Proposal for a Post-Baccalaureate Pre-Nursing Certificate Program

College of Science and Engineering, Department of Biology
Contact: Barry S. Rothman, Professor of Biology brothman@sfsu.edu or x8-2418

Title: Pre-Nursing Post-Baccalaureate Certificate Program
Residence Credit via CELIA Special Sessions
Desired date of implementation: Summer, 2015

With this proposal, the Department of Biology is seeking approval for a new self-support certificate in Pre-Nursing. The department has been offering a Pre-Health Professions Certificate (PHPC) through CELIA since 2006. The program was created to address a critical need for pre-health post-bacs to have access to course work required to apply to graduate health profession schools, mainly medical and dental schools. During this nearly nine-year period, the PHPC Program has expanded in size from annual admissions of 18 students to annual admissions of about 150 students. About 20% of the applicants to the program intend, ultimately, to apply to nursing schools. However, a pre-nursing curriculum has little overlap with the existing PHPC Program curriculum; accordingly, we propose a distinct Pre-Nursing Certificate (PNC) Program.

According Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2014-15 Edition, Registered Nurses, on the Internet at http://www.bls.gov/ooh/healthcare/registered-nurses.htm, employment of registered nurses is projected to grow 19 percent from 2012 to 2022, faster than the average for all occupations. The greatest need will be for nurses with BSN-level or higher education. A Program offering prerequisites and support to students applying to nursing school will aid in addressing the national need for nurses.

a. Financial Aid: Financial Aid is available to students enrolled in a Certificate Program. This is vital for student retention and success. In addition, about 10% of the PNC Program’s gross revenue will be used as scholarships for socioeconomically disadvantaged participants based on their FAFSA.

b. Benefits:

- The program will be self-supporting through CELIA, which will guarantee funding of the required courses. As is the case with the existing PHC Program, faculty for the PNC Program will be hired by the Program Director in consultation with the appropriate academic departments. (Added benefit: Lecturers hired to teach in the PHC Program have later been hired as lecturers by departments in the state-side programs.)
- The PHC Program has been quite successful, with an overall success rate of over 80% for the approximately 600 of its participants that have applied to graduate health profession schools. We anticipate a PNC Program will be at least as successful as the PHC Program.
- Participants who come to the PNC Program having previously performed well in -courses equivalent to PNC courses will not be required to retake these courses.
- The PHC Director and Leadership Team have extensive teaching experience in areas to be covered in the proposed PNC Program. We will carefully choose and vet instructors in consultation with the appropriate academic department.
- As with the PHC Program, the PNC Program will be diverse. Of the 91 students interested in applying to nursing programs who have entered the PHC during the last three years, 40% are socioeconomically disadvantaged, 24% are underrepresented minorities, 47% are students of color (including underrepresented minorities) and 21% are male (a 10% minority in nursing). We expect the same demographics in the PNC.
- As with the PHC Program, the PNC Program will support its students by making available a Learning Specialist, Psychotherapist, Colloquia designed to create a supportive community and prepare participants for the challenging health professions school application process and scholarships. In
combination the two programs will create an economy of scale. The PNC Program will share with
PHC Program a full-time Director (B. Rothman) and a Leadership Team of four lecturers (M. Small,
L. Abdallah, R. Small and M. Tappouni), and other operational staff. The Director and Leadership
Team are experienced in the complex health profession school application process, provide
extensive advising hours, teach some of our courses, and co-write lengthy PHC Committee Letters
used to support participants’ applications to graduate health profession schools.

- As with the PHC Program, the PNC Program will interface well with SF State’s efforts in addressing
  national healthcare disparities.

3. List of new courses:
   No new courses are needed.

4. Indicate any specific ways in which the certificate program relates to an existing degree program on campus.

Many of the courses offered by the PHC Program are contained within the General Biology BA and the Cell
& Molecular Biology and Physiology BS degrees. In contrast, the courses in the proposed PNC Program are
non-major, introductory/general studies courses. Indeed, SF State sorely lacks a framework to meet the
needs of its pre-nursing undergraduates. Currently, SF State undergraduates only have the option to
declare Intent to Study Pre-Nursing. Students choosing this option are not given advising, support, nor a
prescribed curriculum. Therefore, the PNC Program would not supplant any major or degree program on
campus.

