

# Graduate Catalog

## GRADUATE ADMISSION POLICIES

The University of Hawai'i at Hilo is an equal opportunity institution of higher education and does not discriminate on the basis of race, gender, sexual identity, age, disability, religious affiliation, or country of origin.

### Application Requirements

**Note:** The following requirements are the minimum requirements for any UH Hilo graduate program. Particular graduate programs' requirements may differ from the minimum. Therefore, prospective students also should check requirements of their program of interest.

Applicants applying for admission to graduate programs must submit the following items directly to the Office of Admissions:

1. A completed application form and appropriate fee. The application form and fee information are available online ([www.uhh.hawaii.edu](http://www.uhh.hawaii.edu)) or from the Office of Admissions.
2. One official transcript from each post-secondary institution attended. These transcripts must be sent directly from the institution or submitted by the applicant in a sealed institutional envelope if accompanying the application. Transcripts from within the UH system are not required.
3. Official Graduate Record Exam scores or other qualifying test scores as determined by the program (check admissions requirements in each program description). International applicants whose native language is not English, or who have not attained a baccalaureate or higher degree from an English-speaking institution, also must submit TOEFL scores.
4. A minimum of two letters of recommendation attesting to the academic ability or other qualifications of the applicant.
5. Statement of academic and/or long range Office of Admissions.
6. Verification of financial status (for all international students).

### Non-accredited U.S. or International Institutions

Degrees from non-accredited U.S. or international institutions are not recognized automatically. Applications of prospective students with such degrees will be evaluated on a case-by-case basis.

### International Applicants

In addition to the above requirements, international applicants must submit official academic records in the original language accompanied by certified English translations. These translations must bear the embossed seal or inked stamp of the issuing institution or government agency and the original signature of the translator. Translations must be complete and exact word-for-word translations of the original documents. International applicants with a Grade Point Average of less than a B (or equivalent) in their undergraduate work or less than a B in 12 or more credits of post-baccalaureate work are not eligible for admission.

### Minimum Qualifications for Acceptance

#### Baccalaureate Degree

Each applicant must hold a baccalaureate degree or graduate degree 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.

Students may be required by programs to fulfill additional coursework beyond the major requirements if such courses are deemed important to the student's ability to successfully complete the course of study. These courses will be determined prior to the student's official admission notification, and will be included in the acceptance letter. Programs and program advisors are responsible for monitoring student completion of these courses.

If an applicant initially has been determined to be inadmissible based on his/her academic record, the graduate program may petition the Graduate Council on behalf of the applicant to reconsider the application. The petition must present evidence (e.g., relevant education, training, experience, publications) that the applicant is capable of successfully completing the desired graduate program.

#### Graduate Record Examination (GRE)

The GRE is required for all applicants for acceptance. Some programs may require a professional test specific to the program of study in lieu of the GRE for admission purposes. Minimum scores on the GRE or professional tests are set individually for each program. Applicants who have completed a graduate program at a regionally-accredited U.S. institution or its equivalent from a recognized non-U.S. institution are not required to submit GRE scores.

### Test of English As A Foreign Language (TOEFL)

In addition to above requirements, an applicant whose native language is not English must demonstrate English language proficiency as a partial admissions requirement. Evidence of proficiency in English is successful completion of the Test of English as a Foreign Language (TOEFL) with a minimum score of 550 (paper version) or of 213 (computer version). Applicants who have baccalaureate degrees from English-speaking institutions are exempt from the TOEFL requirement.

### 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.

**Please Note: The meeting of minimum requirements does not assure acceptance into a UH Hilo graduate degree program. Acceptance into a graduate program is competitive and decided upon by each individual graduate program.**

### Admission Procedures

The Office of Admissions is responsible for accepting application materials for all graduate programs. Admissions professionals screen for minimum qualifications of each application and distribute completed applications to each respective program for decision of acceptance or rejection. The admissions committee within individual programs will make the final decision on applications that meet minimum university qualifications.

The application deadline for fall semester admission is February 1. The application deadline for spring semester admission is November 1. Applications received after the priority deadlines will be considered on a space available basis. Each applicant will be notified of receipt of the application. Incomplete applications will be held in the Office of Admissions until complete and ready for review by the graduate program. Applications that remain incomplete at the end of the selection process will be labeled as "incomplete," and applicants will be denied admission. Applicants will be notified of this action.

Official notification of acceptance or rejection generally is mailed by the Office of Admissions between March 1 and May 30 for fall admission. For spring admission, notification is generally mailed between November 15 and December 15. Applicants should not make definite arrangements to attend the University until they receive formal notice of acceptance from the Office of Admissions.

Evaluation of transcripts of international students and of non-traditional grading will be done at the program level if the applicant meets other minimum qualifications. The Graduate Division and Office of Admissions will help with interpreting unusual grading practices and other special cases.

### Classification of Students

#### Regular Admission

Regular admission may be granted to applicants who hold a baccalaureate degree with a grade point average (GPA) of 3.0 or better for the last 60 semester credits (or equivalent), or who hold a graduate degree with a GPA of 3.0 or better from an accredited institution, or through the petition process noted above. Determination of acceptance, however, is made by the admissions committees of individual programs. Students accepted by program admission committees are defined as "classified students."

#### Denied Admission

Students whose academic records do not meet the minimum requirements, and/or whose admission is not supported by the program and the Graduate Division, will be denied admission.

#### Visiting Graduate Student

Applicants who are pursuing an advanced degree in another institution and who wish to study at UH Hilo for a limited time may apply for admissions as visiting graduate students. To be eligible, applicants must be enrolled in and actively pursuing a graduate degree program at a regionally accredited institution of higher education and be in good academic standing.

Visiting graduate students register on a space available basis and only in courses for which they are judged to be eligible by the instructor of the course and the chair of the individual graduate program.

Typically, visiting graduate students enroll as "unclassified graduate students." They may be allowed to change their status from unclassified to regular status if they apply and are accepted by a graduate program at UH Hilo.

