

Proposing Institution

Francis Marion University

Title of Proposed New Program

Bachelor of Science in
Pharmaceutical Studies

Submission Date

May 15, 2012
Revised: August 22, 2012



Dr. Luther Fred Carter, President

Francis Marion University

4822 E. Palmetto Street

Florence, South Carolina 29506

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A. Classification

Program Title:	Bachelor of Science in Pharmaceutical Studies
Academic Unit:	Department of Chemistry
Designation, type and level of degree:	New Undergraduate Baccalaureate Program, Undergraduate Program, Bachelor of Science in Pharmaceutical Studies
Proposed implementation date:	January 2013
CIP code:	51.2099
Program(s) Identification:	New
Site	Francis Marion University, Florence, SC
Program qualifies for supplemental Palmetto Fellows Scholarship and Life	Yes
Delivery Mode	Traditional

B. Justification

B.1. Purposes and Objectives of the Program

Francis Marion University requests approval of a Bachelor of Science in Pharmaceutical Studies (BSPS) which will be offered under a Memorandum of Agreement with the South Carolina College of Pharmacy. Students in the Pre-Pharmacy track at FMU will be eligible for this degree program if they complete the required 90 hours at FMU (including General Education), are accepted into the Doctor of Pharmacy program (PharmD) at the South Carolina College of Pharmacy, and successfully complete 30 hours in their first year at the College of Pharmacy at either the USC or MUSC campus.

B.2. Need for the Program

One of the key programs offered by the Chemistry Department at Francis Marion University is the Pre-Pharmacy Curriculum. The FMU Pre-Pharmacy program requires 70 credit hours in science, math, and general education courses. Students who complete the required courses, and who compile a good enough record, are accepted into a College of Pharmacy, most commonly the South Carolina College of Pharmacy, and transfer there after two, or three years. These students are then treated as having not graduated from Francis Marion University even though they have been successfully prepared by FMU for graduate studies in pharmacy.

This proposal would allow those students who spend three years at Francis Marion University, and who complete a minimum of 90 credit hours including all general education and pre-pharmacy requirements, to transfer back to the University 30 credit hours from their first year at the South Carolina College of Pharmacy. They would then be awarded a Bachelor of Science in Pharmaceutical Studies from the University. Francis Marion University would gain credit for a successful graduate, and the student would receive a degree in four years. Under the current system, the student receives no degree until completion of the Doctor of Pharmacy degree, after four years at the College of Pharmacy.

B.3. Congruence with Mission

FMU's mission is to make available an excellent undergraduate education in the liberal arts and to offer selected professional programs at the undergraduate and graduate level. The University responds to the needs of its region and the state through its academic programs, and for that reason, FMU has developed a Bachelor of Science in Pharmaceutical Studies degree program through a Memorandum of Understanding with the South Carolina College of Pharmacy that will be offered by the Department of Chemistry. This program addresses students' desire to be awarded a baccalaureate degree from FMU as they work toward their PharmD, and will be a worthwhile addition to the University's list of undergraduate offerings.

The addition of the BSPS degree program is congruent with the mission of Francis Marion University to offer a wide range of Undergraduate degrees including degrees in the health sciences.

B.4. Relationship to Other Programs

This proposed program will run simultaneously with other programs in the Department of Chemistry and is seen as a way to recruit students into this area.

B.5. Comparison of Program to Other Institutions

In the state only one institution offers a baccalaureate degree similar to the one proposed by Francis Marion University. Clemson University established in 1974 its Pre-professional Bachelor of Arts/Science to students who complete 3 years of undergraduate work and their first year at an accredited medical, dental, veterinary, law, or other accredited, professional school.

The proposed program will be operated in accordance with a memorandum of understanding with the South Carolina College of Pharmacy. The College of Pharmacy admission standards will be strictly adhered to, and students who wish to receive the Bachelor of Science in Pharmaceutical Studies must successfully complete 30 hours at the College of Pharmacy in addition to the minimum 90 hours required by the University.