5. Names of faculty expected to teach PNC Program courses:
   (Note: the Program Director and Leadership Team will supervise all PNC Program offerings by lecturers and
teaching assistants (TAs). Consultation with department chairs will occur as needed.)

| MATH 124: Halloran (M.A.) | BIOL 328: Nusse (M.S.) | HED 825: Pureval (M.S.) |
| SCI 124: Beyer (M.A.)  | BIOL 212: Rojo (M.S.)  | DFM 253: Siu-Chan (M.S.) |
| BIOL 100: Caporale (Ph.D.) | BIOL 213: Butt (M.S.) | PSY 431: Fladeboe (M.S.)  |
| BIOL 101: Nagami (M.S.) | SCI 610: TAs from FPBP | SCI 239: R. Small (M.S.)  |
| SCI 110: TAs from FPBP  | BIOL 210: Akhavan (Ph.D.) | SCI 235: R. Small (M.S.)  |
| CHEM 101: R. Small (M.S.) | BIOL 211: Akhavan (Ph.D.) | SCI 695: Rothman (Ph.D.), R. Small (M.S.) |
| CHEM 102: TAs from FPBP | SCI 210: TAs from FPBP |                      |
| SCI 103: TAs from FPBP  | COMM 150: Kammeyer (M.S.) |                      |

6. All fees and Tuition: Fees and tuition will be established per E.O. 1047 and payable to CELIA.

7. Additional resources needed to implement and sustain the program. Indicate how these resources will be
   obtained.
   a. All resources needed to implement and sustain the PNC Program are in place. This includes overall
      administration, teaching, classroom space, admissions and student support.

9. Indicate the nature of the results of any consultations which may have occurred regarding this proposal.
   a. Consultations:
      Angela Jones, Associate Dean, College of Extended Learning and International Affairs
      Sheldon Axler, Dean, College of Science and Engineering
      Susan Shimanoff, Associate Dean, College of Liberal and Creative Arts
      Alvin Alvarez, Acting Dean, College of Health and Social Sciences
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96 Mary Ann Van Dam, Director, School of Nursing
97 Michael Goldman, Department Chair, Biology
98 Jane DeWitt, Department Chair, Chemistry and Biochemistry
99 Christina Sabee, Department Chair, Communication Studies
100 Nancy Rabolt, Department Chair, Consumer and Family Studies
101 David Bao, Department Chair, Mathematics
102 Jeff Cookston, Department Chair, Psychology
103 Mary Beth Love, Department Chair, Health Education
104 Pam Howard, Subject Librarian, J. Paul Leonard Library

105 b. Results: There is enthusiastic support for the creation of the pre-nursing certificate program from all parties listed above.
106
107 10. Learning Objectives:
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109 Note that student performance in each of these learning objectives will provide valuable feedback for the fine-tuning of the curriculum.
110
111 a. Students will demonstrate an understanding of the responsibilities of and scope of practice in being a nurse in two research projects and presentations on relevant healthcare/nursing topics. Research topics will be chosen under the supervision of the instructor. Presentations will be evaluated by the Program Co-Director, a co-instructor and class peers. Feedback on the first project will be used to improve methods and presentation of the second class project.
112
113 b. PNC Program participants will demonstrate an understanding of the scientific vocabularies and concepts necessary for their being competent nurses. This objective will be measured by their performance in the prerequisite science and math courses offered by the PNC Program.
114
115 c. PNC Program participants will demonstrate an understanding of the psychological and nutritional vocabularies and concepts necessary for their being competent nurses. This objective will be measured by their performance in the prerequisite psychology and nutrition courses offered by the PNC Program.
116
117 d. PNC Program participants will be able to communicate effectively in speech and in writing. This objective will be measured by their performance in the prerequisite communication course and the Health Professions Colloquium offered by the PNC Program. Students will write a number of Personal History/Statement of Intent works through the completion of structured writing assignments in the Health Professions Colloquium. Students will present public talks and participate in interpersonal communication exercises in their communication course. Students will practice and be evaluated on effective interviewing skills in the communications course and Health Professions Colloquium.
118
119 e. PNC Program participants will understand the application process for nursing school. This objective will be measured by their performance in the Health Professions Colloquium offered by the PNC. Students will complete a resume, personal GPA analysis, and Personal Statements for their applications to nursing schools.
120
121 11. Assessment and continuous monitoring of the program.
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123 Overall program success will be measured by the performance of participating students in national standardized tests (GRE and TEAS) and their admission into nursing schools. Other benchmarks will include student retention rate, certificate completion rate, and GPA while in the PNC. The detailed running of the PNC Program will be monitored by the Director (Rothman), the Leadership Team (M. Small, L. Abdallah, R. Small and M. Tappouni) and the Dean, College of Science and Engineering (Axler). The quality of instruction will be measured by standard SF State course evaluations and by classroom visits from the Director and Leadership Team. The PNC Program budget will be monitored by the Dean, College
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12. Bulletin copy:

a. General Information

The goal of the Pre-Nursing Post-Baccalaureate Certificate Program is to guide participants through the entire preparation and application process as competitive applicants to graduate nursing schools. The Program is suited for students who need to take nursing school prerequisites for the first time or retake such courses in order to be competitive in the admission process for nursing school. Yearly cohorts of approximately 30 students will take nursing school prerequisite courses in biology, chemistry, mathematics, communication, as well as auxiliary course work in the form of discussion sections, and a Health Professions Colloquium. Optional preliminary and/or more advanced course work in biology, chemistry, mathematics, public health, nutrition and/or psychology will be available as needed. The program begins in the early summer and runs continuously for four semesters, a period of 15 months, and is supervised by a Leadership Team that includes the Program’s Director and Co-Director. The Leadership Team writes a comprehensive Committee Letter that may be submitted with the student’s nursing school application. Federal and/or private loans may be available to students with documented financial need.