Admission as a visiting graduate student does not guarantee subsequent admission as a regularly admitted graduate student. A visiting graduate student who decides to apply for admission as a regular graduate student must apply for acceptance via the standard admissions process as do all other applicants.

Visiting graduate students who later become admitted as regular students may request to have courses taken under the visiting student status credited toward the new degree objective. They should consult with their graduate programs, which then make appropriate recommendations to the Graduate Division.

#### Unclassified Graduate Student

Students with documented baccalaureate degrees who do not meet the minimum requirements for admission to a program, or who for any other reason have not been formally accepted into a program, may attempt to register for selected courses. Such registration is done on a space-available basis, and is with the written consent of both the faculty teaching the course and the chair of the program. **Admission into a course as an unclassified graduate student does not guarantee admission as a regularly classified graduate student at a future date. A limit of 9 credit hours at UH Hilo may be taken at the graduate level by unclassified graduate students in their academic career.** Waivers to this rule may be granted with the permission of the instructor, graduate program chair, and chair of the Graduate Council (the latter acting on behalf of the Graduate Council).

Applicants who are sponsored by an educational institution or governmental agency and who wish to undertake a special program of study, research, or training without a degree objective may apply as unclassified graduate students. These students also are limited to 9 credit hours at UH Hilo.

All applicants for unclassified graduate student status are required to submit the following:

1. A graduate application;
2. Proof of baccalaureate degree;
3. A brief statement of objectives specific to each class in which the applicant hopes to enroll.

Unclassified graduate students are not required to submit the application fee, GRE scores, or letters of recommendation. If an unclassified graduate student later applies, and is accepted, into a graduate program, the student may petition for acceptance of credits taken while in unclassified status, **but acceptance of the petition by the graduate program is not assured.**

Undergraduate students in their final semester of coursework before being granted a baccalaureate degree may petition to take graduate coursework for credit in the status of an Unclassified Graduate Student. Permission must be received from the student's academic advisor, course instructor, and graduate program chair. This coursework must be in excess of the requirements for the baccalaureate degree. Failure of the student to obtain the baccalaureate degree at the end of the semester in which the graduate coursework is undertaken will invalidate any graduate credits from the coursework. Students must present evidence of successful completion of the baccalaureate degree to the Graduate Division Office.

## Additional Considerations

### Concurrent Degrees

An applicant may apply to more than one graduate program but may enroll in only one program initially. Concurrent enrollment in more than one program is strongly discouraged. The individual programs applied for, however, will determine individually what constitutes the minimum course load, and the student (with the approval of both program chairs) may decide to attempt both programs.

### Reapplication

Applicants who have been denied admission to a graduate program at UH Hilo because of failure to meet academic standards may reapply for admission after completing at least 12 semester credits of post-baccalaureate course work. The courses must be numbered 400 or above and completed with a GPA of 3.0 or above.

Completion of additional course work does not guarantee admission. To be reconsidered for admission, applicants must follow the standard application process and will be considered along with all other applicants. If admitted, no more than 12 semester credits of relevant post-baccalaureate course work may be applied toward the new degree objective.

### If Admitted, But Not Enrolled

Admission may not be postponed or deferred. Newly-admitted students who do not register during the semester for which they are admitted or who withdraw from all courses before the last day to drop are considered no-shows. Their admission status will be rendered invalid. To reapply for admission, they must contact the Office of Admissions for instructions.

### Returning Student

**If a student has not registered continuously, that student must reapply for admission. Readmission is not guaranteed.**

### International Student Documents

International student documents are processed by the International Admissions Office. Visa questions will be handled only by this office.

TUITION AND FEES

**Tuition for the 2007-2008**

**Academic Year**

**Graduate Students Other Than Pharmacy**

*Per Credit Hour (PCH)*

Resident .....\$ 236.00

Nonresident .....\$ 544.00

Tuition for Summer, 2008

Per Credit Hour (PCH).....\$ 286.00

Pharmacy Doctoral Students

*Per Academic Year*

Resident.....\$15,000.00

Non-Resident..... \$30,000.00

Fees for the 2007-2008

Academic Year (Per Semester)

	<b>5+ Credits</b>	<b>1-4 Credits</b>
Student Activities	\$18.00	\$9.00
Student Government	18.00	9.00
Student Publications	19.00	9.50
Student Health Fee	7.00	7.00
Student Recreation	5.00	2.50
Campus Center	7.00	3.50
<b>TOTAL</b>	<b>\$74.00</b>	<b>\$40.50</b>

**Application Fee**

A \$50 fee is required for all applicants. This fee is not refundable, not transferable to another semester, and is required each time an application is submitted.

**Late Registration Fee**

Students will be assessed a \$30.00 fee for registering during the late registration period, which begins on the first day of instruction.

**Special Fees and Charges**

Student Identification Card	\$ 10.00
Graduation Application Fee	15.00
Transcript of Record	5.00
Rush Transcript	15.00
Institutional Credit by Examination	15.00
Replacement of laboratory equipment	Cost of item(s) broken or lost

**REGISTRATION AND DEGREE REQUIREMENTS**

**Registration**

Graduate students are encouraged to participate in early registration whenever possible. Graduate students must meet general guidelines and payment schedules set by the university.

**Full-Time Registration Requirements for Students**

Graduate students must register for six or more credits during the Fall or Spring semesters and three credits during the summer to be considered full time.

**Academic Standards**

A cumulative grade point average (GPA) of at least 3.0 (on a scale where A = 4.0) in courses required by the graduate program is required in order to maintain satisfactory academic standing and graduate degree certification. When the cumulative GPA falls below 3.0, the student will be placed on academic probation. Once a student is placed on probation, the student has two semesters to attain a cumulative GPA of 3.0 or higher, or the student will be dismissed.

No credit is granted for graduate courses in which a grade lower than a B- has been received. Grades lower than a B-, however, will appear on the student's transcript and will be computed into the student's GPA, although the student may NOT use the course for degree requirements.

