

APPLICATION FOR INSTRUCTIONAL GRANTS PROGRAM 2004-2005

INSTRUCTIONAL IMPROVEMENT PROJECT (IIP) and INSTRUCTIONAL TECHNOLOGY DEVELOPMENT (ITD)

Please submit **11 copies** of the completed application (Cover Sheet, Budget Form, Proposal Narrative, and Letter from Faculty Sponsor) no later than **5 pm, Monday, March 1, 2004** to Library Administration, Box 0840, Campus Library, Room 128.

1. APPLICANT

Name: (omitted)

Title: (omitted)

Department: (omitted)

Campus Phone: (omitted) Campus Box # : (omitted)

Email: (omitted)

2. **FACULTY SPONSOR**, required if applicant is not faculty: _____

3. **APPROVED** (Department Chair or appropriate teaching committee):

(Sign)

(Print Name and Title)

4. **TITLE OF THE PROJECT:** Addressing Current Regulatory Changes for Prescribing Schedule II Controlled Substances: A web-based course for UCSF School of Nursing and Medical Center Nurse Practitioners and Nurse Midwives Students, Faculty and Clinical Preceptors

5. **AMOUNT REQUESTED:** \$6658.19

6. Does the Grant proposal involve the development or use of educational technology for the improvement of instruction? Yes X. If yes, please be sure to include in your Proposal Narrative a clear description of the "technology" and how it is to be used in the project.

7. **PERIOD OF PROJECT ACTIVITY:**

a) Starting Date: July 1, 2004 b) Ending Date: June 30, 2005

(Project activity should be confined to funding period: July 1, 2004 to June 30, 2005.)

8. **STUDENTS, HOUSE STAFF AND OTHER LEARNERS TO BE REACHED BY THE PROJECT:**

Number per quarter N/A

Level/type of student/learner: First year or second year graduate nursing students, clinical preceptors and UCSF Advanced Practice Nurses

Number per year ~170 % of participants for course credit approximately 88%

Addressing Regulatory Changes for Ordering Schedule II Controlled Substances: A Web-based Course for Nurse Midwifery and Nurse Practitioner Students, Faculty and Clinical Preceptors

A. Overview

In California, traditional registered nursing roles have gradually expanded since the 1970s. For example, nurse practitioners and certified nurse midwives have been given the legal authority to assess and manage signs and symptoms of persons with acute and chronic illnesses. As of 1986 and 1991, nurse practitioners and certified nurse midwives, respectively, had further expansion of their practice privileges in the area of prescriptive authority. These clinicians were granted limited “furnishing” (prescriptive) privileges. Since the 1990’s, a series of laws have been passed allowing nurse practitioners and certified nurse midwives to expand these privileges to include writing transmittal orders (prescriptions) in a wide variety of health care settings, and to order/furnish some controlled substances.

Recent passage of Senate Bill 298 (Figueroa-2002) and Assembly Bill 1196 (Montanez-2003) now permits certified nurse midwives and nurse practitioners, respectively, to order Schedule II controlled substances (CS), which means that these advanced practice nurses may order Schedule II -V CS. The passage of these bills recognize the significant contributions that certified nurse midwives and nurse practitioners extend to patient care, particularly in the areas of behavioral and developmental pediatrics, end-of-life care, gerontology, mental health/psychiatric care, obstetrical care, and oncology.

The UCSF School of Nursing, through its Master of Science program, graduates approximately 12 nurse midwives every year, in addition to 10 nurse practitioners from a variety of specialties, ranging from neonatal to geriatric nurse practitioners. Thus, it is imperative that students in these specialties, and the faculty who provide clinical instruction to these students receive up-to-date information about CS, with an emphasis on Schedule II CS and the related recent regulatory requirements. Community-based clinical preceptors (approximately 100), who provide clinical instruction to these students, will need this information for their own certification renewal. Advanced practice nurses at UCSF Medical Center, part of our campus community, will also be eligible to take this course to maintain current practice requirements and to build relationships between the School of Nursing and Medical Center. Thus, this UCSF-sponsored initiative would be a way to give back to and maintain vital relationships with clinical preceptors and UCSF colleagues who donate their time and expertise to the education of these advanced practice nursing students.

After the initial implementation, it is anticipated that this course would continue to be offered to students via the School of Nursing WebCT™ platform. UCSF colleagues and community-based clinical preceptors who had not taken the course during the first offering, could take this course at a fee through the Office of

Continuing Medical Education. In this capacity, any California nurse practitioner and certified nurse midwife could also take the course.