b. Admissions Requirements, Application Process and Tuition

- Applicants must have graduated from a regionally accredited institution of higher learning with a baccalaureate or higher degree and a GPA of 2.5 or above for their most recent 60 semester units (90 quarter units) of course work. However, because of the limited number of students that can be accommodated by the Program, applicants with higher GPAs will have an advantage in being admitted.

- Applicants must apply and be admitted to SF State through its Division of Graduate Studies. In so doing, they must complete the online Pre-Nursing Post-Baccalaureate Certificate Program application at www.xxxx.sfsu.edu and a secondary application, and submit the supporting documents requested in this latter application. These include a personal statement, official transcripts from all colleges and universities attended, a list of relevant course work and grades, a list of relevant experiences and dates and two letters of reference, at least one from a college instructor. A third letter is optional. Students who consider themselves economically and/or educationally disadvantaged must fill out a special section of the application.

- Deadline for receipt of a complete set of application materials is February 15 for admission that summer (early June). Interview invitations are announced in mid-spring and admissions decisions are announced in late spring.

- Students whose primary language is not English must earn a minimum score of 550 on the paper version of the Test of English as a Foreign Language (TOEFL) or a minimum score of 213 on the computer-based version.

- Out-of-state and international students are welcome to apply to the Program. All students pay the same tuition.

- Students who are socioeconomically disadvantaged and/or members of underrepresented groups in nursing are encouraged to apply to the Program.

- Information on tuition and other fees may be found at: http://www.cel.sfsu.edu/pre-health/

- Written English Proficiency Requirement

Students must demonstrate an appropriate level of writing competency. This is accomplished by the student receiving a grade of B or higher in the Health Professions Colloquium, which focuses on writing personal statements and interview skills. Students who do not pass this requirement may have alternative course work specified by the Program Director.
## Pre-Nursing Certificate Program Curriculum

<table>
<thead>
<tr>
<th>Semester One (Summer)</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH 124 Statistics (10 weeks)</td>
<td>3</td>
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<tr>
<td>SCI 124 Math Concepts: Statistics</td>
<td>1</td>
</tr>
<tr>
<td>SCI 239 Introduction to Health Professions (10 weeks)</td>
<td>2</td>
</tr>
<tr>
<td>PSY 431 Developmental Psychology</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester Two (Fall)</th>
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<tbody>
<tr>
<td>CHEM 101 Survey of Chemistry Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 102 Survey of Chemistry Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 328 Human Anatomy Lecture and Lab</td>
<td>4</td>
</tr>
<tr>
<td>DFM 253 Nutrition in Health and Disease</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Semester Three (Spring)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 212 Principles of Human Physiology Lecture</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 213 Principles of Human Physiology Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 210 General Microbiology and Public Health Lecture</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 211 General Microbiology and Public Health Lab</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Semester Four</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI 695 Health Professions Colloquium</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total for Pre-Nursing Certificate Program</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

The following courses are not required, but are offered as optional/supplemental courses to be taken at the students’ discretion. In some cases, students may take supplemental courses in place of required courses as appropriate and in consultation with an advisor.
Proposal for a Post-Baccalaureate Pre-Nursing Certificate Program

From: Alvin N Alvarez <alvarez@sfu.edu>
Date: Tuesday, February 17, 2015
Subject: Revised Pre-Nursing Proposal - Approval Needed
To: Barry S Rothman <brothman@sfu.edu>

Morning Barry,

Thanks for the heads up! Just wanted to confirm that I am in support of PNPBP program and want to wish you well as this moves forward!

Take care,
Alvin

True reconciliation does not consist of merely forgetting the past
-Nelson Mandela

Alvin Alvarez, Ph.D.
Interim Dean
College of Health & Social Sciences
1600 Holloway Avenue
San Francisco, CA 94132

EMAIL: alvarez@sfu.edu
PHONE: (415) 338-326
FAX: (415) 338-0596

Please reply to:
brosthan@sfu.edu

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Barry S. Rothman, Ph.D.
Professor of Biology
San Francisco State Univ
OFC 406, 415.338.4918

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From: Christina Sabee <csabee@sfu.edu>
Date: Tuesday, January 20, 2015
Subject: Consultation on the Proposed Pre-Nursing Post-Baccalaureate Certificate Program
To: Barry S Rothman <brothman@sfu.edu>

Hi Barry,

I’ve no objections to the proposal . . . and we’re happy to keep working with you to have a section of COMM 150 taught for the program. As in the past, we’d of course appreciate consultation in hiring Jennifer Kammeyer (and if she’s unavailable for some reason, we could consult about an agreeable replacement).