Graduate students who do not meet other academic/program standards will be dismissed from their graduate program. This process entails a warning letter from the chair of the graduate program to the student. If the necessary academic standards are not attained within a period specified by the graduate program, the graduate program's chair recommends to the appropriate Dean that the student be dismissed from the program. Students will be notified of the intended action. Appeals of such action may be made in writing to the Vice Chancellor for Academic Affairs within ten business days.

**Graduate Committees and Primary Academic Advisors**

With the exception of certain professional programs, all graduate programs utilize a graduate committee system for advising and evaluating graduate students. At the Master's level, the committee is comprised of a minimum of three faculty members. One member will chair the committee and serve as the student's primary academic advisor. At least two members of a student's graduate committee must be full time tenured or tenure track faculty at UH Hilo.

For students in a non-thesis option, the graduate committee serves as an examination and evaluation body of the student's requirements as listed by the graduate program. For students utilizing a thesis option, the committee serves as the thesis committee. Acceptance or rejection of a student's work as fulfilling degree requirements is determined by a majority of the graduate committee.

Some professional programs may not utilize a graduate committee system. In these cases, a designated faculty member serves as the student's primary academic advisor. Acceptance or

rejection of a student's work as fulfilling degree requirements is determined by a majority vote of the graduate program's faculty.

### Minimum Residence Credits for Degree Certification

Regardless of any previous graduate experience, a minimum of 24 credit hours must be taken at UH Hilo before a degree can be granted. This is known as the "residence requirement," and applies to all graduate degree programs at UH Hilo. Credit hours earned under courses designated as "thesis" may not be counted toward the Graduate Division's minimum residence requirement.

### Minimum Credits in Graduate Level Courses

Students are required to complete a minimum of 24 credits in courses at the 600 level or higher before a degree may be granted. Specific graduate programs may require additional credits at the 600 level or higher; students are advised to read program requirements and discuss them with their primary graduate advisor.

### Use of Undergraduate Courses for Graduate Credit

Graduate students may take up to six credits of course credit in 400-level classes toward their graduate degree requirements with the approval of the graduate program chair. Courses numbered 499 may not be used for graduate credit. Credits used to meet requirements for an undergraduate degree may not be used to meet graduate program requirements.

### Dual Level Courses

Some courses are dually listed at the 400 and 600 level. Courses identified by graduate programs as core courses are not eligible as dual level offerings. For dual level courses, credit in the graduate course is not available to students who have received credit in the corresponding undergraduate course.

Dual level courses must be evaluated as a unit based upon their specific content, including specification of differences in expectations for undergraduate and graduate levels. Courses that have changing content from semester to semester, such as those ending in the numbers -94, -97, and -98, are not eligible for use in dual level offerings.

### Overload Policy

Students may register for up to 15 credits with the approval of the graduate program chair. Any registration above 15 credits requires approval by both the graduate program chair and the Graduate Division. Students wishing to register for more than 15 credits must complete an Overload Petition. After obtaining the approval of the graduate program chair, the form must be submitted to the Graduate Division for approval. The Overload Petition must be approved before the end of the add deadline.

### Incomplete Grades

An instructor may assign an Incomplete (I) when a student has done most of the course work satisfactorily, but because of unforeseen circumstances has not completed all course requirements. The Incomplete is not for the purpose of converting a failing grade, or unsatisfactory work, to a passing grade. The student must request the Incomplete option from the instructor,

but it is the instructor's decision as to whether it is appropriate or not.

Graduate students who are given a grade of "I" must complete the coursework before the due date listed in the university calendar. "I" grades that are not completed by this due date automatically are converted into "NC" grades. The instructor may set a deadline sooner than that listed in the university calendar, reflecting the instructor's availability to extend his/her commitment beyond the course. The instructor, however, cannot extend the due date unless granted a specific waiver by the college Dean or, for interdisciplinary programs that involve more than one college, the Vice Chancellor for Academic Affairs.

Some departments and programs may have more restrictive policies regarding incomplete grades. Students should confer with their academic advisors concerning departmental rules and expectations.

The incomplete policy has specific implications for students receiving tuition scholarships and other kinds of financial aid and for international students holding visas. Graduate students who receive federal or state aid may lose their eligibility if they receive Incompletes. See the Financial Aid Satisfactory Academic Progress Policy.

All courses taken by graduate students are subject to the above policy. **Incomplete grades must be resolved before students can receive a graduate degree.**

### Repeating Courses for Credit

A few graduate courses (numbered 600 and above) are repeatable for credit. Examples include thesis research and courses that are approved via the curriculum review process as "repeatable for credit" (e.g. Special Topics classes).

### Retaking Courses for a New Grade

With the exception of courses that are explicitly repeatable for credit (see above), graduate courses cannot be retaken unless approved by the program chair and graduate division **prior to registration**. With the permission of the graduate program chair, courses may be retaken, but not for additional credits. No more than two courses may be retaken, and no graduate level course may be retaken more than once during the student's graduate career. The grade received will be averaged with the previous grade in that course in computing the UH Hilo cumulative grade point average (GPA). For graduation purposes, however, a program grade point average may be computed which includes only the grades earned in the courses that are part of the student's graduate program. A statement which specifies the recomputed program GPA will be reflected on the student's academic records and transcript.

### Continuous Registration

All students admitted to a degree-granting program must maintain continuous registration each semester for at least one credit hour. Students who do not register will be removed from the graduate program and will be required to reapply to the Graduate Division. Students do not need to maintain matriculation during the summer session unless final degree requirements are to be completed during this period. Students must be registered during the semester when the degree is granted.

## Leave of Absence

Under exceptional situations, students may apply for a Leave of Absence. Students on leave are excused from the registration requirement during the period of the leave. Leaves are normally granted for six months with an extension of up to one year. A Leave of Absence is granted only in exceptional circumstances, such as illness or other unusual personal hardship, and requires detailed justification. Leaves of Absence are not granted to students who wish to absent themselves to undertake thesis or dissertation research elsewhere. If possible, requests for Leaves of Absence should be submitted one month prior to the semester for which the leave is requested. Students must complete a readmission application upon return.

