Section I: Institutional and Program Overview

A. Program Overview

1. Name of degree or program proposed.

Master of Science in Clinical Psychopharmacology

2. Percent of program being offered via distance education. If the program is not being offered fully via distance education, how will the remainder of the program be offered?

Ninety percent of the didactic coursework in the program will be offered via distance education. In the first cohorts, located at Tripler Army Medical Center, instructors will make live on-site visits between three and five times per course. In subsequent cohorts, the didactic courses may become completely online. In addition, students will complete 400 hours of supervised work in clinical settings.

3. Detailed description of the type of distance education modality being proposed and the format. Is it asynchronous, synchronous, online, correspondence, teleconference, video on demand, etc.?

A combination of distance education modalities will be used in this program. Asynchronous lectures are being developed for the bulk of the program; they will be posted on course websites on the UH system's learning management system Laulima, a variant of Sakai. Biweekly hour-long meetings will be held using synchronous technology (Elluminate Live!), during which instructors and students will engage in content-centered discussion and review. The live on-site sessions will be recorded and provided to students for review; they will also be archived for use in later cohorts and when necessary updated. Frequent announcements and email exchanges on the Laulima course website will provide follow-up and individual student-faculty communication.

4. Geographic scope of the program. Where will you market the program?

Initially the program will be offered to students at the Tripler Army Medical Center in Honolulu, on the island of O`ahu. Subsequently the program will be marketed primarily in Hawai`i, but it is also expected that it will eventually attract professionals from other parts of the US and Pacific islands where the Armed Forces are located. The long-term intent of the program includes recruiting across the state of Hawai`i and on the mainland aimed at clinical psychologists seeking prescriptive authority and other professionals desiring to increase their understanding of pharmacotherapeutics.

5. Projected number of students.

It is anticipated that 4-10 students will be admitted into the program each year, and that a new cohort will enter each fall. Each cohort will require four semesters and one summer session to complete. Enrollment could reach 20 students per year when the program matures.

6. Type of student the program geared for, i.e. adult learners, part-time or full-time.

The first two cohorts will be comprised of clinical psychologists on staff at Tripler Army Medical Center, who will be enrolled fulltime in the program. TAMC will pay tuition in full to these students, who will be designated "Fellows." It is anticipated that subsequent cohorts will include both fulltime students and working professionals who will take program courses on a part-time basis. The program will attract clinical psychologists who want to increase their knowledge of pharmacotherapy and who reside in states that allow them prescriptive authority after obtaining this degree and other professionals interested in developing expertise in pharmacotherapy.

7. Initial date of offering.

The first cohort officially begins on August 9, 2011.

8. Anticipated life of the program, i.e., one time only or ongoing? Cohort model or rolling admissions? Independent study?

The program will be ongoing with a new cohort beginning every fall. TAMC is funding the first two cohorts within the framework of the hospital's five-year cycle of professional development for staff. It is anticipated that the current three-year contract between TAMC and UH Hilo-COP will be renewed for the full five years. Whether or not the contract is renewed, at that point the program will be well-established and able to attract students from a broad geographical range.

9. Describe the external and/or internal partners contributing and/or participating in this proposal, if applicable. Attach any Memoranda of Understanding (final and signed) between the requisite parties. If more than 25% of the program will be delivered under contract with an institution or organization not certified to participate in Title IV, HEA programs, please see WASC's **Policy for Contracts with Unaccredited Organizations** and explain how this arrangement conforms with the policy.

Tripler Army Medical Center (TAMC), located in Honolulu, HI, is the headquarters of the Pacific Regional Medical Command of the armed forces administered by the United States Army in the State of Hawaii. It is the largest military hospital in the Asian and Pacific Rim, providing a full range of services, including mental health services.

TAMC is on a five-year cycle of fellowship awards to staff for professional development, with the current cycle beginning in Fall 2010. It plans to enroll up to 10 staff psychologists per year in the MSCP program. A new cohort will begin every fall and complete in two years.

The contract between UH Hilo and TAMC is consistent with the WASC policy for contracts with unaccredited organizations, in that the university is providing instruction in psychopharmacology to clinical psychologists practicing at TAMC. UH Hilo is responsible for "course content and the delivery of the instructional program; selection and approval of faculty; admission, registration, and retention of students; evaluation of prior learning; evaluation of student progress; and the awarding and recording of credit." TAMC provides classrooms for students in the program, clinical facilities and clinical supervisors/preceptors." The contract is attached.

Attachments 1.TAMC_UH_Hilo_contract_09-23-10.pdf

B. Descriptive Background, History and Context
1. Brief description of the institution, including the broader institutional context in which the new program or change will exist. Connect the anticipated substantive change with the mission, purpose, and strategic plan of the institution.

The University of Hawai`i at Hilo is part of the State-supported ten-campus University of Hawai`i system, along with UH Manoa, UH West O`ahu, and seven community colleges. In addition to the College of Pharmacy, UH Hilo includes four other degree-granting colleges. The university presently offers a PhD in Hawaiian and Indigenous Language and Culture Revitalization, one Doctor of Pharmacy (PharmD), six master's degrees, 33 baccalaureate degrees and 24 academic subject certificates. In April 2011, a proposal for a new Ph.D. in Pharmaceutical Sciences is undergoing WASC substantive change review.

Since 2002, when the current Strategic Plan was completed, the University's primary mission has been to "offer high quality undergraduate liberal arts and professional programs. Selected graduate degree programs are also offered where need warrants and the university has strong expertise." In the ensuing years, many changes have occurred at the university, including addition of most of our graduate programs. The most consequential of these has been the PharmD program with the establishment of College of Pharmacy. The College has instigated changes across the institution, inspiring a stronger focus, in terms of student majors and institutional resources, on the natural and health sciences.

2. To address prior experience, list the number, variety and longevity of other similar programs that have been or are being offered via distance education. Include a summary or profile of one of the programs being offered via distance education to demonstrate prior experience.

The University of Hawai`i at Hilo is now offering four online degree programs that will undergo substantive change review in September and October 2011: the AA to BA online Psychology program, the RN to BSN online program, the Master of Arts in Indigenous Language and Culture Education (ILCE), and the BA in Communication. The first three have been offered in good faith by the university since 2002, 2004, and 2006, under the misapprehension that programs required subchange review only if 50% or more of total credits were offered online. The fourth achieved DL status gradually and without planning to become an "online program": individual faculty members have offered more and more online courses over the years and students have responded enthusiastically.

The AA to BA online Psychology program accepted its first off-island on-line students in Fall 2002. Program enrollment is limited to 33 students at any one time; as one student completes, another student is admitted. Pending the outcome of the substantive change review in September 2011, new students will again be admitted to the program Fall 2012. On average, students have been enrolling in two courses per semester and completing the Psychology program in four to six semesters. To date, a total of 84 students have been admitted and 51 have graduated.

C. Institutional Accrediting History Relevant to Substantive Change
1. Brief response to issues noted in prior substantive change reviews since the institution's last comprehensive review.

The last comprehensive WASC review of the University of Hawai`i at Hilo (UH Hilo) was completed in 2004. Since then, UH Hilo has successfully completed three substantive reviews: for the PhD in Hawaiian and Indigenous Language and Culture Revitalization (HILCR) and for the Doctor of Pharmacy program, both discussed below; and the proposal for a 1+2+1 dual degree program involving four departments at UH Hilo and a group of Chinese universities. The recommendations for action for the 1+2+1 program encouraged the university to continue to progress in student learning assessment and in establishing a more efficient governance system. Both issues were addressed to the satisfaction of the October 2009 WASC special visit site team, as indicated in the commission's March 2010 action letter. A fourth substantive change proposal, for the PhD in Pharmaceutical Sciences, will complete review on April 27, 2011.

