#### **DEGREE/PROGRAM CHANGE** FORM C Form Number: C1765

Fields marked with \* are required

Name of Initiator: Kateri Ruth Morris Email: <u>katerim</u> 10-29-2015	@unm.edu Phone Number: 505 661-4693 Date:			
Associated Forms exist? No 🛛 Initiator's Title Admin Ass	istant to the Dean: Los Alamos Branch			
Faculty Contact Mary Martucci Department Science	Administrative Contact Kateri Morris Admin Email katerim@unm.edu			
Branch UNM-Los Alamos	Admin Phone 505-661-4693			
Proposed effective term Semester Fall Vear 2016 V				
Course Information				
Select Appropriate Program Undergraduate Degree Program V Name of New or Existing Program AS Science (LA) Select Category Degree V Degree Type AS Select Action Revision V				

Exact Title and Requirements as they should appear in the catalog. If there is a change, upload current and proposed requirements.

See current catalog for format within the respective college (upload a doc/pdf file)

#### Does this change affect other departmental program/branch campuses? If yes, indicate below.

Reason(s) for Request (enter text below or upload a doc/pdf file) Reducing credit hours to meet state mandated change to 60 hours for Associate degree.

Upload a document that inlcudes justification for the program, impact on long-range planning, detailed budget analysis and faculty workload implications.(upload a doc/pdf file)

FormC ASSci approved.pdf

Are you proposing a new undergraduate degree or new undergraduate certificate? If yes, upload the following documents.

Upload a two-page Executive Summary authorized by Associate Provost. (upload a doc/pdf file)

FormC ASSci approved.pdf

Upload memo from Associate Provost authorizing go-ahead to full proposal. (upload a doc/pdf file)

## Proposed Revision of UNM-LA's Associate of Science in Science

Overall rationale for change: Reducing credit hours to meet state mandated change to 60 hours for Associate degree.

## **CURRENT TEXT**

#### About the Program

This program represents the first two years of course work in general science with an emphasis in physics, chemistry, and biology. Completion of this degree will enable students to transfer to a four-year institution for additional studies leading to a bachelor's degree. It will also provide background studies for students wishing to enter the work force as technicians in science.

# **PROPOSED REVISION**

#### About the Program

This program represents the first two years of course work in general science with an emphasis in physics, chemistry, and biology. Completion of this degree will enable students to transfer to a four-year institution for additional studies leading to a bachelor's degree. It will also provide background studies for students wishing to enter the work force as technicians in science.

#### NO change in this text. **Specific Requirements Specific Requirements** A minimum of 60 credit hours with a minimum grade-A minimum of 66 credit hours with a minimum point average of 2.0. At least 15 of these 60 hours grade-point average of 2.0. At least 15 of these 66 must be UNM catalog credit courses taken in hours must be UNM-LA catalog credit courses residence. It is strongly recommended that the taken in residence. It is strongly recommended student check the specific requirements for the B.S. or that the student check the specific requirements for the B.S. or B.A. in the particular area of B.A. in the particular area of interest in science (biology, biochemistry, chemistry, earth and planetary interest in science (biology, biochemistry, science, physics, astrophysics) in order to make the chemistry, earth and planetary science, physics, best choices among the optional courses below. astrophysics) in order to make the best choices among the optional courses below. Rationale: Change in wording from UNM-LA to UNM catalog credit courses taken in residence, since the residency is UNM's not UNM-LA's. Minimum credit hours revised to 60. **General Education Requirements General Education Requirements** Writing and Speaking: (6 Credit hours) Writing and Speaking: (9 credit hours) ENGL 110: Accelerated Composition (3) ENGL 110: Accelerated Composition (3) or or ENGL 112: Composition II (3) ENGL 112: Composition II (3)

