including course prefix, number and course description.
 None

5. PROGRAM NEED. Explain why the university needs to offer this program (include target audience and market).

A BA degree involves, by design, less required courses in a subject area than a BS degree. This allows the student to take a broader range of courses than can be done with a traditional BS degree. The New College is poised to become the elite liberal arts College of ASU, excelling at interdisciplinarity. As such, a BA degree is perfect for our college. With the emphasis on preparing students for the future, the

flexibility of the BA degree will allow our students to double major, minor, or explore in depth other areas of interest with ease.

6. **IMPACT ON OTHER PROGRAMS.** List other academic units that might be impacted by the proposed program and describe the potential impact (e.g., how the implementation of this program might affect student headcount/enrollment, student recruitment, faculty participation, course content, etc. in other programs). Attach letters of collaboration/support from impacted programs.

This degree plan may take students away from the BS in Life Sciences degree, as students may find the flexibility of the program attractive. This degree program will add students to courses in other Divisions, Education, and the Carey School, as students will take courses in these programs.

7. **PROJECTED ENROLLMENT** How many new students do you anticipate enrolling in this program each year for the next five years? Please utilize the following tabular format.

5-YEAR PROJECTED ANNUAL ENROLLMENT					
	1st Year	2nd Year (Yr 1 continuing + new entering)	3rd Year (Yr 1 & 2 continuing + new entering)	4th Year (Yrs 1, 2, 3 continuing + new entering)	5th Year (Yrs 1, 2, 3, 4 continuing + new entering)
Number of Students Majoring (Headcount)	20	40	60	80	80

8. **ACCREDITATION OR LICENSING REQUIREMENTS (if applicable).** Provide the names of the external agencies for accreditation, professional licensing, etc. that guide your curriculum for this program, if any. Describe any requirements for accreditation or licensing.
none

9. **FACULTY and STAFF**

- a. **Current Faculty.** List the name, rank, highest degree, area of specialization/expertise and estimate of the level of involvement of all current faculty who will teach in the program.

Faculty	How their Expertise Fits into the Degree
Becky Ball, PhD, Assistant Professor	New hire in Environmental science
Thomas Cahill, PhD, Assistant Professor	Teaches chemistry
Charles Deutch, PhD, Associate Professor	Teaches Cell Biology and Biochemistry
Chad Johnson, PhD, Assistant Professor	Teaches Animal Behavior
Peter Jurutka, PhD, Associate Professor	Teaches Biochemistry and Molecular Genetics
Pamela A. Marshall, PhD, Associate Professor	Teaches Genetics
Susie Sandrin, Ph.D., Clinical Faculty	Teaches chemistry and environmental science courses
Todd Sandrin, PhD, Associate Professor	Teaches freshman biology, Microbiology
Udo Savalli, PhD, Lecturer	Teaches freshman biology, Vertebrate Zoology
Francisco Solis, PhD, Associate Professor	Teaches physics
Brian Sullivan, Ph.D., Professor	Teaches Natural History and Herpetology
Ken Sweat, PhD, Senior Lecturer	Teaches freshman biology, Biometry
Carl Wagner, PhD, Assistant Professor	Teaches Organic Chemistry

- b. **New Faculty.** Describe the new faculty hiring needed during the next three years to sustain the program. List the anticipated hiring schedule and financial sources for supporting the addition of these faculty.
none
- c. **Administration of the program.** Explain how the program will be administered for the purposes of admissions, advising, course offerings, etc. Discuss the available staff support.

The program will be administered by the Division of Mathematical and Natural Sciences in the New College of Interdisciplinary Arts and Sciences. Admissions will be handled by the usual ASU admissions procedures; there will be no special admission requirements for this program. Advising for this program will be provided by the advisors (currently two) in the Division. These advisors currently service the three majors in our Division; Applied Computing, Applied Mathematics, and Life Sciences. Students will be advised on an individual basis, by an advisor in the Division of Mathematical and Natural Sciences and if necessary by an advisor in the Division or College housing the concentration, emphasis, or second major. Students will choose, in consultation with an advisor, their individualized course of study based upon prior experiences and career aspirations. Students will have ongoing advising as needed. The advising for the new program will be added to their duties. Teaching schedules and course offerings by semester are determined by the Division Director in consultation with the Associate Director, faculty, and advisors. Technology support will be provided by ASU's UTO office and the New College technology support staff.