2. Institutional response to issues noted in prior Commission or other Committee action letters or visiting team reports that are relevant to the proposed substantive change.

Action letters to UH Hilo have emphasized the need for greater faculty involvement in the assessment of student learning outcomes. In developing the MSCP program, CoP faculty have been attentive to the need to integrate a sustainable and meaningful system for such assessment, consistent with both the WASC model and the expectations for the performance of clinical psychologists with prescriptive authority as established by the US military and specified in the attached "Memorandum UH Hilo TAMC Psychopharm Practicum." The assessment plan, attached in section III.B, will continue to be reviewed by the faculty program committee and by the college assessment director, who will assume office on May 1 (her CV is attached).

As the institution has added graduate programs, we have developed the appropriate administrative infrastructure to support those programs. There is now a vice chancellor for research who also oversees aspects of the graduate programs. The commission's 2008 action letter acknowledged that UH Hilo had clarified "the role of the university-wide Graduate Council and [established] a new campus-wide curriculum review committee with clearly delineated responsibilities for overseeing curricular quality and integrity," two advances that bode well for the quality of all graduate programs at UH Hilo. The proposed MSCP has been thoroughly vetted by the Graduate Council and the Campus Curriculum Review Committee.

3. If the proposed program is within a school accredited by a professional accrediting agency, or is related to a program that is accredited by a professional accrediting agency, list the agency, year accredited, and include a copy of the executive summary to the most recent team evaluation report and agency action. Also, indicate whether the specialized agency needs to review and approve the proposed program prior to implementation.

The proposed MS program is within the UH Hilo College of Pharmacy, which was granted Pre-candidate Status by the Accreditation Council of Pharmacy Education (ACPE) in June 2007. Candidate status was affirmed at the ACPE Board meeting in June 2009. A focused site visit occurred in March 2010, and the college was found to meet expectations for its stage of development, its accreditation term was extended to June 30, 2011 and a comprehensive visit occurred in April 2011 "for the purposes of advancing the Doctor of Pharmacy program from Candidate to Full accreditation status." The results of the site visit will become available after the June 2011 meeting of ACPE. The 2010 ACPE Accreditation Action and Recommendations report on the 2010 visit is

attached.

Attachments 📄 1.ACPE_AR_U_of_Hawaii_Hilo_S2010.pdf

Section II: Program Need and Approval

A. Program Need
1. Program need/rationale framed by the institution's mission and strategic goals.

Alignment with Mission and Strategic Goals of UH Hilo and UH System

The proposed graduate program is consistent with the primary mission of UH Hilo as stated in the 2002-2010 Strategic Plan: "to offer high quality undergraduate liberal arts and professional programs. Selected graduate degree programs are also offered where need warrants and the university has strong expertise."

A new UH Hilo Strategic Plan is currently being developed, with completion targeted for summer 2011. These new mission and vision statements are being reviewed by the university community:

- Draft Mission: UH Hilo is committed to interactive learning, discovery, and creativity to benefit our increasingly intercultural communities.
- Draft Vision: UH Hilo is a community of scholars working together across disciplines and differences to address real world issues. Every student engages in practical experiences connected to the people and environment of Hawaii, preparing them to compete, innovate, and lead in their professional and personal lives.

The proposed MS in Clinical Pharmacology is consistent with this new and broader mission, for it provides advanced professional development to working clinicians, with an initial focus on those practicing in the state of Hawaii.

Growing Trend: Prescriptive Authority for Clinical Psychologists. Currently, the U.S military, Guam and two states (New Mexico and Louisiana) allow prescriptive authority to licensed, doctoral-level psychologists who have completed advanced education in psychopharmacology and passed a national certification exam.

The proposed MSCP program would be the first in the nation offered by faculty with extensive expertise in pharmacology and integrated pharmacotherapeutics solely within a College of Pharmacy. It will enable clinical psychologists on staff at Tripler Army Medical Center (TAMC) to meet the Army's requirements for psychologists with prescriptive authority.

Meeting Needs of the Military in Hawai`i.The military community in Hawai`i will enjoy tremendous benefits if there are additional clinical psychologists at TAMC who have prescriptive authority. According to the 2010 US Census, there were 40,874 active military personnel stationed in Hawai`i as of September 2009,a population almost as large that of Hilo, Hawai`i. The successful training of clinical psychologists in the art and science of psychopharmacology will afford improved mental health treatment for our service men and women and their families.

Military personnel present distinctive needs in pharmacologic treatment for mental health problems arising from service-related experiences. Recent media attention to this issue highlighted concerns regarding the unique problems facing psychopharmacology in the military; factors include polypharmacy due to treatment of mental health and physical pain from combat, traumatic stress, multiple sources of controlled substances and increased risk of suicide. Furthermore, a strong co-morbidity between heavy alcohol use and mental health problems for active military personnel has been found in a recent Department of Defense. Another DOD study showed that active military personnel also were reported not to comply with prescriptions for high blood pressure.

The families of deployed military personnel require additional consideration. A recent study, reported in the *New England Journal of Medicine*, of 250,626 wives of deployed active-duty U.S. Army soldiers demonstrated statistically significant elevations in diagnoses of depressive disorders, sleep disorders, anxiety and acute stress reaction and adjustment disorders as compared to those married to non-deployed soldiers.

Higher rates of mental and behavioral health visits were reported for children of deployed military personnel as compared to those of non-deployed soldiers, according to a pediatric survey. Over 600,000 mental and behavioral health out-patient visits were reviewed for this retrospective cohort study of children between 3-8 years of age. An 11% increase in visits was found after a parent was deployed. Conditions of attention-deficit, adjustment, behavioral, stress and autistic disorders were most frequently reported.

Serving the General Population. If legislation is passed in the state of Hawaii to allow prescriptive authority for clinical psychologists with an MSCP degree, there will be an additional demand for this program within the state. In the near future, given the uniqueness of this MSCP program offered by the College of Pharmacy, it can be expected to attract psychologists from other states as well.

Whether or not prescriptive authority is granted to clinical psychologists in Hawai`i, potential demand for graduates is reflected by the improvements to patient care state-wide,. The MSCP training program intensifies the student's knowledge in the psychopharmacology, physiology, epidemiology and brain chemistry of mental health conditions. The sophistication and scholarship that accompanies training of this kind is of direct benefit to patients being treated by MSCP graduates. Primary care physicians, who currently treat the majority of patients with mental health disorders, also will benefit from an improvement in knowledge within practitioners in the mental health care community who seek the MSCP degree. The Hawaii Psychology Association is comprised of over 200 members. Clinical psychologists will actively seek to further their education in psychopharmacology in order to better treat their patients.

In broader terms, the US Bureau of Labor Statistics estimates that 34% of psychologists are self-employed, mainly as private practitioners and independent consultants. Employment growth for psychologists ranges between 11 and 26 percent, depending on specialty. The Bureau also noted that employment for psychologists, which includes those with a master's degree in psychopharmacology, "will grow because of increased demand for psychological services in schools, hospitals, social service agencies, mental health centers, substance abuse treatment clinics, consulting firms, and private companies."

As evidenced from letters of support (available on request), this program is viewed

across the State as an important landmark for the improvement of the mental health of the residents of Hawai`i.