Offering this course in an ongoing fashion for continuing education units (CEUs) would offer the following benefits: 1.) Disseminating current information related to ordering Schedule II controlled substances for California nurse practitioners and certified nurse midwives; and 2.) Providing a recruitment strategy for potential graduate nursing students since this course would showcase current curriculum developments in the School of Nursing.

The development and implementation of a web-based pharmacology supplement is an ideal approach for the delivery of this essential material for the following reasons:

- 1.) Pharmacology content following the parameters from the Committee on Instructional Courses unit/time requirements is currently offered as a WebCT™ course in the School of Nursing. Students and faculty have some familiarity with accessing this content on the web;
- 2.) As a supplement, only nurse midwifery and nurse practitioner students, faculty and preceptors who need to have this information would be required to access to this course, thus, minimizing credit requirements for other School of Nursing specialties; and
- 3.) A web-based course would permit distant access by faculty, students, and preceptors to the content, enhancing the number of individuals who could complete the course.

This proposed web-based course supplement would include the following topical areas:

- 1). Overview of the Controlled Substance Act of 1970 and Schedule I-V controlled substances,
- 2.) State of California regulatory law related to advanced practice nurses furnishing/ordering controlled substances,
- 3.) Legal and ethical issues related to ordering controlled substances,
- 4.) Clinical considerations in ordering controlled substances (Pharmacokinetics, pharmacodynamics, and dependency potential),
- 5.) Schedule II controlled substances used for pain management across the lifespan, and
- 6.) Use of Schedule II stimulants for selected health care conditions (e.g., attention deficit-hyperactivity disorder and narcolepsy).

Each topical area would be presented in a distinct module that would include a quiz wherein the participant would be tested on the material presented in the module. Answers to the quiz questions would be provided to participant upon

completion of the quiz. If participants have questions related to modules, the pharmacy consultant and/or one of the nursing faculty members would respond to these queries via course email and/or by telephone. To assure accuracy of course content, links to current references would be included in each module. Course evaluations would be on-line, thus, providing faculty with critical information needed for course modification and enhancement. Continuing education units (10 contact hours) would be offered to the faculty, clinical preceptors and UCSF advanced practice nurses who have completed the initial course offering at no cost. A fee will be assessed for future continuing education course offerings.

In sum, our primary objective is to develop and implement an innovative and timely web-based clinical pharmacology course supplement that includes pertinent pharmacological, legal, ethical and regulatory information that is needed for the safe selection and administration of controlled substances, in particular Schedule II drugs. To the best of the nursing faculties' knowledge there is no course of this kind that currently exists online. It is anticipated that through a web-based course offering of this nature the course faculty will be able to promptly respond to professional regulatory requirements that have major implications for the health care of Californians. Wide dissemination of this information will provide a significant number of nurse practitioner and nurse midwifery students, faculty, clinical preceptors and other California advanced practice nurses with the required information to safely order/furnish controlled substances to health care consumers in the State of California.

B. Educational Objectives

At the completion of the course module, the learner will be able to:

- 1.) Recognize the implications of the Controlled Substances Act (CSA) of 1970 for contemporary clinical care in various health care settings;
- 2.) Define terms and categories related to controlled substances;
- 3.) Define furnishing/ordering and dispensing of controlled substances as described in the CA. Nursing Practice Act;
- 4.) Determine when certified nurse midwives and nurse practitioner may and may not furnish/order controlled substances,
- 5.) Select an appropriate controlled substance for a client based on his/her age, sex, weight, indicated health problem(s) and related health risk(s);
- 6.) Outline therapeutic goals of the particular therapy that requires the use of controlled substances;
- 7.) Recognize the signs of toxicity and major adverse reactions of the model drug and how to identify them in the clinical setting.

8.) Select appropriate drug alternatives for clients who have had major drug reactions.

C. Participant Evaluation Methods

Participants' knowledge will be assessed via web-based quizzes per topical area, which will be based on the educational objectives. All quizzes must be completed with a score of greater than or equal to 70% score in order to receive a satisfactory grade for this course supplement.

D. Project Evaluation Methods

Participants will also be asked to evaluate their experiences in accessing and utilizing this web-based clinical pharmacology course supplement on Schedule II controlled substances. This process will be achieved by using a web-based evaluation, which has been specifically tailored for UCSF School of Nursing courses. Areas queried will include ease of use, convenience, and usefulness of course content and instructional technology in promoting professional development. Clinical preceptors and advanced practice nurses at UCSF Medical Center using the course for current practice update and CEU's will be assessed as to whether or not the course enhanced: 1.) Their required skills; 2.) Their association with the School of Nursing, 3.) Their preceptors skills in counseling nurse midwifery and/or nurse practitioner students about the selection and use of CS in their health care settings, and/or 4.) Meeting CEU current practice requirements. All of the participants' responses can be used to modify the course as needed.