10. RESOURCES (necessary to launch and sustain the program)

- a. Describe any new resources required for this program's success, such as new support staff, new facilities, new library resources, new technology resources, etc.

none

- b. Explain where you will get the resources to support this program.

All courses are existing and so no new resources are needed.

APPENDIX
OPERATIONAL INFORMATION FOR UNDERGRADUATE PROGRAMS
(This information is used to populate the [Degree Search](#) /catalog website.)

1. Contact and Support Information

Office Location (Building & Room): Pamela A. Marshall

Campus Telephone Number: 3-6143

Program email address: Pamela.marshall@asu.edu

Program website address:

2. Additional Program Description Information

A. Additional program fee required for this program? Yes No

B. Does this program have a second language requirement? Yes No

3. Career Opportunities & Concentrations Provide a brief description of career opportunities available for this degree program. If program will have concentrations, provide a brief description for each concentration.

Students have a wide variety of career options including: health professional programs, graduate school, laboratory research, science writing, environmental management and conservation, science advisors to businesses and government, and primary and secondary school teaching.

4. Additional Admission Requirements If applicable list any admission requirements (freshman and/or transfer) that are higher than and/or in addition to the university minimum undergraduate admission requirements.)

none

5. Keywords List all keywords used to search for this program. Keywords should be specific to the proposed program.

Program keywords:

biology, chemistry, ecology, environmental studies, conservation, research, medicine, dentistry, pharmacy, pre-med, physics, genetics, biotechnology, crime lab, forensics, field studies, wildlife, pre-vet, veterinarian, bioscience, botany, plants, microbiology, cell biology

Career keywords:

Physician, Pharmacist, Veterinarian, Doctor, Medical Professional, PA, Biologist, Ecologist, Chemist, Geneticist, Genetic Counselor, Forensics, Research Specialist, Lab Technician, Microbiologist

6. Area(s) of Interest

A. Select one (1) primary Area of Interest from the list below that applies to this program.

- | | |
|----------------------------------------------------------------------------|--------------------------------------------------------------|
| <input type="checkbox"/> Architecture, Construction & Design | <input type="checkbox"/> Engineering & Technology |
| <input type="checkbox"/> Artistic Expression & Performance | <input type="checkbox"/> Environmental Issues & Physical Sci |
| <input checked="" type="checkbox"/> Biological Sciences, Health & Wellness | <input type="checkbox"/> Interdisciplinary Studies |
| <input type="checkbox"/> Business, Management & Economics | <input type="checkbox"/> Languages & Cultures |
| <input type="checkbox"/> Communication & Media | <input type="checkbox"/> Law & Justice |
| <input type="checkbox"/> Computing & Mathematics | <input type="checkbox"/> Social Science, Policies & Issues |
| <input type="checkbox"/> Education & Teaching | |

B. Select any additional Areas of Interest that apply to this program from the list below.

- Architecture, Construction & Design
- Artistic Expression & Performance
- Biological Sciences, Health & Wellness
- Business, Management & Economics
- Communication & Media
- Computing & Mathematics
- Education & Teaching
- Environmental Issues & Physical Sci
- Engineering & Technology
- Interdisciplinary Studies
- Languages & Cultures
- Law & Justice
- Social Science, Policies & Issues

Updated 11- 13- 08

CIP Code: _____
(To be determined by the Office of the Executive Vice President
and the Provost of the University)

COVER SHEET

Critical Requirements: Students who follow the 2011-2012 catalog year and are entering ASU as either a first-time freshman or transfer from any Arizona public university or Arizona community college must complete critical requirements.