C. Enrollment

C.1. Admission Criteria

Students interested in the Bachelor of Science in Pharmaceutical Studies program must meet the minimum admission requirements set by Francis Marion and be accepted to the University. These students must still meet the minimum admission requirements set by the South Carolina College of Pharmacy and be accepted into the PharmD program.

C.2. Projected Total Student Enrollment

The Pre-Pharmacy track at FMU has 31 students currently progressing through the program. Of these 31 students, 10 are freshmen, 11 are sophomores, 4 are juniors, and 6 are seniors. Applications to the University for Fall 2012 show a strong interest in the Pre-Pharmacy program with 64 applicants indicating the program as their desired course of study. It is anticipated that at least 15 of these 64 applicants will enroll at FMU in Fall 2012. On average FMU has 5 to 7 students accepted into a PharmD program. Most of these students enroll at the South Carolina College of Pharmacy and rarely leave the state or enroll at South University or Presbyterian College for their PharmD program. We anticipate at least 5 students per year, and possibly more, will complete the Bachelor of Science in Pharmaceutical Studies.

C.3. Table A – Total Enrollment

PROJECTED TOTAL ENROLLMENT						
YEAR	FALL		SPRING		SUMMER	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2012-2013	0	0	30*	450		
2013-2014	41	615	41**	615		
2014-2015	40	600	40	600		
2015-2016	32***	480	32	480		
2016-2017	37	555	37	555		

* We anticipate more students who are currently in the Pre-Pharmacy track to switch to the BSPS degree during the first year and extend their time at FMU.

** We anticipate that there will be some students to switch (transfer and new enrollment) to this program in the spring, while others will leave the program.

*** We anticipate the majority of the students who initially enter this program in Spring 2013 will have completed.

C.4. Table B – New Enrollment

ESTIMATED NEW ENROLLMENT						
YEAR	FALL		SPRING		SUMMER	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2012-2013	0		2*	30	0	0
2013-2014	17	255	19	285	0	0
2014-2015	30**	450	32	480	0	0
2015-2016	32	480	32	480	0	0
2016-2017	37	555	37	555	0	0

* Expect fewer students to enroll at FMU for the BSPS degree in the Spring or Summer – the majority will declare intent in the Fall. Anticipated start will be Fall 2013, so no values recorded for Fall 2012.

** We anticipate that additional students coming in during the fall semester will balance out the number of students who switch out of the major.

D. Curriculum

D.1. BSPS Curriculum

The proposed program will require a minimum of 90 hours at Francis Marion University which will include the Pre-Pharmacy curriculum (61 hours) as well as the University General Education requirements (29 hours with electives). The table below summarizes proposed curriculum:

Biology	General Biology (Bio 105, 106), Human Anatomy (Bio 205), Human Physiology (Bio 406)	16 hours
Chemistry	General Chemistry (Chem 101, 102), Organic Chemistry (Chem 201, 202)	16 hours
Mathematics	Probability and Statistics (Math 134), Differential Calculus (Math 201)	6 hours
Physics	General Physics (Phys 215, 216)	8 hours
English	English Composition (Eng 112, 200)	6 hours
Economics	Intro to Macroeconomics (Econ 204)	3 hours
Psychology	Intro to Psychology (Psy 206)	3 hours
Speech Communications	Oral Communications (Spco 101)	3 hours
	Pre-Pharmacy Courses	61 hours
Social Science	Political Science 101 or 103	3 hours
	Anthropology, Economics, Geography, Political Science, or Sociology	3 hours
Humanities	Literature (any language)	3 hours
	History	3 hours
	Art 101, Music 101, or Theater 101	3 hours
	Art, History, Literature (any language), Music, Philosophy and Religious Studies or Theater	3 hours
	Electives	11 hours
	General Education (plus Electives)	29 hours