2. Listing of the number, variety and longevity of other programs at the proposed degree level

- Master of Arts in Hawaiian Language and Literature: since Fall 1998
- Master of Education: since Fall 2000
- Master of Arts in China-U.S. Relations: since Fall 2004
- Master of Science in Tropical Conservation Biology and Environmental Science: since Fall 2004
- Master of Arts in Clinical Psychology: since Fall 2005. The program has just received ten-year accreditation from the Masters in Psychology Accreditation Council.
- Master of Arts in Indigenous Language and Culture Education: since Fall 2006.

3. Process and results used to establish the need. Please provide a summary of the findings, not the full study.

The need for an MSCP program in Hawai`i first arose in response to an emerging connection between clinical psychologists and their patients who were being treated medicinally for mental health disorders. This relationship was amplified in the Armed Services, where a lack of qualified prescribers collided with escalating numbers of soldiers needing treatment.

The history of instituting prescriptive authority for clinical psychologists, which establishes need, is central to the justification of the MSCP program. Prescriptive authority for psychologists has been developed and studied on a national basis for decades. Hawai`i Senator Daniel Inouye helped initiate the US Department of Defense Psychopharmacology Demonstration Project (PDP) as early as 1987. The PDP, launched in 1991, created a training program to prepare PhD clinical psychologists "who could safely and effectively use psychotropic medication as one component of their clinical armentarium." [Merrick, Lynn. Prescriptive authority for psychologists: issues and considerations. Honolulu, HI: Legislative Reference Bureau, January 2007. http://www.state.hi.us/lrb/rpts07/rxauth.pdf]

3. Evidence used to support enrollment projections and to support the conclusion that interest in the program is sufficient to sustain it at expected levels. If the program is planned to be offered for a finite period, provide the enrollment data for the length of the program. If the program is planned to be offered continuously, then provide enrollment projections for the first three years. These enrollment projections should be reflected in the budget.

The contract with TAMC (attached) provides for up to ten students per year. For the first cohort, four students will be enrolled. Each fall a new cohort will start, entering through TAMC at a rate of 4-6 per year with an upper limit of 10 per cohort. Enrollment projections are included in the budget document attached to section IV.F.

Once the terms of the TAMC contract have been met, and assuming the program is as productive as anticipated, it will be offered to other qualified persons. Potential students

not associated with TAMC already are contacting the Psychopharmacology Program office to inquire about enrolling in the MSCP curriculum.

4. Attach the recruitment and/or marketing plan for the program. Note that all materials regarding this program should clearly state, "Pending WASC approval" prior to Commission ratification.

No marketing or recruitment has occurred to date. The first cohort has been established without recruitment. For the three years of the contract, TAMC will pay tuition, provide on-site facilities and clinical supervision for students and will be responsible for recruiting students through their own fellowship opportunities. Development of a recruitment and marketing plan will be initiated in 2012-2013 and will be based upon experiences of the first cohort.

Attachments 1.TAMC_UH_Hilo_contract_09-23-10.pdf

B. Planning/Approval Process
1. Description of the planning and approval process within the institution (and system, if applicable), indicating how the faculty and other groups (administrators, trustees, stakeholders, system office, etc.) were involved in the review and approval of the new site or program. Attach documentation of necessary approvals.

The College of Pharmacy and TAMC began discussions about the MSCP in early 2009. The contract was signed by UH Hilo chancellor on August 2, 2010. The program committee developed the curriculum, and a program coordinator was hired early in the fall semester to work with COP faculty to design courses and integrate them into the university's course management system Laulima and Elluminate Live!

In December 2010, the faculty congress recommended approval of the request for authorization to plan for the program to the vice chancellor for academic affairs and the chancellor, who concurred. On February 23 , 2011, authorization was granted by the UH system Council of Chief Academic Officers. A proposal was prepared in accordance with UH Hilo Graduate Council guidelines (attached). On March 1, the program proposal was approved by COP faculty and dean; on March 3 by the Graduate Council; and on April 20 by the campus curriculum committee. A positive recommendation is expected to follow on May 6 from the Faculty Congress, followed by approval by the chancellor. Internal discussions have assured the college that the program is supported at all levels internal to the university. On May 17, the proposal was approved by the UH system Council of Chief Academic Officers; the final step is approval by the Board of Regents, which is expected to occur at the July 19 BOR meeting. (There is no June BOR meeting in 2011.)

Documentation of BOR approval will be provided immediately following the July 19 BOR meeting.

Attachments 2.New-Grad-Program-Proposal-Guidelines-UHH_DRAFT_1-11-11-1.pdf

Section III: Program Description and Evaluation

A. Curriculum

1. Overall description of the program, including the alignment of the program philosophy, curricular design, and pedagogical methods with the target population and degree nomenclature selected.

The objective of the MSCP program is to provide a rigorous, advanced education in clinical psychopharmacology to licensed, doctoral-level, practicing psychologists to enable them to safely and effectively prescribe medications for their patients in accordance with all relevant state and federal laws. Additionally, in states that do not allow such prescriptive authority, this program will enhance the ability of clinical psychologists to consult with primary care physicians and psychiatrists about appropriate drug therapy for their patients.

Initially the proposed program will provide graduate-level training in psychopharmacology for students who have earned a Ph.D. in Clinical Psychology and who also work for the Armed Services. Such clinical psychologists can gain the license to prescribe medication to mental health patients within the Armed Services.

Following the completion of the contract with TAMC, the MSCP program will be made available to any student seeking a higher degree of understanding of the principles of psychotherapeutic drugs. The concentrated training of psychotherapeutic drugs achieved in a Master of Science in Clinical Psychopharmacology program is attractive to licensed psychologists outside of the Armed Forces. Psychiatric nurses also may benefit from the didactic knowledge gained from this program. Individual courses in psychopharmacology, neuroscience and pharmacotherapeutics would also be of benefit to non-matriculated students seeking a broader background in these fields.

The MSCP curriculum is comprised of 33 total credits. Beginning with a strong foundation in biochemistry and physiology, the curriculum for the MS degree in Psychopharmacology reflects current best practice in teaching evidence-based medication therapy management through intensive coursework in Integrated Pharmacotherapy. The integrated pharmacotherapy series is the core of the curriculum and combines all aspects of pharmaceutical care with therapeutic knowledge. Advanced Psychopharmacology I and II, taught during the final two semesters, serve as the capstone courses. This curriculum is designed to provide an in-depth coverage of pharmacotherapy associated with the treatment of mental disorders.

FIRST YEAR		Credits
Fall	PHPS 450 The Biochemical Basis of Therapeutics I – Biomolecules	3
	PHPS 451 The Biochemical Basis of Therapeutics II- Metabolism	3
	PHPS 606 Human Physiology	3

Spring	PHPS 601 Integrated Pharmacotherapy I		7
Summer	PHPS 602 Integrated Pharmacotherapy II		7
SECOND YEAR			
Fall	PHPS 603 Integrated Pharmacotherapy III		4
	PHPS 604 Advanced Psychopharmacology I		2
	PHPS 607 Psychopharmacology Practicum		0
Spring	PHPS 605 Advanced Psychopharmacology II		2
	PHPS 607 Psychopharmacology Practicum		0
Summer	PHPS 607 Psychopharmacology Practicum		2
Total Credits			33

The psychopharmacology practicum must be completed over two semesters and a summer. This is indicated by the distribution of credits: 0 credits for the fall and spring and 2 credits in the summer.

Program personnel and their responsibilities are described and their vitae provided in the attached "MSCP Program Staff w CV."