Course Subject and Title (courses in bold/shading are critical)	Hrs.	Upper Division	Completed ATP: <input type="checkbox"/> Yes <input type="checkbox"/> No		Completed AGEC: <input type="checkbox"/> Yes <input type="checkbox"/> No	
			Transfer Course/Grade	Minimum Grade if Required	Additional Critical Requirement Notes	
TERM ONE: 0-15 CREDIT HOURS						
ASU 101: The ASU Experience	1	<input type="checkbox"/>				<ul style="list-style-type: none"> ASU 101 is for ASU freshman students only Not required of transfer students An SAT, ACT, Accuplacer, or TOEFL score determines placement into first-year composition courses ASU Math Placement Exam score determines placement in Mathematics course Minimum 2.0 GPA in all critical courses BIO 181 & 182 must be completed by end of term 3 CHM 113 & 116 must be completed by end of term 3 Complete all critical courses by end of term 5 Complete all Math requirements by end of term 5
BIO 181: General Biology I (SQ)	4	<input type="checkbox"/>		Grade of C		
CHM 113: General Chemistry I (SQ)	4	<input type="checkbox"/>		Grade of C		
ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students	3	<input type="checkbox"/>		Grade of C		
Humanities, Fine Arts & Design (HU):	3	<input type="checkbox"/>				
TERM TWO: 16-30 CREDIT HOURS						
BIO 182: General Biology I	4	<input type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> Minimum 2.0 GPA in all critical requirements BIO 181 & 182 must be completed by end of term 3 CHM 113 & 116 must be completed by end of term 3 Complete all critical requirement courses by end of semester 5 Complete all Math requirements by end of semester 5 	
CHM 116: General Chemistry II	4	<input type="checkbox"/>		Grade of C		
ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or 108: English for Foreign Students	3	<input type="checkbox"/>		Grade of C		
Humanities, Fine Arts & Design (HU):	3	<input type="checkbox"/>				
TERM THREE: 31-45 CREDIT HOURS						
CHM 233/237: General Organic Chemistry I/Laboratory or CHM 231/235: Elementary Organic Chemistry/Laboratory	4 or 3/1	<input type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> Minimum 2.0 GPA in all critical requirements BIO 181 & 182 must be completed by end of term 3 CHM 113 & 116 must be completed by end of term 3 Complete all critical requirement courses by end of semester 5 Complete First Year Composition by the end of semester 3 Complete all Math requirements by end of semester 5 	
Complete 1 from: LSC 347: Fundamentals of Genetics or BIO 353: Cell Biology or BIO 320: Fundamentals of Ecology	3	<input checked="" type="checkbox"/>		Grade of C		
MAT170 or higher	3/4	<input type="checkbox"/>		Grade of C		
Social & Behavioral Science (SB):	3	<input type="checkbox"/>				
Literacy and Critical Inquiry (L):	3	<input type="checkbox"/>				
TERM FOUR: 46-60 CREDIT HOURS						
Complete 1 course from: LSC 347: Fundamentals of Genetics or BIO 353: Cell Biology or BIO 320: Fundamentals of Ecology	3	<input checked="" type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> Minimum 2.0 GPA in all critical requirements Complete all critical requirement courses by end of semester 5 Complete all Math requirements by end of semester 5 	
CHM 234/238: General Organic Chemistry II/Laboratory	3/1	<input type="checkbox"/>		Grade of C		
MAT 210 or higher: Brief Calculus or Humanities (HU):	4 or 3	<input type="checkbox"/>		Grade of C		
Social & Behavioral Science (SB):	3	<input type="checkbox"/>				
TERM FIVE: 61-75 CREDIT HOURS						
Complete remaining course from: LSC 347: Fundamentals of Genetics or BIO 353: Cell Biology or BIO 320: Fundamentals of Ecology	3	<input checked="" type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> Minimum 2.0 GPA in all critical requirements Complete all critical requirement courses by end of semester 5 Complete all critical requirement courses by end of semester 5 Language and Cultures: see Additional Notes, below 	
PHY 111/113: General Physics/Laboratory Or PHY101	3/1 or 4	<input type="checkbox"/>		Grade of C		
Language and Cultures: Global Awareness (G): Cultural Diversity (C):	3	<input checked="" type="checkbox"/>				
Upper division Literacy and Critical Inquiry (L):	3	<input checked="" type="checkbox"/>				
Major Elective Course:	3	<input checked="" type="checkbox"/>				
TERM SIX: 76-90 CREDIT HOURS						
PHY 112/114: General Physics/Laboratory, if one year sequence of physics desired (pre-professional programs including grad school) or GLG101/103 Introduction to Geology (Physical)	3/1 or 3/1	<input type="checkbox"/>		Grade of C	<ul style="list-style-type: none"> Language and Cultures: see Additional Notes, below 	
Language and Cultures (G): Cultural Diversity (C):	3	<input checked="" type="checkbox"/>				
Social and Behavioral Science (SB):	3	<input type="checkbox"/>				
Major Elective Course:	3	<input checked="" type="checkbox"/>		Grade of C		
Humanities (HU):	3	<input type="checkbox"/>				