## Withdrawals

**Students who withdraw from courses for which they are registered at the University must follow a formal withdrawal procedure if they wish their record to indicate good standing.** *Absence from class does not constitute due notice of withdrawal. No grades are recorded for students who formally withdraw by the listed withdrawal date that is noted in the Catalog. Withdrawal from all classes after the listed withdrawal date may be granted, but only in exceptional circumstances, such as illness or other unusual personal hardship, and requires detailed justification. Withdrawal from classes may affect financial aid eligibility. See the Financial Aid Satisfactory Academic Progress Policy in the Financial Aid Handbook. For international students, student visas require that students be registered as full time, so withdrawal from courses may result in a failure to meet visa requirements.*

## Transfer of Graduate Credits

Students matriculated in advanced degree programs must petition to have previously earned graduate credits from other institutions transferred toward their University of Hawai'i at Hilo graduate degrees within their first semester at UH Hilo. Using the Graduate Division's "Application For Transfer Credit" form, students submit this petition to their graduate program. A copy of the official transcript from the other institution must be on file with the Graduate Division.

Credits petitioned for transfer must be relevant to the student's UH Hilo degree program, must have been earned at a regionally accredited university, must not have been used to satisfy the requirements of another degree, and must have been earned in graduate-level courses for which the student earned at least a B. Credits for courses in which the student received no letter grade cannot be transferred.

Credits earned through correspondence courses or through courses or experiences offered under the auspices of proprietary schools, business or industrial training programs, or schools conducted by federal agencies such as the Department of Defense normally are not considered for transfer.

Courses taken more than five years prior to matriculation in the Graduate Division are accepted only when the graduate program chair attaches a statement justifying the transfer.

The graduate chair in the student's program forwards all approved petitions to the Vice Chancellor for Academic Affairs or designee for final approval. Approved transfer credits will be included on the student's official Graduate School transcript as

a single entry of total credits accepted in transfer. Letter grades from transfer credits are not considered in the determination of grade-point average.

Limitations on the number of credits acceptable in transfer are set in the first instance by the minimum residence requirement of 24 credit hours for any advanced degree; transfer credits cannot be applied toward the residence requirement. For example, for a master's program requiring a minimum of 30 credit hours, no more than six transfer credits may be applied toward the degree. When graduate programs require more than 30 credit hours, the VCAA or designee may accept a correspondingly larger number of transfer credits.

## Policy Prohibiting the Awarding of a Second Degree in the Same Field

**The UH Hilo policy is that a second degree at the same level (master's or doctoral) can be awarded only when a significant amount of additional coursework in a very different field is completed. Normally students who have already earned a master's or doctoral degree in a given discipline at either a foreign or U.S. institution may not earn a second degree in a similar field at the same level from UH Hilo.**

## Transcript Notations of Approved Concentrations Within a Major Program

For each advanced-degree recipient, approved concentrations, or specializations, may be listed on the official graduate transcript, along with the graduate major. Such listings are limited to two concentrations. In addition to the titles of approved and satisfactorily completed majors and concentrations, official graduate transcripts show the titles of doctoral dissertations and master's theses. All such special transcript listings are made only at the time of completion of final degree requirements.

## Courses Taken in Other Graduate Programs at UH Hilo

Graduate students may take courses offered by other graduate programs at the university with the consent of the course's instructor. These other courses may count toward the student's degree program only with the authorization of the student's graduate program, and this authorization must be obtained before the student registers for the course.

## Waiver of Regulations and Requirements

Some Graduate Division regulations and/or program requirements may be waived by the Vice Chancellor for Academic Affairs or designee in exceptional individual instances. A petition for waiver must be endorsed by the student's program graduate committee or graduate chair, who append their reasons for believing that the waiver request would not breach the spirit of the specified regulation or requirement.

## REQUIREMENTS FOR ADVANCED DEGREES

### Candidates for Master's Degrees

#### Advising and Guidance From the Graduate Committee

At the beginning of a student's work toward the master's degree, the chair of the student's graduate program, in consultation with the student, designates a primary advisor. The primary advisor may be the chair of the graduate program or another faculty member. This advisor also may serve as chair of the student's graduate committee. The graduate committee, when required by the program, will consist of a minimum of three members who meet periodically with the student to discuss his or her progress.

#### Requirements for a Master's Degree

The Catalog stipulates the specific requirements for a master's degree in each program of the University. The minimum requirements include the following:

1. Students must maintain continuous registration, including the semester in which the degree is awarded.
2. Students must complete at least 24 credit hours of graduate coursework in residence, exclusive of a thesis. A minimum total of 30 credit hours of graduate coursework is required for all master's degrees. A maximum of six hours of transfer credit is allowed for programs requiring 30 credit hours; additional credit hours may be accepted for transfer in programs that require more than 30 credit hours, as long as the 24 credit minimum in residence is maintained.
3. Graduate students must maintain at least a B average in courses approved by the program or graduate committee and presented for the degree.
4. Students must fulfill all departmental or school course requirements. (No credit is granted for graduate courses in which a grade lower than a C has been received).
5. Students must complete all other requirements as listed by the specific graduate program.
6. Students must complete all requirements, including thesis if required by the program, within five years after admission to the Graduate Division.

#### Examination

If a general examination is required for the student's master's degree, the examination may be written, oral, or a combination of both. The decision for pass or fail shall be by majority vote of the graduate committee in programs that utilize a graduate committee. In programs that do not use graduate committees, the program faculty by majority vote shall determine whether the student has passed or failed.

#### Thesis

##### Evaluation

If a thesis is required for the student's master's degree, the graduate committee, or the program faculty in programs that do not use graduate committees, will supervise and approve the thesis. Programs may designate additional examiners for the master's thesis beyond the student's graduate committee.

#### Preparation and Typing

Master's theses should conform to *Style and Policy Manual for Theses and Dissertations* available at the following web site:

<http://www.hawaii.edu/graduate/download/manuals/td-stylepolicy.pdf>

#### Submission and Binding

Note: This section is under construction. It is anticipated that students will be required to provide, at minimum, one hard copy of the thesis with original signature page, and one electronic version.