In addition, 30 hours must successfully be completed (grade of C or higher) by the student at the College of Pharmacy. The first year at the College of Pharmacy includes the following curriculum:

Fall P1 (semester 1)	Hours	Spring P1 (semester 2)	Hours
SCCP 600 - Integrated Physiology-Pathophysiology I	2	SCCP 601 - Integrated Physiology-Pathophysiology II	5
SCCP 605 - Pharmaceutics I	3	SCCP 606 - Pharmaceutics II	3
SCCP 610 - Microbiology/Immunology	4	SCCP 616 - Biochemistry/Biotechnology II	2

SCCP 615 - Biochemistry/Biotechnology I	3	SCCP 620 - Intro. to Pharmacology and Med. Chem.	3
SCCP 650 - Introduction to Pharmacy Practice	2	SCCP 670 - Intro. to Community Pharmacy Lab I	1
SCCP 655 - Pharmacy Calculations and Med. Terminology	1	SCCP 661 - Clinical Applications II	1
SCCP 660 - Clinical Applications I	1	SCCP 680 - Intro. to Drug Information	1
SCCP 671 - Compounding & Applied Pharmaceutics Lab	1	Spring Semester Total:	16
Spring Semester Total:	17		

D.2. Program Assessments

The coordinator of the Pre-Pharmacy track will monitor the progress and success of students going through this program. We anticipate that a minimum of 90% of students entering the South Carolina College of Pharmacy will successfully complete their first year and receive the Baccalaureate from FMU.

D.3. All New Courses: None Required

No new courses are needed to implement the program. All courses required for the 90 hours at FMU are courses that are already taught regularly. The 30 hours taught at the South Carolina College of Pharmacy are the courses in which first year students enroll.

E. Faculty

E. 1. Table C – Faculty List (Existing)

List Staff by Rank (e.g. Professor #1, Professor #2, Associate Professor #1, etc)	Highest Degree Earned	Field of Study	Teaching in Field (Yes/No)
Professor #1, Professor	Ph.D.	Chemistry	Yes
Professor #2, Professor	Ph.D.	Chemistry	Yes
Professor #3, Associate Professor	Ph.D.	Chemistry	Yes
Professor #4, Associate Professor	Ph.D.	Chemistry	Yes

E. 2. New Faculty

No additional faculty will be required by the Department of Chemistry at Francis Marion to support the Bachelor of Science in Pharmaceutical Studies program.

E.3. Currently Employed Faculty

No changes are required in the current assignments of the four faculty members in the Department of Chemistry at Francis Marion to support the Bachelor of Science in

Pharmaceutical Studies program. Professor #2 currently serves as the Coordinator of the Pre-Pharmacy Program and will continue in that capacity.

E. 4. Faculty Development

Professional funds are also available through the university at a rate of \$2,400 per year per person with preference given to support of scholarly presentations. Other opportunities for staff development exist internally in the University and within the Department of Chemistry.

E.5. Definition of FTE

The fulltime teaching equivalency (FTE) at Francis Marion for:

- Tenured and Tenure-track faculty is a 3-4 annual teaching load with four contact courses in either the Fall or Spring semester and three contact courses in the other semester.
- Non-tenure track (term contract) is a 4-4 annual teaching load with four contact courses each semester.

E.6. Table D – Unit Support

UNIT ADMINISTRATION/FACULTY/STAFF SUPPORT						
YEAR	NEW		EXISTING		TOTAL	
	Headcount	FTE	Headcount	FTE	Headcount	FTE
Administration						
2012 – 13	0	0	1	0.2	1	0.2
2013 – 14	0	0	1	0.2	1	0.2
2014 – 15	0	0	1	0.2	1	0.2
2015 – 16	0	0	1	0.2	1	0.2
2016 – 17	0	0	1	0.2	1	0.2
Faculty						
2012 – 13	0	0	4	4.0	4	4.0
2013 – 14	0	0	4	4.0	4	4.0
2014 – 15	0	0	4	4.0	4	4.0
2015 – 16	0	0	4	4.0	4	4.0
2016 – 17	0	0	4	4.0	4	4.0