Please let me know if you need anything else from COMM. Good luck through the proposal process :)

Thanks,
Christina

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Christina M. Sabee
Associate Professor and Department Chair
Communication Studies Department
San Francisco State University

415-338-1597
Proposal for a Post-Baccalaureate Pre-Nursing Certificate Program

--- Forwarded message ---

From: Maryann A Van Dam <vandam@sfsu.edu>
Date: Wednesday, February 18, 2015
Subject: program evaluation
To: Barry S Rothman <brothman@sfsu.edu>

Hi Barry,

I have read through the program and this is something I can support without question. I think it provides a certification for a solid science education and assists the student to be better prepared for nursing because of the psychology, nutrition and the introduction to Health Professions courses. These are prerequisites that we cannot demand because of BRN regulations. I applaud you for your efforts and thank you on behalf of my profession.

Mary Ann

*Be the kind of woman that when your feet hit the floor each morning the devil says... *Oh damn, She's up!*

--- Forwarded message ---

From: Pamela J Howard <pjhoward@sfsu.edu>
Date: Thursday, January 22, 2015
Subject: Consultation on the Proposed Pre-Nursing Post-Baccalaureate Certificate Program
To: Barry S Rothman <brothman@sfsu.edu>
Cc: Caroline D Hamly <chamly@sfsu.edu>

Morning Barry attached is the letter of support that you require from the library for the new pre-nursing post-bac certification. You will notice that both Caroline Hamly and myself are the noted librarians to support this program.

hope all goes well with the CRAC review.

Pam Howard
Biology and Health Professions Subject Specialist
Leonard Library, SF State
1830 Holloway Avenue
San Francisco, CA 94132-4030

Tel: 415/338-7395
Proposal for a Post-Baccalaureate Pre-Nursing Certificate Program

From: Jane G Dewitt <dewitt@sfsu.edu>
Date: Wednesday, May 6, 2015
Subject: Revised Pre-Nursing Proposal
To: Rachel Small <rjsmall@sfsu.edu>
Cc: Barry S Rothman <brothman@sfsu.edu>

Hi, the proposal looks fine to me. We would be able to schedule CHEM 102 sections for students in this certificate program when the CHEM 102 lab is not utilized by the department. I support the proposal.

Jane

Mathematics

-------- Forwarded message --------
From: Barry S. Rothman <brothman@sfsu.edu>
Date: Thu, Feb 26, 2015 at 3:03 PM
Subject: Re: Revised Pre-Nursing Proposal - Approval Needed
To: David Bao <dbao@sfsu.edu>

Thanks, David. I'll make the corrections.

Barry

On Thursday, February 26, 2015, David Bao <dbao@sfsu.edu> wrote:

Hello Barry,

Thanks for the reminder.

Your proposal is fine except for two typos. Both Beyer and Halloran (SCI 124 & MATH 124) hold M.A. degrees rather than M.S.

All the best,

David Bao

--------- Forwarded message --------
From: Michael A Goldman <goldman@sfsu.edu>
Date: Mon, Feb 16, 2015 at 2:31 PM
Subject: RE: Revised Pre-Nursing Proposal - Approval Needed
To: Barry S Rothman <brothman@sfsu.edu>

Barry,
Proposal for a Post-Baccalaureate Pre-Nursing Certificate Program

With your ~100% success rate with nursing students (and twice the national average on medical students), this sounds great.

Thank you!

Mike

Michael A. Goldman, Ph.D.,
Professor & Chair
Department of Biology
San Francisco State University
San Francisco, CA 94132-1722 USA
Tel. 415.338.1549 | goldman@sfsu.edu

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Psychology

---------- Forwarded message ----------
From: Jeff Cookston <cookston@sfsu.edu>
Date: Wed, Feb 4, 2015 at 5:05 PM
Subject: RE: Consultation on the Proposed Pre-Nursing Post-Baccalaureate Certificate Program
To: Barry S Rothman <brothman@sfsu.edu>

Hi Barry,

Although this certificate program could prevent students from taking our section of PSY 431 in the summer, I do not oppose your proposed certificate program.

Relatedly, please let me know if you need a teacher for your 10-week summer section of PSY 431.

Best,
jeff

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Jeff Cookston, Ph.D.
Professor and Chair
Department of Psychology
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132
Office: 415.338.7555
Fax: 415.338.2398
http://developmentalpsych.sfsu.edu/jcookston
Twitter @jccookston
SRA Online News Feature Articles Editor
SRA Young Scholars Program Co-Chair