or	or
ENGL 113: Enhanced Composition (3) ENGL 120: Composition III (3)	ENGL 113: Enhanced Composition (3) ENGL 120: Composition III (3) ENGL 219: Technical Writing (3) Rationale: Changes made to meet the required number (9) of general education credits in Writin and Speaking. The additional Writing and Speaking requirement that was previously listed under "Other" required credit hours has been moved here to meet the 9-credit requirement.
MATH 162: Calculus I (4) MATH 163: Calculus II (4) MATH 163: Calculus II (4) Note: MATH 180 & 181 may be substituted for MATH 162 and 163, but will only be accepted for some bachelor degrees in science (e.g. Biology)	Mathematics and Statistics (minimum 3 credit hours)MATH 162: Calculus I (4)orMATH 180: Elements of Calculus I (3)Note: MATH 180 may be substituted for MAT 162, but will only be accepted for some bachelor degrees in science (e.g. Biology)Rationale: MATH 163 was moved to the list of technical core requirements as this course is beyond the general education requirement for mathematics.
<b>Social And Behavioral Sciences (3 Credit Hours)</b> Select any UNM Core Curriculum course in this area.	Social And Behavioral Sciences (6 Credit Hours) Select any UNM Core Curriculum course in this area Rationale: Changes made to meet the required number (6) of general education credits in Social and Behavioral Sciences.
Humanities (3 Credit Hours)	Humanities (6 Credit Hours)

Select any UNM Core Curriculum course in this area.	Select any UNM Core Curriculum course in this area.
	Rationale: Changes made to meet the required number (6) of general education credits in the Humanities.
Foreign Language (3 Credit Hours)	Foreign Language (3 Credit Hours)
Select any UNM Core Curriculum course in this area.	Select any UNM Core Curriculum course in this area.
	NO change in this text.
Fine Arts (3 Credit Hours)	Fine Arts (3 Credit Hours)
Select any UNM Core Curriculum course in this area.	Select any UNM Core Curriculum course in this area.
	NO change in this text.
TOTAL GENERAL EDUCATION REQUIREMENTS (NOT INCLUDING SCIENCE) 24 CREDIT HOURS	TOTAL GENERAL EDUCATION REQUIREMENTS (NOT INCLUDING SCIENCE) 30 CREDIT HOURS
	Rationale: Changes made to meet the required number of general education credits
Technical Core Requirements	Technical Core Requirements
Physical and Natural Sciences: (20 Credit hours)	Must Include:
Must include:	Mathematics and Statistics (4 credit hours) MATH 163: Calculus II (4)
<ul> <li>CHEM 121/123L: General Chemistry I(3)/General Chemistry I Lab (1)</li> <li>CHEM 122/124L: General Chemistry II(3)/General Chemistry II Lab (1)</li> <li>PHYC 160: General Physics (3)</li> </ul>	Note: MATH 181 may be substituted for MATH 163, but will only be accepted for some bachelor degrees in science (e.g. Biology)
<ul> <li>PHYC 160L: General Physics Lab (1)</li> <li>PHYC 161: General Physics (3)</li> <li>PHYC 161L: General Physics Lab (1)</li> </ul>	Physical and Natural Sciences: (20 Credit hours)
And additional course (4 credit hours) selected from:	CHEM 121/123L: General Chemistry I(3)/General Chemistry I Lab (1)
<ul> <li>BIOL 201: Molecular and Cell Biology</li> <li>(4)</li> </ul>	

- BIOL 202: Genetics (4)
- BIOL 203L: Ecology and Evolution (4)
- BIOL 204L: Plant and Animal Form and Function (4)
- CHEM 212: Integrated Organic Chemistry and BioChemistry (4)
- EPS 101: How the Earth Works–An Introduction to Geology (3)
- EPS 105L: Physical Geology Laboratory (1)
- EPS 201L: Earth History (4)
- ENVS 101: The Blue Planet (3)
- ENVS 102L: The Blue Planet Laboratory (2)
- PHYC 167: Problems in General Physics (1)
- PHYC 168: Problems in General Physics (1)
- PHYC 262: General Physics (3)
- PHYC 262L: General Physics Lab (1)
- PHYC 267: Problems in General Physics (1)

NOTE: CHEM 131L and 132L could be substituted for CHEM 121/123L and 122/124L, although it is not usually offered at UNM-LA. PHYC 151, 151L, 152. 152L may be substitute or PHYC 160, 160L, 161, 161L but will not be acceptable for some baccalaureate degrees in science (biology B.A. or B.S., Chemistry B.A., earth & planetary science B.A.) CHEM 122/124L: General Chemistry II (3)/General Chemistry II Lab (1)