Staff						
2012 – 13	0	0	1	0.25	1	0.25
2013 – 14	0	0	1	0.25	1	0.25
2014 – 15	0	0	1	0.25	1	0.25
2015 – 16	0	0	1	0.25	1	0.25
2016 – 17	0	0	1	0.25	1	0.25
TOTAL	0	0	30	22.25	30	22.25

F. Physical Plant

F.1. Existing Plant

The existing classrooms and laboratories in the Leatherman Science Facility and McNair Science Building will be adequate to provide space for the program for the foreseeable future. As previously indicated the program will enroll Pre-Pharmacy students into already existing courses at FMU.

F.2. Future Plans

No additional facilities will be required to support the Bachelor of Science in Pharmaceutical Studies program.

G. Equipment

No additional equipment or materials required to support the Bachelor of Science in Pharmaceutical Studies program.

H. Library Resources

The James A. Rogers library at Francis Marion University has an extensive collection of items on the topic of chemistry. These items include printed and e-books, print journals, online journals and abstracts, as well as extensive cooperative borrowing resources. The information that follows summarizes the quantity and quality of our collection that will be used to support the Bachelor of Science in Pharmaceutical Studies.

The Library currently holds over 1600 print titles related to chemistry. These titles cover many areas of chemistry including: organic chemistry, inorganic chemistry, chemical mathematics, theoretical chemistry and over 100 other chemistry related subjects. The Library also has nearly 300 e-books offered through our Ebscohost E-books database related to the subject of chemistry. Finally, if a student is unable to find a title within our collection they can look to PASCAL. PASCAL is the Partnership Among South Carolina Academic Libraries which is a consortium that includes 50 South Carolina academic libraries in the state. This program gives Francis Marion University students the ability to access books from any other academic library in the state within 3 – 5 business days. Essentially, this means any holdings at participating universities will be available to our students. It should also be mentioned that the library uses Interlibrary Loan services to provide materials for students. Interlibrary loans allow Francis

Marion students to borrow books and journal articles from thousands of participating institutions worldwide. Between Pascal and Interlibrary Loans any journal article or book that is not available at our university should be able to be accessed within a week from another institution.

The Library also has holding to many print and online journals. Our bound printed journals contain 119 titles related to the various sub-topics of chemistry and our online journals consist of 537 chemistry titles. The library has access to the online database ScienceDirect which contains many chemistry and related field journals from the publisher Elsevier. The library also has access to CAS Sci-Finder, one of the premier chemistry databases available. This database provides access to citations and references to over 10,000 currently published journals and patents and carries the world's largest collection of organic and inorganic substance information.

I. Accreditation, Approval, Licensure, or Certification

I.1. Professional Accreditation

The proposed new program is mentioned in the "Final Comments" section of the 2012 American Chemical Society reevaluation document of the FMU chemistry program, which expressed an interest in new programs, but the proposed BSPS has no effect on the ACS accreditation process.

I.2. Licensure and Certification

This proposed new program will not require licensure or certification.

J. Articulation

J.1. Path

Students from a two-year institution can transfer in no more than 60 hours to Francis Marion to be counted toward the minimum of 90 hours required to satisfy the Bachelor of Science in Pharmaceutical Studies program.

J.2. Terminal Degree

The Bachelor of Science in Pharmaceutical Studies is not considered to be a terminal degree, but instead is one that a student will earn after successfully completing their first year at the South Carolina College of Pharmacy as well as the requirements of Francis Marion as they work toward their PharmD degree.

J.3. Collaboration

Francis Marion University and the South Carolina College of Pharmacy signed a Memorandum of Understanding on December 7, 2011 to establish a collaboration for the Bachelor of Science in Pharmaceutical Studies program. The South Carolina College of Pharmacy has two campuses which offer the curriculum for the PharmD program as outlined in Section D.1. Students from Francis Marion wishing to complete the Bachelor of Science in Pharmaceutical Studies must complete the curriculum requirements for entry into the PharmD program and be accepted by the South Carolina College of Pharmacy.