2. How has the curricular design and pedagogical approach been adapted to the modality of this program?

Program students will be at TAMC on the island of Oahu, while program faculty are situated in Hilo, over 200 miles and several islands away. Content courses, such as the biochemical basis of therapeutics and human physiology, are presented in a combination of pre-recorded lectures made available asynchronously and online, seminar-style onsite workshops associated with the courses, and synchronous Elluminate Live! discussions and review sessions. This multi-modal format enables students to master large amounts of information according to their own life and work schedules, while allowing for instructors to reinforce learning and provide prompt feedback. In future cohorts, which may involve students in practice in non-military settings in other states, on-site visits will be replaced with synchronous Elluminate sessions.

In the first two cohorts, at TAMC, the practicum courses will be offered onsite and students will perform 400 hours of clinical training over two semesters and a summer, under the direct supervision of a qualified onsite clinician. In future cohorts, students will be responsible for identifying their own clinical training sites near their place of residence, with program staff certifying the appropriateness of the site and clinical supervisors and ensuring that program protocols and assessment requirements are met.

3. Program learning outcomes that articulate what the student will be able to do after he/she completes the program and are appropriate to the level of the degree.

Students are expected to master a complex set of content areas. These are itemized in the attached "MS-CP Content Areas"; mastery of these content areas underlies all of the program learning outcomes.

Upon completing the MSCP, successful students will be able to:

1. define, identify and recognize key concepts of terminology in all content areas
2. review and explain at a high level of proficiency, both orally and in writing, the most current theories of the pathophysiology, etiology, signs and symptoms underlying mental health disorders and their psychopharmacologic treatment
3. choose the appropriate diagnosis and effectively apply psychopharmacological knowledge to resolve clinical psychopathological cases using "Subjective, Objective, Assessment and Planning" (SOAP) notes and case presentations, and differentiate mental disorders that are drug-induced or caused by somatic disease
4. analyze, interpret, integrate and evaluate pharmacologically-based clinical findings in psychological settings through literature review, class presentations and written analysis
5. devise, formulate and plan medication therapy management specific to psychopathology, with an emphasis on drug selection based on   relative efficacy for the disorder, adverse effect profiles, food and drug interactions, and pharmacokinetics, and determine appropriate pharmacologic assessment and monitoring
6. demonstrate the ability to compare, contrast and interpret epidemiological, professional, legal and ethical findings in the clinical psychopharmacology literature and case presentations using information technology.

4. Curricular map articulating the alignment between program learning outcomes and course learning outcomes and demonstrating the progression from introductory to advanced levels.

The curriculum map is attached.

5. Listing of courses, identifying which are required.

All courses are required and must be taken in sequence. Course descriptions are attached in "MSCP Course Descriptions." Because of the variation in prior education in biochemistry and human physiology that can be expected in any group of students with

PhDs in clinical psychology, the program has developed strategies for ensuring that those with little or no prior experience in those fields of study can keep up; and that those with solid backgrounds in those fields will not be held back.

6. Process by which syllabi are reviewed and approved to ensure that 1) course learning outcomes are described and are linked to program learning outcomes; 2) materials are current; 3) pedagogy is appropriate for the modality of the course.

Course syllabi have been developed by the program committee under the leadership of the program director and the program coordinator and employing a syllabus template. This process has ensured that detailed course learning outcomes for provided for each course and are linked to specific program learning outcomes. The materials are current and the syllabi show the integration of online, face-to-face, and Elluminate Live! components.

7. Attach three sample syllabi that are representative of the program and attach the capstone/thesis or culminating experience syllabus (if applicable). Syllabi should include specific student learning outcomes for the course, be adapted to the modality of the course, and be appropriate to the level of the degree. Syllabi should also reflect information literacy requirements and use of the library.

We attach the following syllabi:

> 1. PHPS 606 Human Physiology.
>
> 2. PHPS 602 Integrated Pharmacotherapy II.
>
> 3. PHPS 604 Advanced Psychopharmacology I.
>
> 4. PHPS 605 Advanced Psychopharmacology II. This fourth semester course is the second of the capstone courses.

The syllabi for multi-instructor courses specify the Course Coordinator, who is students' primary contact for course issues. As needed, the coordinator will ensure that instructor and students come into prompt contact.

8. Internship requirements and monitoring procedures, if an internship is required.

A clinical practicum is compulsory to fulfill the requirements for the MSCP. Practicum hours are similar to an internship in that the practicum hours are performed outside of the classroom in a clinical setting. Students will participate in a psychopharmacology practicum for eight hours per week.   Practice enhances the didactic components of specific courses by allowing the student to have real time experience in clinical psychopharmacology. The clinical practicum will contain a minimum of 400 hours.

The Psychopharmacology Practicum courses will require students to demonstrate competence in medication therapy management specific to psychopathology. Students

will be supervised by a qualified clinical practitioner with demonstrated skills and experience in clinical psychopharmacology in accordance with the prevailing jurisdictional law. Students will be actively involved in consultation with physicians and/or appropriately credentialed psychologists regarding the prescribing of psychoactive medications. Practicum components will be consistent with APA Recommendations. At the end of the training program, a capstone competency evaluation will be completed in accordance with the attached "Memorandum UH Hilo TAMC Psychopharm Practicum.")

The new assessment officer will develop comprehensive means of assessing student performance in the appropriate program learning outcomes as well as to ensure that students have achieved mastery in accordance with professional criteria.

9. Special requirements for graduation, i.e. comprehensive examination, service learning, etc.

Students must participate in the clinical practicum for a minimum of 400 hours, see a minimum of 100 separate patients, and at the final evaluation of their practicum performance must be judged by their clinical supervisor to have met the expected level of performance.

The TAMC cohorts must pass the American Psychological Association's College of Professional Psychology Psychopharmacology Examination (PEP) to receive their degree, in accordance with the UH Hilo TAMC contract.

Attachments 3.MSCP_Curriculum_Map.pdf, 3.Syllabus_602_integrated_pharmacotherapy_II.pdf, 3.Syllabus_604_advanced_psychopharmacology_I.pdf, 3.Syllabus_605_advanced_psychopharmacology_II.pdf, 3.MSCP_Program_Staff_w_CVs.pdf, 3.MSCP_Course_descriptions-REV_2.pdf, 3.MS-CP_Content_Areas.pdf, 3.Syllabus_606_human_physiology_REVISED_2.pdf, 1.Memorandum_UH_Hilo_TAMC_Psychopharm_Practicum.pdf

B. Schedule/Format
1. Length of time that the typical student is expected to complete all requirements for the program.

Two academic years, including two full summer sessions.

2. Description of the cohort or open registration model being used. Minimum attendance/participation requirements and the provisions made for students to make-up assignments or for students who have to drop out of the cohort for a short period of time.

For the first two TAMC cohorts, the College of Pharmacy will provide first and second year instruction/training for up to a total of 20 students per calendar year. There may be a maximum of ten students per class/cohort. The course coordinator, under the

supervision of the director, will work with individual students who request make-up arrangements or who need to drop out for a short period.

3. How will the institution ensure that timely and appropriate levels of interactions between students and faculty, and among students are maintained?

In the TAMC cohorts, students will interact with instructors and each other in face-to-face sessions held at TAMC at least three times per semester in each course. In all cohorts, each course will include biweekly synchronous Elluminate sessions in which students will discuss course content with the instructor and with each other. The Laulima course website provides course email and asynchronous discussion boards. The practicum courses will involve intensive interaction between student, mentors/supervisors, and patients, as well as written reports by students and evaluations by clinical supervisors.