#### Annual Review Form

The primary academic advisor will submit an annual review form for each graduate student under her or his charge to the chair of the graduate program, using the form provided by their graduate program. This form will include data concerning number of credits earned; progress toward meeting other requirements such as papers, projects or theses; GPA; and other specific requirements for the graduate degree.

#### Awarding of the Degree

When a student has satisfied the requirements for a master's degree, the chair of the student's graduate program submits a "Recommendation for Award of Doctoral/Master's Degree" form to the Graduate Division by the required deadline. If submitting a thesis, this form should be submitted with the thesis when possible.

#### Deadlines

Degree completion dates will be posted on the university calendar. Those who have not completed all degree requirements by the established deadlines will be required to register the following semester.

#### Degree Conferral and Commencement

Degrees are conferred three times each year: December, May, and July. Students who complete degree requirements late in the summer or in the fall semester are awarded degrees in December. Students who complete degree requirements in the spring semester are awarded degrees in May. Students who complete degree requirements in early summer are awarded degrees in July.

To participate in the commencement ceremony, the student's graduate program must submit the "Recommendation for Award of Master's Degree" form to the Graduate Division by the required deadline. Commencement exercises are held only in December and May.

#### Completion Letter

Students who complete all requirements for the degree well in advance of the award of the degree may, upon request, receive a statement from the VCAA or designee certifying that all requirements for the degree have been completed.

### **Checklist for Completion of Degree Requirements**

#### **Master's Degree (non-thesis option):**

- Graduate program: Appoints primary academic advisor and, where appropriate, graduate committee, in consultation with the student.
- Student: Completes coursework required for the degree.
- Student: Completes any other program requirements.
- Student: Registers for semester in which degree requirements will be completed.
- Student: Submits "Application for Graduation" form to the Business Office by the required deadline.
- Student: Passes final examination, and/or passes requirements for papers or projects as specified by the graduate program.
- Student: Completes all other requirements specified by the graduate program
- Graduate program: Submits "Recommendation for Award of Master's Degree" form to the Graduate Division.

#### **Master's Degree (thesis option)**

- Graduate program: Assigns primary advisor and committee.
- Student: Completes coursework required for the degree.
- Student: Completes any other program requirements.
- Student: Passes general examination if required.
- Student: Registers for semester in which degree requirements will be completed.
- Student: Submits "Application for Graduation" form to the Business Office by the required deadline.
- Student: Completes thesis.
- Graduate program: Submits "Recommendation for Award of Master's Degree" form to the Graduate Division when student submits thesis.
- Student: Submits original copy of thesis (with signatures) and an electronic version to the Graduate Division. [pending specifics from the library]

## Candidates for Doctoral Degrees

### Admission to Doctoral Work

For masters' degree candidates intending to continue into the doctoral program in the same graduate program, the student's graduate committee, at a designated time near the completion of the student's masters' work, decides whether or not to admit the student to the doctoral program. This will be indicated on the bottom of Form xx submitted to the Graduate Division by the program. For entry into a UH Hilo doctoral program from a masters' program at another university, or from a masters' program in a different discipline at UH Hilo, students follow the regular graduate application and admission procedures.

#### Beginning the Program

At the beginning of the student's doctoral work, the chair of the graduate program appoints a faculty advisor or graduate committee (whose chair is the principal advisor). The initial advisor assists the student in planning coursework and in understanding the program structure and requirements; the advisor has primary responsibility for monitoring the progress of the student's work. The advisor may or may not become the student's graduate committee chair at a later stage in his or her studies. The initial advisor should meet with the student at least once each semester.

### Requirements for a doctoral degree

The Graduate Catalog stipulates the specific requirements for the doctoral degree in each program. The requirements include:

1. Maintenance of at least a B average in courses approved by the program's graduate committee and presented for the degree.
2. Fulfillment of all program course requirements (no credit is granted for graduate courses in which a grade lower than C- has been received).
3. Completion of at least 24 credit hours in residence regardless of any previous graduate coursework elsewhere. Students continuing their studies for a doctoral degree in the same UH Hilo program from which they earned their masters' degree need not fulfill a second residence requirement.
4. Continuous registration including the semester in which final degree requirements are completed (this does not include summer terms).
5. Demonstration to the graduate committee by means of a comprehensive examination (written and/or oral) of familiarity with basic hypotheses and techniques of the discipline and competence in applying them.
6. Fulfillment of any research skills requirements.
7. Submission of a dissertation on a topic approved by the department or school, embodying the results of original research and giving evidence of high scholarship.
8. Successful defense of the dissertation at a final oral examination.
9. Completion of any other requirements specific to the graduate program.

### Research Skills Requirements

Each graduate program establishes foreign language reading competency or equivalent research skills for its students. The graduate program determines the method(s) to be used to fulfill these requirements. Graduate students may register for research skills courses that have been established in each program.

### Comprehensive Examination

A comprehensive or proficiency examination is used to test candidates' specialized knowledge in the discipline and to demonstrate that they are qualified to undertake advanced-level dissertation work. The comprehensive examination may be written and/or oral.

The student's graduate committee serves as the examination committee, and this body determines the outcome of the examination. The student may repeat all or part of the comprehensive examination only once without prior approval from the Vice Chancellor for Academic Affairs (VCAA) or designee. The student has five years to complete the doctorate after passing the comprehensive examination.

### Dissertation Planning

After the student passes the comprehensive examination, the student's graduate committee will oversee the dissertation work. The committee will include an additional member chosen from a field outside the graduate program or from a similar field but from a different university, appointed by the VCAA or designee. Based on the student's recommendations, the committee is appointed by the chair of the student's graduate program. Two of the three regular members of the committee must be full time faculty at UH Hilo.

Committees are formed and modified (if necessary) by mutual agreement between the student and the faculty. The principal dissertation supervisor serves as chair of the graduate committee. Faculty are not required to serve on a particular dissertation committee if they do not wish to, and they are entitled to withdraw from a dissertation committee for reasonable cause. Faculty members from outside the student's own department or school may serve on the dissertation committee, but they do not replace the outside examiner, who is appointed by the VCAA before the final oral examination is scheduled.