K. Estimated Cost

K.1. Table E - Costs to the Institution and Sources of Financing

ESTIMATED COSTS BY YEAR						
CATEGORY	1st	2nd	3rd	4th	5th	TOTALS
Program Administration	\$9,152.95	\$9,336.01	\$9,522.73	\$9,713.18	\$9,907.44	\$47,632.31
Faculty Salaries	\$29,625.60	\$30,218.11	\$30,822.47	\$31,438.92	\$32,067.70	\$154,172.8
Grad. Assistants	0	0	0	0	0	0
Clerical/Support Personnel	\$4,350	\$4,437	\$4,525.74	\$4,616.25	\$4,708.58	\$22,637.57
Supplies and Materials	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$40,000
Library Resources	0	0	0	0	0	0
Equipment	0	0	0	0	0	0
Facilities	0	0	0	0	0	0
Other	0	0	0	0	0	0
TOTALS**	\$51,128.55	\$51,991.12	\$52,870.94	\$53,768.35	\$54,683.72	\$264,442.68
SOURCES OF FINANCING BY YEAR						
Tuition Funding*	\$132,030.00	\$77,061.51	\$79,373.36	\$105,800.01	\$108,974.01	\$503,238.89
Program-Specific Fees	0	0	0	0	0	0
State Funding	0	0	0	0	0	0
Reallocation of Existing Funds	0	0	0	0	0	0
Federal Funding	0	0	0	0	0	0
Other Funding	0	0	0	0	0	0
TOTALS	\$132,030.00	\$77,061.51	\$79,373.36	\$105,800.01	\$108,974.01	\$503,238.89

*Tuition and fees are calculated at a 3% increase per year.

**No new costs to the institution.

K.2. Additional Sources of Financing

The Bachelor of Science in Pharmaceutical Studies program will not require any “unique cost” or special state appropriations.

L. Institutional Approval

L.1. Department of Chemistry	Date of approval – October 30, 2011
L.2. FMU Academic Affairs Committee	Date of approval – January 26, 2012
L.3. FMU Faculty Senate	Date of approval – February 7, 2012
L.4. FMU Full Faculty	Date of approval – February 21, 2012
L.5. FMU Administration	Date of approval – February 22, 2012
L.6. Board of trustees	Date of approval – March 2, 2012

ACADEMIC AFFILIATION AGREEMENT

AGREEMENT BETWEEN

SOUTH CAROLINA COLLEGE OF PHARMACY
Charleston, SC 29425, Columbia, SC 29208

and

FRANCIS MARION UNIVERSITY
P.O. Box 100547
Florence, SC 29502

THIS AGREEMENT, made and entered into this 1st day of November, 2011, by and between the South Carolina College of Pharmacy, hereinafter referred to as the College; and Francis Marion University, hereinafter referred to as the University;

WITNESSETH:

THAT WHEREAS, the University, through its Pre-Pharmacy program wishes to provide a mechanism for its students entering the Doctor of Pharmacy program at the College to receive a Bachelor of Science in Pharmaceutical Studies after the successful completion of their first 30 hours at the College,

AND WHEREAS, the College is willing to provide the professional program courses,

NOW, THEREFORE, in contemplation of the relationship to be established between the parties and in consideration of the mutual covenants contained herein, the parties mutually agree as follows:

I. DUTIES OF THE COLLEGE

- 1.01 Admit students to the Doctor of Pharmacy program based on criteria listed in the current Bulletin and/or Program brochure.
- 1.02 Provide the professional component of the curriculum as outlined in the current Bulletin and/or Program brochure.
- 1.03 Administer grading and retention policies as outlined in the current Bulletin.
- 1.04 Submit a transcript at the request of the student to the University from the College upon the successful completion of 30 hours in the Pharmacy curriculum.