The program coordinator will also be accessible to students throughout the week via phone, Skype, and email for guidance and support in academic and related matters.

4. Please describe how the identity of students participating in the program will be verified. See **Best Practice Strategies for Promoting Academic Integrity in Online Education.**

As stated in item 2 above, instructors will come to know each student on an individual and face-to-face basis, meeting with them at TAMC regularly in onsite meetings and on Elluminate Live, in which video conferencing is available as part of each synchronous session. The Laulima course website is password protected, accessed by each student with his or her hawaii.edu username and password. The practicum courses will involve intensive interaction between student and supervisor. In addition, the college's expectations with regard to academic honesty are articulated in every college syllabus.

Finally, the institution sets clear guidelines and procedures for academic honesty/dishonesty: http://www.uhh.hawaii.edu/studentaffairs/conduct/student_conduct.php

5. Timeframe of courses, i.e. accelerated, weekend, traditional, etc. If the course timeframe is abbreviated, an institution must allow adequate time for students to reflect on the material presented in class. Faculty using the accelerated course format should be expected to require pre- and post-course assignments, as appropriate. The Committee will expect course syllabi for accelerated courses to be adjusted accordingly to reflect the pre- and post-course assignments, and the accelerated nature of the curriculum.

The timeframe is traditional: courses run through the 16-week fall and spring semesters. The summer semester is 13 weeks long.

6. Sample schedule of courses for a full cycle of the program with faculty assignments, if available.

See the attachment "Course Cycle with Instructors."

Attachments 📄 3.MSCP_-_WASC_-_Course_Instructor_Credit_Listing.pdf,
📄 3.Course_Cycle_with_Instructors.pdf

C. Admissions
1. Admissions requirements.

Admissions.. Students will need to submit all of their application materials to the UHH CoP MSCP Program Admissions Committee, who will select entrants into the program. The admission criteria and procedures conform to the UH Graduate Division's standards post-graduate programs, posted at http://hilo.hawaii.edu/academics/graduate.

Minimum Qualifications for Acceptance: Each applicant for the MSCP must hold a baccalaureate degree and a graduate (PhD) degree in clinical psychology from a regionally accredited U.S. college or university, or its equivalent from a recognized non-U.S. institution of higher learning. The standards of the degree in question must be equivalent in scholarship requirements to those maintained in the undergraduate program at the University of Hawai`i at Hilo.

Grade Point Average (GPA): The applicant must have a GPA of 3.0 or the equivalent from the last 60 semester credits (or equivalent) in the undergraduate degree completed, or must hold a graduate degree with a GPA of 3.0 or better in his/her graduate program. Under special circumstances, a GPA of 2.75 or higher will be considered based on the applicant's other qualifications and subject to the petition process noted above.

2. Identification of the type of student targeted and qualifications required for the program.

This program is designed primarily for students who hold a PhD in Clinical Psychology. The first cohorts will be comprised of qualified staff of the Tripler Army Medical Center.

Following the completion of the contract with TAMC, the MSCP program will be made available to any student seeking a higher degree of understanding of the principles of psychotherapeutic drugs. The concentrated training of psychotherapeutic drugs achieved in a Master of Science in Clinical Psychopharmacology program is attractive to licensed psychologists outside of the Armed Forces. Psychiatric nurses also may benefit from the didactic knowledge gained from this program. Individual courses in psychopharmacology, neuroscience and pharmacotherapeutics would also be of benefit to non-matriculated students seeking a broader background in these fields.

3. Credit policies, including the number of credits that students may transfer in.

The College will evaluate on a case-by-case basis any student requests to apply prior coursework at the lower level, that is, biochemistry and human physiology, as equivalent to coursework required in the program. However, students must complete the integrated and advanced courses and the practicum as part of the program.

In Spring 2011, four students are enrolled in experimental versions of the two biochemistry courses and the human physiology course; in Summer 2011, they will be enrolled in an experimental version of the Integrated Therapeutics I course. . These courses are "experimental" only in the sense that at UH Hilo new courses are routinely

offered with the -97/-98 course numbers and must be approved by the program faculty and by the dean. Next, courses are assigned permanent numbers and go through the full university curriculum review process. The permanent versions of the courses have now been approved to be offered in 2011-2012 and thereafter. The vice chancellor for research and graduate study and the graduate council have approved the application of these "experimental" courses towards the program requirements, once the program itself has been approved by the BOR and WASC.

4. Process for awarding credit for prior learning (applicable only to undergraduate level).

Not applicable.

5. Residency requirements, if applicable.

In the first two cohorts, students must be on site at TAMC to participate in the onsite visits and to complete the clinical training. In future cohorts, which may involve students in practice in non-military settings in other states, on-site visits will be replaced with synchronous Elluminate Live! sessions, and students will be expected to arrange for clinicals near their places of residence.

6. Sample brochure or admissions material. Note that these materials must clearly state "Pending WASC approval" prior to Commission ratification.

No brochure or admissions material has been developed for these first cohorts; the contract with TAMC makes admissions requirements clear.

D. Plan for Evaluating Educational Effectiveness
1. Plan for assessing the program at various stages in the first year, including achievement of student learning outcomes and how findings from the review will be used to improve the program. Attach the assessment plan.

The program's assessment plan is attached. It includes our program learning outcomes (PLOs), description of direct and indirect assessments, a schedule for assessing student progress in attaining the PLOs, sample rubrics that may be adapted by instructors for assignments in different courses, the SOAP rubric used by students (also attached below), and the TAMC assessment requirements for the practicum (also attached below). The faculty program committee is responsible for designing and implementing direct assessment of student learning, identifying signature assignments, refining rubrics, gathering and reviewing the results of assessment activities annually, and using these results to sustain quality in program pedagogy and curriculum. The assessment plan will undergo further development in the coming months as faculty gain experience with and confidence in these methods.

The College of Pharmacy has hired a fulltime assessment director with full professional and educational qualifications who will report for duty on May 2, 2011. (Her CV is attached.) While faculty will remain responsible for assessing student learning by direct means, the assessment director will focus on indirect assessment. She will work with student focus groups and monitor job placement of students, and the effects on their careers of having obtained the MSCP degree had on their careers, and other measures. Indirect assessments will also include benchmarks such as student evaluations, alumni evaluations and faculty evaluations. Evaluations will be tailored after the already

existent assessment tools in the CoP and will be combined with existent assessment tools available for evaluation of distance learning programs.

In addition to the internal assessment processes, TAMC will be monitoring the effectiveness of the program as described in the contract.

A key tool for external assessment of student learning and achievement in this program is the Psychopharmacology Examination for Psychologists (PEP), offered by the American Psychological Association's ("APA") College of Professional Psychology to eligible licensed psychologists. The PEP is used by state licensing boards for testing licensed clinical psychologists who seek prescriptive authority. It is recognized by The Association of State and Provincial Psychology Boards (ASPPB), the alliance of state, provincial, and territorial agencies responsible for the licensure and certification of psychologists throughout the United States and Canada. The TAMC cohorts are required to pass this examination to receive their degrees. The PEP tests mastery of the content areas that are foundational to the program and that are specified in the attachment "MS-CP Content Areas."

2. Plan for incorporating assessment of this program into the school and/or institution's existing program review process.

The University of Hawaii at Hilo has a seven-year cycle for program review, including external review. At the conclusion of its program review process, each campus academic unit meets with the Vice Chancellor for Academic Affairs (VCAA)and a memorandum of understanding is articulated that describes the next steps for the unit and the administration based on the results of the review process.Units like the COP that have external accreditation agencies submit self-study reports to the VCAA that were submitted to their external agency in lieu of a report following UH Hilo's template. These reports are submitted to the VCAA on the schedule set by the external agency, which, in the case of the COP's Doctor of Pharmacy program, is nominally every two years.