Critical Requirements: Students who follow the 2011-2012 catalog year and are entering ASU as either a first-time freshman or transfer from any Arizona public university or Arizona community college must complete critical requirements.

Course Subject and Title <i>(courses in bold/shading are critical)</i>	Hrs.	Upper Division	Transfer Course/Grade	Minimum Grade if Required	Additional Critical Requirement Notes
TERM SEVEN: 91-105 CREDIT HOURS					
Computer/Statistics/Quantitative applications (CS)	4 or 3	<input type="checkbox"/>			
Awareness Area (H, C, G) or General Elective:	3	<input type="checkbox"/>			
Upper Level General Elective:	4	<input checked="" type="checkbox"/>			
Upper division Humanities, Fine Arts & Design (HU) or Social & Behavioral Science (SB):	3	<input checked="" type="checkbox"/>			
Major Elective Course:	3	<input checked="" type="checkbox"/>		Grade of C	
TERM EIGHT: 106-120 CREDIT HOURS					
Awareness Area (H, C, G) or Elective:	3	<input checked="" type="checkbox"/>			
Awareness Area (H, C, G):	3	<input type="checkbox"/>			
General Elective Course:	4	<input checked="" type="checkbox"/>			
Major Elective Course:	3	<input checked="" type="checkbox"/>		Grade of C	
Major Elective Course:	3	<input checked="" type="checkbox"/>		Grade of C	

Graduation Requirements Summary:

Total Hours (minimum 120)	Total Hrs at ASU (minimum 30)	Hrs Resident Credit for Academic Recognition (minimum 56)	Major GPA (2.000 Min.)	Total UD Hrs (minimum 50)	Total Comm. College Hrs. (64 Max)

General University Requirements: Legend

- General Studies Core Requirements:
 - Literacy and Critical Inquiry (L)
 - Mathematical Studies (MA)
 - Computer/Statistics/Quantitative applications (CS)
 - Humanities, Fine Arts, and Design (HU)
 - Social and Behavioral Sciences (SB)
 - Natural Science-Quantitative (SQ)
 - Natural Science-General (SG)
- General Studies Awareness Requirements
 - Cultural Diversity in the US (C)
 - Global Awareness (G)
 - Historical Awareness (H)
- First Year Composition

Additional Notes:

- Students take either PHY101 and GLG101/103 OR PHY111/113 and PHY112/114
- Students take either CHM 231/235 OR CHM 233/237 and CHM234/238
- Students must take 15 credit hours (major electives) selected from 300-level and 400-level courses with the prefixes BCH, BIO, LSC, MIC, or PLB.

No more than 4 credit hours may be from the following courses:

- LSC 305 Biology Behind the Crime Scene (4)
- LSC 310 Natural History of Arizona (3)
- LSC 311 Field Natural History (1)
- LSC 365 The Human Organism (3)
- IAS415 Life in the Universe
- IAS416 Black Holes and Beyond

No more than 3 credit hours may be from the following courses:

- LSC 394 Careers in the Natural and Health Sciences (1)
- LSC 484 Internship (1-3)
- LSC 499 Directed Research (1-3)

- Pre-professional students must meet with an advisor to insure that their course of study under the B.A. will fulfill prerequisites for the professional program of study.

New College of Interdisciplinary Arts & Sciences Requirements:

- Mathematics. Unless a specific math course is listed, students must complete MAT 142 or any MAT course for which MAT 117 or higher level MAT course is a pre-requisite. The mathematics requirement must be completed with a grade of "C" or better.