II. DUTIES OF THE UNIVERSITY

- 2.01 Admit students to the University based on criteria listed in the current University catalog.
- 2.02 Provide the pre-professional component of the curriculum as described in the current University catalog.
- 2.03 Administer grading policies as described in the University catalog.
- 2.04 Inform the student of the College's admission requirements.

- 2.05 Confer a baccalaureate degree upon successful completion of a minimum of 90 hours at the University including all General Education and pre-professional requirements, and the successful completion of 30 hours in the Pharmacy curriculum at the College.

III. MUTUAL DUTIES OF THE UNIVERSITY AND THE COLLEGE

- 3.01 In educational and/or employment practices, neither the College nor the University will discriminate against any person because of race, color, creed, sex, religion, age, veteran status, national origin, or physical handicap. With respect to discrimination based on sex, the College and the University hereby further agree that each will comply fully with Title IX of the Education Amendments of 1972, pursuant to Title IX, 45, CFR, Part 86, and that each will submit to the Department of Health and Human Services an assurance to that effect satisfactory to the Director, Office for Civil Rights, Department of Health and Human Services, Washington, DC, 20201.
- 3.02 Assume responsibility for assuring continuing compliance with the educational standards of the appropriate accrediting bodies.
- 3.03 Support rules and regulations governing students that are mutually agreed upon by the College and the University.
- 3.04 Conduct appeal procedures as described in each institution's catalog.
- 3.05 Meet at least minimal standards of their respective accrediting bodies with regard to library holdings, reference materials, and study aids.

IV. TERMINATION

The term of this agreement is for a period of five (5) years, commencing on the day and year first written above. Further, this agreement may be terminated by either party by giving written notice at least one (1) year prior to the effective date of such termination.

This agreement may be terminated should either institution cease to hold accreditation by the Southern Association of Colleges and Schools (or equivalent accrediting body). In case of termination, it is understood that all students in good standing will have the option to complete their degree program under the rules and regulations in effect at the time of their matriculation.

V. RENEWAL

This agreement may be renewed every five (5) years. If the agreement is renewed without modification, such renewal may be evidenced by a letter of agreement signed by officials of the College and the University who either are or who by their office would have been authorized to sign the original agreement.

VI. ACCEPTANCE OF THE AGREEMENT

This agreement shall not be considered accepted, approved, or otherwise effective until the statutorily or administratively required approvals and certifications, if any, have been given.

VII. MODIFICATIONS

The parties agree to the full and complete performance of the mutual covenants contained herein and that this agreement constitutes the sole, full and complete agreement by and between the parties; and no amendments, changes, additions, deletions, or modifications to or of this agreement shall be valid unless reduced to writing, signed by the parties and attached hereto.

VIII. REPRESENTATIVE'S AUTHORITY TO CONTRACT

By signing this document, the representative of the College/University thereby represents that such person is duly authorized by the College/University to execute this document on behalf of the College/University and that the College/University agrees to be bound by the provisions thereof.

IN TESTIMONY WHEREOF, the hands and seals of the parties are affixed hereto:

FRANCIS MARION UNIVERSITY

By: Richard N. Chapman
Richard N. Chapman

Title: Provost

Date: 12-7-2011

MUSC/USC/SCCP

By: [Signature]

Title: Executive Dean, South Carolina College of Pharmacy

Date: 10/31/11

By: [Signature]

Title: Provost, University of South Carolina

Date: 12/1/11

By: [Signature]

Title: Provost, Medical University of South Carolina

Date: 10/1/11

By: [Signature]

Title: Secretary, USC Board of Trustees

Date: NOV 30 2011

**SUSAN D. HANNA
ASSOCIATE SECRETAR**

OFFICE OF THE GENERAL COUNSEL

MUSC

**APPROVED TO LEGALITY
AND FORM**

By: [Signature]
Date: 10-14-11