E. Budget Justification

Requested funds will be used for personnel costs, postage and mailing materials; processing continuing education units through the School of Medicine's Office of Continuing Medical Education, which has the necessary infrastructure for web based CE monitoring; and purchasing relevant software. The initial WebCT course will be developed using html rather than WebCT managers (i.e. syllabus builder) to facilitate future transfer to a stand-alone continuing education course. A School of Nursing program assistant with interest in web-based course development will take relevant web-related courses (e.g, LearnIt™ in Dreamweaver™, Flash™, Photoshop™, and/or Power Point™) to assist with the implementation and refinement of this and future html based courses suitable for the web. A teaching assistant will be hired to assist in a literature search, literature retrieval, and content compilation; and in the development of the introductory tutorial. An advanced practice nurse with expertise in pediatric pain assessment and management will review the pediatric pain material for currency and accuracy. Macromedia Studio™ and Photoshop™ software will be purchased to allow faculty and staff to construct html-based courses. Respondus™ software will be purchased for the purpose of enhancing the implementation of the web-based quizzes. Office of Continuing Medical Education would receive funding to support CEU tracking

for clinical preceptors and UCSF advanced practice nurses who have enrolled for the initial course offering.

The identified UCSF School of Nursing clinical faculty members (certified nurse midwives, nurse practitioners and doctor of pharmacology), will provide the following in-kind services:

- 1.) Course development, implementation and evaluation;
- 2.) Provision of the necessary support to the course consultant, teaching assistant and program assistants;
- 3.) Development of the modules on relevant regulatory information, and legal and ethical issues/concerns;
- 4.) Provision of on-line support to the course participants;
- 5.) Assist with the construction of all course quizzes; and
- 6.) Completion of all grant-related reports and other related communications.

F. Sustainability

After the initial implementation of this course supplement, the course thereafter will be offered in the same quarter as N232 Clinical Pharmacology or N232.04 Neonatal/Pediatric Pharmacology, predominantly web-based courses, are offered. The faculty of record for N232 (a nurse practitioner and doctor of pharmacology) will oversee this course supplement that has been designed for nurse midwifery and nurse practitioner students, with pediatric and neonatal content reviewed by the Faculty of Record for N232.04. Once launched in this capacity, clinical preceptors will not be able to take this course supplement. Clinical preceptors and other certified nurse midwives and nurse practitioners will be able to take this course as part of their mandatory CE requirements, for a nominal fee.

Using trained staff personnel for development of the html-based course will facilitate continued course update and maintenance within the department in a timely manner. Expenditures will be minimized through use of internal personnel rather than external consultants.

G. Previous UCSF Grants

_____ Instructional Improvement Grant: Simulated Clinical Evaluation, Office of Academic Services, University of California, San Francisco, \$4,994.90.

_____ Instructional Improvement Grant: Cyber Mentoring in Gerontological Nursing: Meeting the Needs of Our Preceptors, Academic Senate Committee, University of California, San Francisco, \$7276.00

_____ Instructional Improvement Grant: Reinforcing Principles and Practice of Disease Prevention and Health Promotion: An Experiential/ Competency-based Learning Experience for Nursing Graduate Students, Office of Academic Services, University of California, San Francisco, CA, \$3,370.00.

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Budget Form

	Item	Qty	Price/Rate	Subtotal
Materials & Supplies (Itemize costs exceeding \$250)				
Equipment Purchase or Rental (Itemize costs exceeding \$250)	LearnIt Training Course	3 mos		\$399.00
	Macromedia Studio	1		\$199.99
	Photoshop	1		\$299.99
	Respondus	1		\$80.00
	Adobe Acrobat 6	1		\$149.99
				\$1,128.97
Personnel Costs (Includes research/teaching assistants at current rates, consulting fees, casual hires at current rates. Indicate hourly rate where appropriate.)	Program Assistant	148	\$20.67	\$3,059.16
	Teaching Assistant	40	\$13.75	\$550.00
	Pediatric pain consultant	3	\$40.00	\$120.00
				\$3,729.16
Other Expenses (Itemize)	OCME CEU Tracking	120	\$15	\$1,800.00
				\$1,800.00
TOTAL				\$6,658.13

Note: When planning technology-related projects, contact the Center for Instructional Technology Lab at (415) 502-6678 or citgrants@library.ucsf.edu to investigate the hardware and software resources available there (<http://cit.ucsf.edu/lab/>).