Critical Requirements: Students who follow the 2011-2012 catalog year and are entering ASU as either a first-time freshman or transfer from any Arizona public university or Arizona community college must complete critical requirements.

- A minimum of 12 upper-division semester hours in the major must be taken in campus resident credit. No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject of the major unless the grade in that course is at least a “C”.
- Each student in the College is required to demonstrate proficiency in the analysis of language and cultures and mathematics by passing an examination or by completing the courses specified below with a grade of “C” or higher in each course. Students considering graduate work after completion of a bachelor’s degree should consult with faculty advisors regarding language requirements in their intended areas of study.
 - Language and Cultures: This requirement may be satisfied through one of the following:
 1. completion of secondary education at a school in which the language of instruction is not English
 2. completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV
 3. completion of upper division course(s) taught in a foreign language, taken in the United States or the relevant country;
 4. completion of six semester hours of upper-division courses that have a Global Awareness (G) or Cultural Diversity (C) designation, in addition to the courses used to meet the University General Studies requirements or four (4) sequential semesters of one foreign language or two (2) semesters of a current computer language. Adjustment to upper division hours is required if lower division courses are used.
 5. completion of two sequential semesters of coursework in a current computer language

29 September 2010

Dear Pam,

I like your proposed B.A. in Life Sciences. The Undergraduate Programs Committee in SoLS has been discussing a B.A. program in Life Sciences also, for somewhat different reasons, but I think both campuses have the need for less specialized undergraduate training in life sciences than they can currently receive on either campus. Congratulations on getting there with this proposed major. While some students on the Tempe campus might move over to the West campus for this B.A. program, I don't think this would have an adverse effect on our programs overall.

I especially like the selection of core courses in the proposed B.A. because it ensures a breadth of learning that I think we lack in SoLS. The students will have a solid grounding in the fundamental principles in life sciences, chemistry and physics, and then have the freedom to choose among many options for upper division electives. (An advantage to this for SoLS is that it would reduce the enrollment pressure for upper-division lab courses that we struggle with. One criticism: I think you have underestimated the diversity of non-technical degree options that would be available to students, while perhaps overestimating its usefulness for health care professions.

SoLS supports the proposed B.A. in Life Sciences at ASU West.

Please let me know if you need additional information.

Respectfully,



Miles Orchinik
Associate Dean for Undergraduate Programs
School of Life Sciences

Subject: Letter of Support for BA in Life Sciences

Date: Wednesday, September 22, 2010 3:14 PM

From: Peter Rillero <PETER.RILLERO@asu.edu>

To: Pamela Marshall <Pamela.Marshall@asu.edu>, Roger Berger <Roger.Berger@asu.edu>

Cc: Mari Koerner <Mari.Koerner@asu.edu>, Kathleen Rutowski <Kathleen.Rutowski@asu.edu>, Barbara Giles <barbara.giles@asu.edu>

Dear Dr. Berger and Dr. Marshall:

On behalf of the Mary Lou Fulton Teacher's College, I support the proposal from the New College to develop a BA in Life Sciences. A BA program, by its very nature, allows for students to take a wider variety of classes to complete their required 120 hours, as a BA program requires less hours in the major. This BA degree also allows students to take a wider variety of science classes to fulfill their requirements and interests. Some students may take education courses and decide that they also want to major in secondary education.

This BA program will directly benefit the MLFTC students by allowing students to more easily double major in a MLFTC education degree and a science BA. It also allows a student to take a wider variety of science classes to fulfill the degree, benefiting our education majors by allowing them to increase their science understanding. Most high school science teachers have to teach two or more science subjects.

A MLFTC graduate that has double majored with a BA in Life Sciences will be more marketable, as they will have a greater breath of science knowledge, and will also more easily become a highly qualified teacher. Therefore, we fully support this BA proposal from the Division of Mathematical and Natural Sciences and see it as a positive development for our majors.

Sincerely,

Peter

Peter Rillero, Ph.D.

Associate Professor of Science Education

Arizona State University's Mary Lou Fulton Teachers College