Visiting, adjunct, and research faculty of UH Hilo (not holding the rank of Professor, Associate Professor, or Assistant Professor) may be appointed to a dissertation committee by the VCAA or designee upon recommendation of the program for a period not to exceed their term appointment at UH Hilo. If such term appointment is renewed, the member may continue to serve on the student's graduate committee.

### Prospectus

The prospectus functions to identify the topic to be undertaken in the dissertation and to formalize the approval of the project by a faculty committee. The timing, format, length, and conventions governing the prospectus are set by each graduate program. If the student's program requires a prospectus, the student should submit it within six months after being admitted to candidacy; the prospectus must first be approved by the dissertation committee. In a conventional prospectus, a student is

asked to identify a topic, to summarize relevant backgrounds, and to explain the approach. Some programs substitute for the prospectus another means of ensuring that the student's project has been identified clearly and has received written approval by each member of the committee.

Before approving the dissertation project, the chair of the graduate committee is encouraged to arrange a conference with the student and the other committee members for the purpose of discussing the research topic. Each program must inform doctoral students of its expectations, standards, and procedures regarding the prospectus or other approval of dissertation projects and must provide access to samples of accepted proposals or prospectuses. Graduate programs should include specific information about their expectations for a prospectus in advising manuals for graduate students.

### Admission to Candidacy

After the student has passed the comprehensive examinations and met all research skills and coursework requirements, as certified by the program's submission of the "Recommendation for Admission to Candidacy for Doctoral Degree" form, he or she will be officially admitted to candidacy for the doctoral degree by the VCAA. Intra- and inter-program majors and minors should be declared at this time where applicable.

At least two semesters normally elapse between admission to candidacy and the granting of the degree. Doctoral candidates must complete all requirements for the degree, including the dissertation, within five years after admission to doctoral candidacy.

### Declaration of Candidacy

In the semester that the student plans to complete the dissertation, he or she must submit a "Declaration of Candidacy for a Graduate Degree" form to the Graduate Division by the required deadline.

### Preparation and Typing

**Doctoral dissertations should conform to** *Style and Policy Manual for Theses and Dissertations* available at:

<http://www.hawaii.edu/graduate/download/manuals/td-stylepolicy.pdf>.

### Submission and Binding

The student should obtain "Requirements and Guidelines for Graduate Theses and Dissertations" from the UH Hilo Library for detailed instructions. Two print copies of the dissertation must be presented by the student to the Library by the due date listed on the University calendar. One copy will be bound and returned to the student, the other will be bound and added to the Library's collection. There is a fee for binding (of the student's copy) and copyright.

### Dissertation Defense

The graduate committee has direct charge of all matters pertaining to the dissertation. The student's dissertation must have the unanimous approval of his or her dissertation committee and of the chair of the graduate program before arrangements are made for the final examination for the degree. Members of the student's graduate committee serve as the examination committee.

### Outside Examiner

The VCAA or designee, upon recommendation from the graduate program, adds an outside examiner to the examination committee as the representative of the faculty. The outside examiner is either a UH Hilo faculty member from a related area outside the student's graduate program or someone from a related discipline outside the University. Normally, the outside examiner will have no involvement in the supervision of the student's dissertation. The outside examiner's function on the examination committee is to render an independent judgment and to assure that the dissertation satisfies Graduate Division standards. An outside examiner is supposed to serve the Graduate Division and, therefore, must have substantial experience evaluating the scholarship/research of doctoral students (e.g., by being part of a graduate program, on graduate committees, supervising graduate research).

In special circumstances, particularly when a student would benefit from early counsel from a faculty member outside UH Hilo, the department chair or director of graduate studies can petition the VCAA or designee to appoint an outside examiner while the dissertation is still being written. If the nominee is from another institution, the program officer should forward the nominee's academic credentials, including a vita, to the VCAA or designee to be evaluated. The VCAA or designee then invites the nominee or another faculty member to serve as outside examiner.

### Final Oral Exam (Dissertation Defense)

After the student's program has been notified of the appointment of an outside examiner, the program director, in conjunction with the chair of the examination committee, may proceed to schedule the final oral examination.

Because of the time required to give adequate consideration to the student's research, the student should submit the dissertation to the graduate committee well in advance of the final oral defense. Normally, two months is recommended; the student should consult the committee.

The final oral examination is open to any person wishing to attend. Members of the graduate committee must be given sufficient time to question the candidate about the dissertation. The final defense is a public examination, however, and the committee chair is responsible for the conduct of an open and impartial examination, including reasonable participation by observers. At the conclusion of the examination, it is customary for the chair to request that everyone except the graduate committee leave the room, so that the members may reach a decision. This procedure should not be invoked at any other time during the examination and should not preclude any questions from either committee members or outside observers.

No member of a graduate committee can be expected to participate in a dissertation defense if that member has not had at least two weeks to read and consider the dissertation beforehand.

At the final examination, the student will be required to respond to examiners' questions concerning the dissertation and to defend the validity of the dissertation. To pass, the student must receive no more than one dissenting vote from the total graduate committee present. All members of the graduate committee who accept the dissertation in partial fulfillment of requirements for the doctorate shall so attest by their signatures on the "Recommendation for Award of Doctoral Degree" form. If the

outside examiner does not signify approval in this manner, he or she should give the reason for dissent by submitting a separate memorandum to the VCAA or designee within three days of the examination.

If at the final examination the examiners generally approve of the dissertation but require significant changes and are not yet prepared to sign the "Recommendation for Award of Doctoral Degree" form, the chair of the graduate committee will coordinate with other members of the committee to compile all required changes and will inform the student of the scope and substance of those changes. The committee will establish how the changes will be reviewed and approved.

Following the oral exam and approval of the dissertation, the chair of the graduate program submits to the Graduate Division the signed "Recommendation for Award of Doctoral Degree" form, indicating that the student has now fulfilled all academic requirements for the doctoral degree and has successfully defended the dissertation. Members of the dissertation committee sign the signature page in the original copy of the dissertation; the outside examiner does not sign the signature page.