The MSCP is separate from the PharmD and is therefore not included in the COP accreditation review by the ACPE. It will undergo the university's program review process as a degree program. It will be placed on the university's program review schedule when it has been approved by the BOR and WASC.

3. Evaluation of the educational effectiveness of distance learning programs (including assessments of student learning outcomes, student retention, and student satisfaction) including appropriate comparisons with campus-based programs.

Comparison of assessment results with those of other programs is not feasible: the MSCP is not being offered on campus, and it is the first program of its kind in the US.

From the outset, the COP seeks to ensure that online MSCP courses are designed to provide good learning environments for students. Thus, before being offered, each course will be reviewed by a team composed of a pharmacology faculty experienced in online delivery and a course design specialist from the office of Instructional Technology and User Services or the College of Continuing Education and Community Service, using the attached course design guidelines. The specialist will provide guidance and training as needed before the course is launched and during the semester as the course is being taught.

Our assessment plan, attached below, is built on clearly articulated program learning outcomes and a sustainable schedule for assessment student achievement of these outcomes. Direct assessment of student performance in online courses will of course be crucial in gauging teaching effectiveness and indicating ways in which online pedagogy and curriculum can be improved. The assessment plan also includes tracking of indirect measures; item 6 below comments on course/instructor evaluation by students.

4. If the program is offered on-campus or in a traditional format, then it would be appropriate to include a summary of a recent program or curricular review to determine if appropriate changes have been made to the proposed program.

This program has not been previously offered by the College of Pharmacy in any other format.

5. Description of how the student's ability to succeed in distance education programs will be addressed and linked to admission and recruiting policies and decisions.

Most of the attributes and skills required for success in online learning motivation, time management, ability to focus and prioritize are attributes and skills that practicing clinical psychologists with PhDs are likely to possess. However, recognizing that even the best educated and most highly motivated individual may be challenged by instructional technology, the MSCP program will provide training at the beginning of the first semester in Laulima (Sakai) and Elluminate Live! Both systems are user-friendly and well-supported by the university, so that students will have access to technical assistance throughout the program.

UH Hilo's DL website website
http://www.uhh.hawaii.edu/academics/dl/help_for_students.php offers an online readiness test and tutorial that is designed to both raise student awareness of the special challenges of the online learning environment and to train the student in essential Laulima functions.

6. Procedures to evaluate teaching effectiveness in the distance education modality.

See item III. D.3 above and the attached assessment plan for descriptions of direct and indirect assessment of student learning and hence of teaching effectiveness.

Attachments

4.Memorandum_UH_Hilo_TAMC_Psychopharm_Practicum.pdf,
4.CV_MSCP_assessment_coordinator.pdf, 4.SOAP_rubric.pdf,
4.Quality_Online_Course_Design_Guidelines.pdf, 4.MSCP_Program-Assessment-Surveys-FINAL.pdf,
4.MSCP_Assessment_Plan_Final_w_all_attachments.pdf, 3.MS-CP_Content_Areas.pdf

Section IV: Resources

A. Faculty

1. Number and type (full-time, part-time, tenured, non-tenured) of faculty allocated to support the program in terms of developing the curriculum, delivering instruction to students, supervising internships and dissertations, and evaluating educational effectiveness.

A total of 22 faculty will provide lectures for the MSCP program. Sixteen are full-time College of Pharmacy faculty (of which two have tenure), one is a full-time nursing professor and one is a full-time, tenured Chemistry professor. The remainder of the group is comprised of one part-time CoP lecturer, two program coordinators and one librarian who will also provide instruction.

The College of Pharmacy is distinctively qualified to offer the MSCP program with its existing faculty. Currently, the College of Pharmacy offers and administers a professional degree in Pharmacy (PharmD) and so has faculty qualified and capable of teaching, mentoring and supporting graduate students in psychopharmacology. College of Pharmacy faculty will provide the prerecorded didactic lectures described above and will interact with students during the semester of instruction via site visits, synchronous Elluminate sessions, and email and other communication on Laulima . (FacultyCVs are attached)

Additional support staff and educators who cover specific topics (e.g., law, ethics, regulatory issues) currently are supported through the contract with TAMC. Existing support staff, the Planning Director of the Tripler grant, and CoP Student Services staff will be able to deal with correspondence, admissions, and administration of the MSCP program.

The curriculum outlined in this proposal includes lectures already offered to our current Pharm.D. students (videorecorded for MSCP students to view at their convenience according to a syllabus) along with newly created lectures, courses, seminar hours, student grading and assisting, and operations support that will be required solely for the program.

Because there will be significant overlap between the content of the MSCP degree and the current Pharm.D. degree, only 2.0 new faculty FTE's (non-tenure track) will be needed, and there will be no significant increase in workload for existing faculty FTEs. These additional faculty will be non-tenure track under the current funding paradigm since they are supported by a federal grant. One is the Program Coordinator, who is responsible for the overall integration of the material, and for the basic science component. The other FTE will be a clinician who will be responsible for all of the clinical aspects of the program except for the practicum. Vitae of these personnel are included in the faculty CVs.

2. Information about the balance of full- and part-time faculty members involved, and how that balance will ensure quality and consistency in instruction and advising.

Full-time faculty teach core content, while part-time faculty are hired to teach special topics. The full-time program and clinical coordinators advise students.

3. Analysis of the impact that the proposed program or change will have on faculty workload for all involved in the program, including teaching, research, and scholarship. Who will teach courses no longer being taught by the faculty reassigned to this

program? What will be the maximum number of students that each faculty member can advise?

There is significant overlap in content between courses in the MSCP and the current PharmD, so that lectures prepared for PharmD courses are used in appropriate combinations in MSCP didactic courses. All lectures are recorded and made available through Laulima. Apart from supplemental updates to lectures and MSCP-specific content, few additional resources are needed.

The two coordinators will advise up to 20 students per year.

4. Preparedness of faculty to support the modality of instruction. Are faculty development opportunities available? Include any faculty guidelines for online instruction.

CoP faculty have been working with, and will continue to work with, instructional technology and course design staff from the office of Instructional Technology and User Services and the College of Continuing Education and Community Service. They have been trained in both workshops and one-on-one sessions, and one-on-one follow-up and development are available throughout the year.In addition, the UH system offers synchronous and asynchronous online workshops on all aspects of instructional technology, with particular focus on Laulima.

Program online courses must be reviewed by a team comprised of a pharmacology faculty well-versed in online instruction and a specialist from ITUS or CCECS using the attached quality online course design checklist. The specialist provides any needed training and design assistance to ensure that the course meets the guidelines and is available to assist throughout the semester.

 5. Overview of the key credentials and experience of primary faculty responsible for the program. Include abbreviated vitae (3-5 pages) that demonstrate the most current activities in relationship to the program (scholarship, teaching, etc.).

At the inception of this program 22 full-time tenured and tenure track faculty are responsible for lectures. Primarily assigned to instruction in the PharmD program, these faculty have the appropriate areas of expertise to cover the didactic courses. All have doctorates, sound research and publication records, and most have had experience teaching at the graduate or professional level. See the attached "Faculty CVs."