PHYC 160: General Physics (3)

PHYC 160L: General Physics Laboratory (1)

PHYC 161: General Physics (3)

PHYC 161L: General Physics Laboratory (1)

# And an additional 6 credit hours should be selected from:

Math:

MATH 264: Calculus III (4)

### **Physical and Natural Sciences:**

- BIOL 201: Molecular and Cell Biology (4)
- BIOL 202: Genetics (4)
- BIOL 203L: Ecology and Evolution (4)
- BIOL 204L: Plant and Animal Form and Function (4)
- CHEM 212: Integrated Organic Chemistry and BioChemistry (4)
- EPS 101: How the Earth Works–An Introduction to Geology (3)
- EPS 105L: Physical Geology Laboratory (1)
- EPS 201L: Earth History (4)
- ENVS 101: The Blue Planet (3)
- ENVS 102L: The Blue Planet Laboratory (2)
- PHYC 167: Problems in General Physics (1)
- PHYC 168: Problems in General Physics (1)
- PHYC 262: General Physics (3)
- PHYC 262L: General Physics Lab (1)

PHYC 267: Problems in General Physics (1)

	Rationale: Changes made to meet the required number of credits (60). The Writing and Speaking Technical Core Requirements were moved to the General Education Writing and Speaking requirement. The Humanities Technical Core requirement was moved to fit in with the Humanities general education requirement. Rather than having two separate lists of additional courses from which students must choose X number of credits, the lists were combined into one since the lists were identical . The number of credits was edited to reflect the requirement that the total number of credits add up to 60.
OTHER (22 CREDIT HOURS)	
To complete the required number of hours for this degree, other courses (22 credit hours) may be chose from the following if not already counted in your degree program: Writing and Speaking (Maximum of 3 credit hours) • ENGL 219: Technical Writing (3)	
• ENGL 219. reclinical writing (5)	
Physical and Natural Sciences	
<ul> <li>BIOL 201: Molecular and Cell Biology (4)</li> <li>BIOL 202: Genetics (4)</li> <li>BIOL 203L: Ecology and Evolution (4)</li> </ul>	
• BIOL 204L: Plant and Animal Form and	
<ul><li>Function (4)</li><li>CHEM 212: Integrated organic Chemistry</li></ul>	
and BioChemistry (4)	
• EPS 101: How the Earth Works–An Introduction to Geology (3)	
<ul> <li>EPS 105L: Physical Geology Laboratory</li> </ul>	
<ul><li>EPS 201L: Earth History (4)</li><li>ENVS 101: The Blue Planet (3)</li></ul>	

<ul> <li>ENVS 102L: The Blue Planet Laboratory (2)</li> <li>PHYC 167: Problems in General Physics (1)</li> <li>PHYC 168: Problems in General Physics (1)</li> <li>PHYC 262: General Physics (3)</li> <li>PHYC 262L: General Physics Lab (1)</li> <li>PHYC 267: Problems in General Physics (1)</li> </ul>	
Mathematics and Statistics	
• MATH 264: Calculus III (4)	
Computer Science	
CS 151L: Computer Programming Fundamentals for Non-Majors (3)	
Humanities (Maximum 3 credit hours)	
Select any UNM core course in this area.	
Social and Behavioral Sciences (Maximum of 3 credit hours)	
Select any UNM Core Curriculum course in this area.	
Total Technical Core Requirements 42 Credit Hours	Total Technical Core Requirements 30 Credit Hours
TOTAL CREDIT HOURS 66 CREDIT HOURS	TOTAL CREDIT HOURS60 CREDIT HOURSRationale: Minimum credit hours revised to 60.

# Memorandum

To: Kay Willerton, Interim Dean of Instruction

From: Dennis Davies-Wilsop, Library Director

Date: October 19, 2015

Re: Library support for revisions of AS Program in Science Form C

Proposed changes will not impact the library's current level of support for the program.

### UNM-Los Alamos Degree Program Change Proposal

### Associate of Science in Science

The UNM-Los Alamos Curriculum Committee has approved the proposed changes associated with the degree program indicated above.

ins-William 10-30-15 Dennis Davies-Wilson, Chair Date