### Remote Participation

Normally, all members of the graduate committee and the outside examiner are present at the defense. At the discretion of the program, with the unanimous consent of all members of the graduate committee and the student, committee members or the outside examiner may participate in the defense via real-time teleconferencing or real-time videoconferencing. In all cases, the chair and at least one other member of the dissertation committee must be physically present.

If in exceptional circumstances one member of the graduate committee cannot be present (*either physically or virtually*), they may submit questions and comments in writing. Such arrangements must be approved in advance by the program and must have the unanimous consent of all other members of the graduate committee and the student.

### Filing the Accepted Dissertation

#### Submission

By the deadline published for each semester, the student is required to submit the dissertation to the Library along with payment of the appropriate fees. Details on these requirements may be found at the Library.

The dissertation should include the acceptance (signature) page with original signatures indicating approval by the dissertation committee ([see sample below](#)).

### Abstract (Mandatory)

The acceptable length for an abstract to be published in Dissertation Abstracts International (DAI) is 350 words. An abstract within the dissertation need not be limited. The student may prepare a lengthy abstract for inclusion in the dissertation and a more concise summary for publication in DAI. The abstract is expected to give a succinct account of the student's dissertation so that a reader can quickly learn the essential contents and results. A typical abstract includes a statement of the problem, an account of procedure or methods followed, and an account of main results and conclusions.

Abstracts must be prepared carefully, since they are published in DAI without editing or revision. Abstract copy must be typed on one side of the paper and should be double-spaced. Symbols and foreign words and phrases must be printed clearly and accurately.

To remain within the 350-word limit, the following method for counting is recommended:

There is a maximum of 2,450 typewritten characters per abstract. Count the number of characters, including spaces and punctuation, in a line of average length and multiply by the number of lines. An average abstract will have about 70 characters per line with a maximum of 35 lines.

The original abstract is deposited with University Microfilms International, Ann Arbor, Michigan, and is listed and indexed in Dissertation Abstracts International. This constitutes publication. However, publication in University Microfilms does not copyright material.

### Agreement Form

At the time the student submits the dissertation to the Library, he or she will be asked to complete the required University Microfilms Agreement Form. Students are encouraged to contact the Library for these forms prior to submitting their dissertation. Those students who will be mailing their dissertations should request that this form be mailed to them.

### Copyright

To protect the right of authorship by copyright, it is only necessary under current law to affix a notice of copyright to the page following the title page. The copyright notice should give the full legal name of the author, as follows:

© Copyright by Suzette M. Doe 2000

All Rights Reserved

Unless a dissertation is copyrighted in this way, it becomes part of the public domain as soon as a copy of it is placed on the library shelves.

The Graduate Division also urges students to register their dissertations with the federal copyright office. The advantage of taking this step could be considerable. In the case of plagiarism, for example, the author may bring an action against the guilty party and recover damages. In the case of scholarly work, proving and recovering damages may be difficult, if not impossible. But if the work bears a notice of copyright and has also been registered with the copyright office, statutory damages may be awarded, and may include attorney's fees incurred in prosecuting the suit. Registration of the dissertation with the copyright office entails signing the appropriate section of the University Microfilms Agreement Form and payment of a \$45 fee. However, even without registering the dissertation with the copyright office, the copyright notice on the page following the title page is sufficient to effect a copyright for the author.

### Survey of Earned Doctorates

When the student submits the dissertation to the Graduate School, he or she will be asked to complete a "Survey of Earned Doctorates" form, which will be forwarded to the National Opinion Research Center in Chicago, Illinois. Students are encouraged to contact the Graduate Division for this form prior to submitting their dissertation.

**Deadlines**

Degree completion deadlines are noted in the University Calendar.

**Degree Conferral and Commencement**

As noted under Master's degree requirements.

**Completion Letter**

Students who complete all degree requirements well in advance of the awarding of the degree may, upon request, receive a statement from the VCAA or designee certifying that all requirements for the degree have been completed.

**Checklist for Completion of Degree Requirements of Doctoral Degree:**

- ✓ **Graduate program** : Assigns principal advisor and graduate committee.
- ✓ **Student** : Satisfies residence and course requirements.
- ✓ **Student** : Passes research skills examinations (if required).
- ✓ **Graduate program** : Arranges comprehensive examination.
- ✓ **Student** : Takes comprehensive examination.
- ✓ **Student** : Writes a prospectus.
- ✓ **Graduate program** : Submits "Recommendation for Admission to Candidacy for Doctoral Degree" form to the Graduate Division.
- ✓ **Student** : Maintains appropriate registration for dissertation credit each semester, including semester in which all degree requirements will be completed.
- ✓ **Student** : Submits "Declaration of Candidacy for a Graduate Degree" form to the Graduate Division by the required deadline.
- ✓ **Student** : Completes dissertation.
- ✓ **Graduate program** : Nominates outside examiner by memo to the VCAA or designee.
- ✓ **VCAA or designee** : Appoints outside examiner and so notifies the graduate program.
- ✓ **Student** : Passes final oral examination.
- ✓ **Graduate program** : Submits "Recommendation for Award of Doctoral Degree" form to the Graduate Division.
- ✓ **Student** : Submits dissertation (with fees) to the Library, and completes the "UMI Microfilming Agreement Form" and the "Survey of Earned Doctorates." [details provided by Library]

**STUDENT RIGHTS AND RESPONSIBILITIES****Policy on Academic Dishonesty**

Graduate students are subject to the policies and procedures governing student conduct as described in the UH-Hilo Student Conduct Code. This includes acts of academic dishonesty, including, but not limited to, plagiarism, cheating, and falsifying data. Students can find these policies in the chapter of the Undergraduate Catalog entitled "Academic Regulations" under the section "Academic Dishonesty."

**Policy on Conduct Violations Other than Academic Dishonesty**

Instances in which graduate students are alleged to have violated the UH-Hilo Student Conduct Code in areas other than academic dishonesty will be handled following the procedures described in the Student Conduct Code. These procedures are described in the chapter of the Undergraduate Catalog entitled "Other Important Policies & Procedures" under the section "Student Conduct Code."