Attachments 📄 5.MSCP_faculty_CVs.pdf, 📄 5.Quality_Online_Course_Design_Guidelines.pdf

B. Student Support Services
1. a.Ongoing academic advising and academic support, b. Financial aid advising, c. Career placement services

    The COP Director of Student Services (DSS), who supervises one full time Academic Advising Specialist, one full time Admissions Counselor and two part time student employees will oversee the admission process for the MSCP program. The College is in the process of recruiting two additional student services employees to meet the student service needs of the growing College of Pharmacy and to assure adequate

administration for the new COP graduate programs.

The staff of the college OSS addresses the needs of prospective and incoming students as well as aids the current students in their progression through their degree program. Additionally, the student employees assist the staff in the OSS to prevent potential backlogs of administrative processes. The Director of Student Services will continue to direct and coordinate the necessary processes and planning in order to best allocate resources to meet the recruitment, admissions and student services needs for the CoP. The CoP OSS will continue to build and implement student support structures that specifically address the needs and concerns of CoP students.

The students in the TAMC cohorts receive salaries from TAMC, which also pays their tuition and fees. Financial aid is not an issue for them. However, the UH Hilo Financial Aid Office provides guidance in financial aid for all eligible students.

Academic and career advising and counseling will be facilitated through a soon to be hired MSCP program coordinator. Additional advisement will be provided by the Associate Dean for Academic Affairs who will serve as Director of the MSCP program.

UH Hilo provides the full range of services to students, including doctoral students: Admissions, Records (includes registration), Counseling, and Financial Aid through the Division of Student Affairs.

In addition, the UH Hilo DL Coordinator provides support to students admitted to online programs in the form of assistance with registering, identifying appropriate Student Affairs offices for students to communicate with, and arranging for proctoring and other services offered thru UH system university centers on all islands (see attachment "DL Services.")

2. Availability of support services for students and faculty, including helpdesk hours.

Technological support is provided by the College of Pharmacy technology staff of two information technology specialists. The program coordinator also provides upon request one-on-one training on Laulima, Elluminate, and other instructional software.

Students and faculty can get technical assistance with Elluminate from the Elluminate specialists at the University of Hawaii at Manoa College of Education, with whom UH Hilo shares an Elluminate contract. UH Hilo offers an Elluminate webpage. UH system technicians provide prompt online assistance with Laulima via email to both faculty and students. UH Hilo staffs a helpdesk from 7:45 am to 4:30 pm weekdays, and the UH system Information Technology Services offers helpdesk assistance system-wide by phone and by email 8 am to 7 pm, four days a week and 8 am to 4:30 pm on Fridays.

Attachments 3.CCECS_DL_Services.pdf

C. Information Literacy and Library Resources
1. Description of the information literacy competencies expected of graduates

and how they will be evaluated.

Students admitted to the program will have PhDs in clinical psychology and might be presumed to have achieved a very high level of competency in information literacy. Nevertheless, the program requires them to demonstrate proficiency at distinguishing useful, truthful, and relevant information from that which is not; and to demonstrate that they are able to use information ethically.

A high level of competence in all aspects of information literacy underlies each of these program learning outcomes:

2. Review and explain at a high level of proficiency, both orally and in writing, the most current theories of the pathophysiology, etiology, signs and symptoms underlying mental health disorders and their psychopharmacologic treatment

3. Choose the appropriate diagnosis and effectively apply psychopharmacological knowledge to resolve clinical psychopathological cases using "Subjective, Objective, Assessment and Planning" (SOAP) notes and case presentations, and differentiate mental disorders that are drug-induced or caused by somatic disease

4. Analyze, interpret, integrate and evaluate pharmacologically-based clinical findings in psychological settings through literature review, class presentations and written analysis

6. Demonstrate the ability to compare,contrast and interpret epidemiological, professional, legal and ethical findings in the clinical psychopharmacology literature and case presentations using information technology

2. Description of how library resources will be used in the curriculum.

Library resources will be embedded into the curriculum through various avenues such as assignments requiring use of published materials (available online), the library's specialized information portal, and course reserve materials. Students will gather and organize information from published online sources in order to identify ongoing and potential drug-related problems and the root cause of those problems. Students will learn how to retrieve, evaluate, and manage professional information and literature and use clinical data to optimize therapeutic drug regimens as well as collect accurate and comprehensive drug information from appropriate sources.

3. Description of what staffing and instructional services have been put in place and what library and informational resources are available to students and faculty, onsite and remotely, in support of this program. Include a description of the library's information literacy program.

The Edwin H. Mookini Library holds 230,798 print volumes, 1,746 print serials, 14,416 electronic journals, and 5,585 electronic books. The library subscribes to over fifty indexes and databases covering many subject areas.

The library has purchased or licensed all the resources from the Basic Resources for Pharmaceutical Education List to support the College of Pharmacy. The library

subscribes several specialized drug information databases and is part of the Hawaii Medical Library Consortium. These resources currently available to college faculty and students:

Academic Periodical Search

Biological Abstracts

CAB Abstracts

CINAHL Full-text

Clinical Pharmacology

Counseling Psychology Research Guide

Cochrane Library

Detailed Drug Information for the Consumer

Facts & Comparisons

Lexi-Comp ONLINE

Medical Letter

Merck Index

Natural Medicines Comprehensive Database

Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations

Pharmacist's Letter

PsycNet

Psychology & Behavioral Sciences Collection

PubMed/Medline

SciFinder Scholar

StatRef

USP-NF Online

Web of Science

A full-time permanent Medical Librarian serves as liaison for the College of Pharmacy and the School of Nursing. The pharmacy librarian is the primary contact for the

pharmacy program and the university library. The librarian develops and maintains information resources in pharmacy and biomedical sciences; helps select, evaluate, and monitor print, electronic, and web resources; and provides support for accreditation review processes, new academic programs, and grant proposals.
The library has designated a librarian to provide support for all distance learning students and programs. The DL librarian maintains a webpage with links to tutorials and to UH system library services and resources as well as to UH Hilo online course reserve materials.

   4. If additional information literacy and library resources are deemed necessary, specify what these resources are and detail the institution's long-term financial commitment to implement this program.

At the present time, it is considered that support and resources are adequate to the needs of the college, including those of the new MSCP.

5. Access to library systems (local, national, or global), electronic services, Internet, information utilities, service providers, and document delivery services for both faculty and students.

The Edwin H. Mookini library is a part of the Hawaii Library Consortium (HLC) and the Hawaiʻi-Pacific Chapter of the Medical Library Association (HPCMLA). The library is also a member of the Hawaiʻi-Pacific Chapter of the Medical Library Association. The purpose of this Chapter is to promote the educational, scientific, and professional growth of its members and of member organizations in health sciences, library service and in the Medical Library Association. The library plans on becoming a member of the National Network of Libraries of Medicine (NN/LM).

D. Technology
1. Description of the institution's technological capacity to support teaching and learning in the proposed program.

COP IT infrastructure includes three Apple XServe servers, one Mac Pro Server, an XServe RAID and a Tape Backup unit, as well each faculty and staff member has access to either a Mac or PC, laptop or desktop computer. Servers now support BLOGs, WIKIs VPN and web-based calendars in addition to other services. Classrooms are equipped with multimedia, access to the internet, distance-capable interactive television and video, as well as access to standard instructional software. The college IT infrastructure is maintained and supported by two full-time staff members with a third being recruited during the present school year.

Through the Office of Campus Technology (OCT), UH Hilo offers a full range of technological services and support for faculty, staff, and students. Externally, the campus has 10 Gigabit communication capacity to UH system and beyond with Internet 2 capability. Fiber connections run throughout the campus and the entire campus has wireless access to the internet. All classrooms have multimedia and internet access, and there are computers available for student use at multiple points around campus.

