

**DEGREE/PROGRAM CHANGE
FORM C**

Fields marked with * are required

Name of Initiator: Karen McElveny

Email:* kamc@unm.edu

Date:* 10-05-10

Phone Number:* 505 277-1779

Initiator's Rank / Title*

Coord,Program Advisement: Chemistry General

Admini

Faculty Contact* David Bear

Administrative Contact*

Karen McElveny

Department* Chemistry & Chemical Biology

Division A&S

Program Undergrad BA

Branch Main

Proposed effective term:

Semester

Fall ▼

Year

2011 ▼

Course Information

Select Appropriate Program

Undergraduate Degree Program ▼

CIP Code

Name of New or Existing Program

* Bachelor of Arts - Chemistry

Catalog Page Number

168

Select Category

Major ▼

Degree Type

BA

Select Action

Revision ▼

Exact Title and Requirements as they should appear in the catalog.

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

REGISTRAR'S NOTE: THIS FORM REQUESTS REVISION TO THE MAJOR REQUIREMENTS, AND DELETION OF CONCENTRATIONS IN PRE-MEDICAL/PRE-PHARMACY, PRE-GRADUATE, AND GENERAL CHEMISTRY.

[BA CHANGES 11-12.doc](#)

☐ **This Change affects other departmental program/branch campuses**

Reason(s) for Request * (enter text below or upload a doc/pdf file)

To streamline the BA major so the students will have a greater choice in obtaining multidiciplinary backgrounds in the application of Chemistry to other fields.

Statements to address budgetary and Faculty Load Implications and Long-range planning

None.

* (enter text below or upload a doc/pdf file)

[B.A. Chem Requirements.docx](#)

Justification for Changing the B.A. in Chemistry Degree Requirements

The Department of Chemistry and Chemical Biology proposes to change the requirement for the B.A. Degree in Chemistry in accordance with the initiative by University of New Mexico Office of the Provost for academic departments to streamline majors and reduce concentrations. The goal of the initiative is to increase the flexibility in meeting graduation requirements and raising 4-year graduation rates. The Department of Chemistry and Chemical Biology has complied with this directive by merging all of its previous concentrations for the B.A. in Chemistry degree (Pre-Medicine, Pre-Pharmacy, General, and Pre-Graduate) into a single B.A. in Chemistry program, whose core requirements (General, Organic, Analytical and Physical Chemistry Courses) remain the same. The proposed new program does not change the number of units required to obtain the B.A. degree (32 hours), but allows significant flexibility in elective and selective courses that students may take to fulfill the requirements.

Present and Proposed Requirements for B.A. Degree in Chemistry

Present Pre-Medicine and Pre-Pharmacy Tracks	Present General Track	Present Pre-Graduate School Track	Proposed Single Track
General Chemistry (8 hr) Chem 121, 122, 123L, 124L	General Chemistry (8 hr) Chem 121, 122, 123L, 124L	General Chemistry (8 hr) Chem 121, 122, 123L, 124L	General Chemistry (8 hr) Chem 121, 122, 123L, 124L or Chem 131L, 132L
Analytical Chemistry (4 hr) Chem 253L	Analytical Chemistry (4 hr) Chem 253L	Analytical Chemistry (4 hr) Chem 253L	Analytical Chemistry (4 hr) Chem 253L
Organic Chemistry (8 hr) Chem 301, 302, 303L, 304L	Organic Chemistry (8 hr) Chem 301, 302, 303L, 304L	Organic Chemistry (8 hr) Chem 301, 302, 303L, 304L	Organic Chemistry (8 hr) Chem 301, 302, 303L, 304L
Physical Chemistry (4 hr) Chem 315	Physical Chemistry (4 hr) Chem 315	Physical Chemistry (4 hr) Chem 311/312	Physical Chemistry (4 or 6 hr) Chem 315 or Chem 311/312 (excess 2 units from 312 count towards the electives)
Biochemistry (3 hr) Chem 421 or Biochem 423			
5 hr Chem Electives ¹	8 hr of Chem Electives ¹	6 hr Chem Electives ¹	8 hr of Chem Electives¹
Physics Phyc 151, 152, 151L, 152L	Physics Phyc 151, 152, 151L, 152L	Physics Phyc 160, 161, 160L, 161L	Physics Phyc 151, 152, 151L, 152L or Phyc 160, 161, 160L, 161L
Math Math 180, 181 or Math 162, 163	Calculus Math 180, 181 or Math 162, 163	Calculus Math 162, 163, 264	Calculus Math 180, 181 or Math 162, 163

¹Electives include: Chem 411 (Physical Chem Lab, 3 credits), Chem 431 (Inorganic Chemistry, 3 credits), Chem 432L (Advanced Synthetic Chemistry Lab, 3 credits), Chem 433 (Group Theory, 3 credits), Chem 421 (Biological Chemistry, 3 credits), Chem 422 (Molecular Biology, 3 credits), Chem 425 (Organic Chemistry of Biological Pathways), Chem 424L (Experimental Chemical Biology, 4 credits), Chem 453 (Instrumental Analysis), Chem 457 (Environmental Chemistry, 3 credits), and Chem 477 (Polymer Chemistry, 3 credits), Chem 442 (Molecular Structure Analysis, 3 credits), Chem 471 (Advanced Topics in Chemistry, 3 credits), Chem 495-496 (Undergraduate Problems), Chem 497 (Senior Honors Research).

For the degree of Bachelor of Arts:

CHEM 121, 123L, 122, 124L, 253L, 301, 302, 303L, 304L, 315, and sufficient hours of electives to bring the total to 31 hours (see approved electives below). Electives must be selected from the following courses:

CHEM 421, 422, 424L, 425, 431, 471, 495-496 (no more than 2 credit hours in 495-496). The BA program must also include PHYC 151, 151L, 152, 152L and MATH 162 and 163. Those students who previously majored in a field requiring MATH 180 and 181 and then switched to the BA program in Chemistry, may substitute that sequence for MATH 162 and 163 with the permission of the Department of Chemistry chairperson. If the substitution is approved, the student must also take an additional 3 hours of Mathematics in a course approved by the Chemistry Department chairperson.