UH Hilo faculty have unlimited access to Elluminate Live!, the UH system's Laulima (Sakai) Learning Management System, and the system's broad range of instructional

technologyonline resources. In addition to instructional use of technology, UH Hilo, as part of the UH system, has fully functional administrative and student services computer systems to handle a wide range of campus functions.

2. Description of the institution's provisions for students in the proposed program to gain full access to course materials.

All course lectures and slides are posted on Laulima and are available 24-7 during the semester. These materials can be downloaded and saved on individual student computers. Our students must agree to manage these materials with academic integrity.

Students also have 24/7 access to online databases and other informational resources through the University of Hawaii library.

3. Description of the level of technology proficiency expected of students and faculty.

In addition to standard computer skills in word-processing, for the purposes of the program, faculty and students are expected to use the course management system Laulima to access course materials, email, and as needed for asynchronous discussion; and Elluminate Live! for interactive synchronous lectures and discussions. In addition, they will use the university's online databases. Online training is available for all of these resources.

4. Description of how students will receive training on how to utilize program required technology.

UH Hilo's Elluminate Live! contract includes the training services of a technical specialist situated at the UH Manoa College of Education; this specialist trains students on the software in a face-to-face class session at the beginning of the first semester. In addition, the program coordinator is able to provide as-needed and one-on-one support in Elluminate for both faculty and students. UH Hilo provides an Elluminate Live! resource webpage with links to training videos and PDF documents.

In support of both faculty and students, the UH system Information Technology Services (ITS) offers online videos on all aspects of Laulima and select Word, Excel, and PowerPoint functions. UH Hilo offers an online Student Readiness test and tutorial.

5. Description of how the institution will ensure business continuity during system failures (major or minor) or scheduled service interruptions.

At the campus level, continuity and safeguarding of network services are assured by provision of two network paths to each building. Externally, the network connects to the UH system through the university fiber system and through the state fiber system separately. In addition, all internal communication systems and servers are on Uninterrupted Power Supply (battery back-up) to ensure safe power-down if there is power disruption. Scheduled service interruptions occur after 10pm or on weekends and are announced to the campus community.

6. Description of the provisions available to faculty to ensure that the enrolled student is the student completing the coursework. See**Best Practice Strategies for Promoting Academic Integrity in Online Education.**

In the first cohort, instructors will conduct at least three face-to-face sessions per course per semester at Tripler Army Medical Center. For all cohorts, each course will include biweekly synchronous Elluminate sessions in which students and instructors will discuss course content and professional issues. The Laulima course management system is secure, with access to course websites requiring students to enter their hawaii.edu usernames and passwords. When students submit written assignments, quizzes, and exams online, they must affirm that they have not received inappropriate assistance in completing the work. Course examinations are completed on Laulima within set time limits.

In the psychopharmacology practicum, students will have intensive interaction with mentors/supervisors and patients.

The institution has clear guidelines and procedures addressing academic honesty and dishonesty: the student conduct code applies to all students and contains a detailed description of academic honesty and procedures for students who violate that expectation.

All program syllabi include a statement on academic honesty.

E. Physical Resources
1. Description of the physical resources provided to support the proposed program(s) and the impact of the proposed change on the physical resource capacity of the institution. This includes, but is not limited to, the physical learning environment -- classrooms, study spaces, student support areas.

 The legislature has appropriated $5.5 million for the planning and design of a permanent CoP building. The College currently occupies over 20,000 sq.ft. of facilities distributed among several sites both on campus and nearby. For more details see the attached"WASC-Physical-Space".

TAMC will provide clinical settings for the practicum courses and a conference room for onsite meetings. Office space is provided to each student with internet capabilities.

Attachments 5.WASC-Physical-Space.pdf

F. Financial Resources
1.Assessment of the financial viability and sustainability of the program including: a. Narrative describing all start-up costs for the institution and how the costs will be covered (including direct program cost and institutional indirect cost). Costs for licensing, hardware, software, technical support, training for faculty and students, and instructional design should be included.

The attached budget projection is that approved by the UH system Council of Chief Academic Officers May 19,2011 and will be submitted to the Board of Directors in July 2011and includes two abbreviations peculiar to the UH system. The projection page headings can not be altered, but we have spelled out terms on the Notes page. "SSH" means "student semester hours," "APT" means "Academic ProfessionalTechnical [staff]," and "FTE" means "Full-Time Equivalent."

Direct program costs for the three years 2010-2013 are covered by TAMC, as indicated in the attached budget projection. Salaries and fringe benefits for the fulltime program coordinator and clinical supervisor as well as for faculty are included in direct costs. The program director and assessment director fill permanent positions; the director is associate dean of academic affairs, and the assessment director works with all college programs. The program coordinator's responsibilities include coordination of course design and training.

Licensing for Laulima is paid for by the UH system; licensing and technical support for Elluminate Live! by UH Hilo, which makes the system available to all faculty, staff, and students; workshop and one-on-one training for faculty as well as assistance with course design are provided as part of their mission by the office of Instructional Technology and User Services and by the Distance Learning coordinator.

 b. Total cost of the program to students, including tuition and any special fees.

At the current rate of graduate tuition for UH Hilo, total cost is $11,225 for in-state students. TAMC will pay in-state tuition and fees for its fellows. Subsequent cohorts may include out-of-state students; nonresident graduate tuition at the current rate would be $22,031.

c. Financial impact of the change on the institution including evidence that the institution has the capacity to absorb start-up costs. If the institution has incurred a deficit in the past three years, supplemental information describing the financial capacity of the institution to start and sustain the new program(s) is required.

Start-up costs are covered as described in section IV.F.1.a. above. The institution has not incurred a deficit in the past three years, nor ever in its history.

d. Statement of the minimum number of students per year necessary to make the program financially viable. The budget should reflect anticipated attrition and should include plans to respond to low enrollment.

We do not anticipate attrition in the TAMC cohorts; students have a fellowship commitment to the program and TAMC. Once the TAMC contract has been completed, the program would require a minimum of eight students per year distributed over two cohorts.

e. Budget projection, for at least the first three years of the proposed program, based on the enrollment data in the market analysis and including projected revenues and costs. The budget should include all budgetary assumptions.

The required budget projection is attached. On page 2 are the notes specifying figures used in the projection.

Attachments Academic_Cost_and_Revenue_-_MSCP_05302011-

Section V: Teach-out

A. Teach-out
1. Teach-out plan detailing how students who begin this program will be able to finish if the institution determines that the program is to be closed. Please see WASC's **Policy on Teach-Out Plans and Teach-Out Agreements.**

University of Hawai`i Board of Regents policy 5.1.g.3 provides that "Provisional and established programs deemed out-of-date or nonproductive may be terminated by the President in consultation with the Board, following a stop-out of the program by the administration. Commitments to students already officially enrolled in such programs shall be met but no new program admissions shall take place."

Each campus is responsible for working out the details of enabling students to complete program requirements. While it would be permissible for programs at different campuses in the system to collaborate in providing students with appropriate coursework, it would not be appropriate for such arrangements to require students to travel to an institution on another island or in another state.

In the event, unlikely in view of the careful planning associated with establishment of the program, that the university administration requests that the program be closed, the College of Pharmacy will ensure that students already enrolled in the program will be able to complete their degrees. The MSCP program would be a small part of the College's overall program in terms of numbers of students and percentage of faculty contributing to it at any one time, and College resources would readily cover the needs of these students.