**Conduct and Removal of Financial Support**

All other recommendations to dismiss a student from the Graduate Division or one of its programs, or to break a student's assistantship contract or to revoke a fellowship, tuition scholarship, or other source of financial support, are made to the VCAA, accompanied by appropriate documentation. The student will be informed of the basis for any such decision. The student may appeal the decision by using first the grievance procedure of the student's program and then, if needed, the appeals procedures of the Graduate Council Grievance Committee. Action on a recommendation to remove support from or to dismiss a student in good academic standing will await the outcome of the grievance procedure.

**Academic Complaints**

The process for handling academic complaints by graduate students will follow the same general procedure as utilized for undergraduate students at UH Hilo. This procedure is outlined in the University of Hawaii'i at Hilo Student Academic Complaint Policy found at [www.uhh.hawaii.edu/uhh/accreditation/StudentRights.php](http://www.uhh.hawaii.edu/uhh/accreditation/StudentRights.php). The following exception is made for graduate students:

Under Part III (Procedures for the Resolution of Academic Complaints Filed During the Regular Academic Year) Letter B (Complaint of Academic Impropriety), for complaints relating to academic impropriety involving post-baccalaureate students, the Dean shall refer the written complaint to the UH Hilo Graduate Council (Academic Complaints Committee) for timely review and recommendation (10 calendar days) before taking action.

## MASTER OF ARTS (M.A.) IN CHINA-U.S. RELATIONS

### Program Chair:

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**James Wang, Ph.D., (Emeritus, UH Manoa) International Studies and Political Science**

### Program Purpose

The Master of Arts in China-U.S. Relations at UH Hilo is a 30-credit-hour program designed to provide students with an interdisciplinary, liberal arts background in Chinese culture and its relation to the United States' role in Pacific affairs. It will prepare students for a broad spectrum of professions such as international education, business and tourism, government, cultural exchange, and international service in China and the Pacific region.

The program aims to promote China-U.S. cultural communication. It provides a forum for dialogue and understanding between the United States and the Chinese people. United States' students will study various aspects of Chinese civilization and see the United States from a Chinese perspective, while Chinese students will learn about United States' culture and see China from a Pacific Rim perspective.

### Program Emphasis

The program emphasizes three key areas of study:

#### 1. United States' Perceptions of China's Historical and Cultural Traditions

While considerable emphasis is placed on China's turbulent modern history, students also study, in depth, China's cultural, philosophical, and religious traditions. Students learn about China from Confucianism, Taoist, and Buddhist, as well as modern, perspectives. This learning provides a context for

review of prevailing perceptions of China held by the United States in the decades prior to and after the Second World War, perceptions which have helped shape U.S. policies toward China.

#### 2. United States' Role in China's Economic Reform

The focus is on China's evolution from a highly-centralized, planned economy to its mass mobilization for market socialism--or capitalism with Chinese characteristics. Students examine how China has adopted market liberalization and the resulting tension with state political structures. The importance of economic relations between China and the U.S. in terms of trade and investment, and how these relations may evolve, is a main aspect of study. Related study is China's need for technological and educational advancement and the United States' role in helping it achieve those ends.

#### 3. Government and Public Policy in China

Students examine China's elaborate institutional structure for the party and state, and how China's leaders have attempted to move party-state organizations toward modernity. A related aspect of study involves analysis of the military's role in policymaking, especially on issues such as Taiwan, democratic reform, dissent, human rights, and the environment. These issues influence ongoing Sino-American relations.

### Distinctive Features

- China Summer Tour

Students study at both UH Hilo and Peking University in China. The program welcomes international students.

- Multidisciplinary Approach

Students enroll in interdisciplinary courses in religion, philosophy, history, business, economics, political science, anthropology, geography, and languages of China. Core courses within the program are designed and taught from an interdisciplinary approach.

- China-U.S. Encounter

This summer program promotes China-U.S. cultural communication. A special emphasis is placed on the study of Chinese culture and its relationship to United States' values. To provide a forum for dialogue and understanding between the American and Chinese people, the experience will consist of a mix of Asian, Pacific, and American students.

- Pacific Focus

Students explore the cultural, social, political and economic relationships between China, the United States, and other nations in the Pacific region. Specifically, American students will see the United States from the Chinese perspective, while Chinese students will comprehend China within the Pacific Rim context.

- Year-Round Schedule

Courses will be offered during the traditional academic year (Fall/Spring) as well as summer and winter sessions. Full time graduate students can finish their degrees more quickly,

and professionals, especially schoolteachers, can use their summers for advanced education.

## Application Process

### General Procedures:

Applications to the program will be examined beginning March 1 for admission the following Fall semester. After March 1 applications will be considered on a space available basis until July 1.

Applications and supporting documents should be sent to the Graduate Office of Admissions, UH Hilo, 200 West Kawili Street, Hilo, HI 96720. This office maintains applications through final notification to applicants. If you do not hear from the Graduate Office of Admissions within 30 days of submission of your application, please contact the office at 808-974-7414.

Applications that meet the initial requirements are forwarded to the China-U.S. Admissions Committee for a comprehensive review. The names of graduate candidates selected by the committee are forwarded to the Graduate Office of Admissions which sends final notification to the applicant.

### Application Requirements:

- A. A completed application form and appropriate fee. The application form and fee information are available online ([www.uhh.hawaii.edu](http://www.uhh.hawaii.edu)) or from the Graduate Office of Admissions.
- B. One official transcript from each post-secondary institution attended. These transcripts must be sent directly from the institution or submitted by the applicant in a sealed institutional envelope if accompanying the application. Transcripts from within the UH system are not required.
- C. Official Graduate Record Exam scores are required unless other qualifying test scores are required by a specific program (check admissions requirements in each program description). International applicants whose native language is not English, or who have not attained a baccalaureate or higher degree from an English-speaking institution, also must submit TOEFL scores.
- D. A minimum of three letters of recommendation attesting to the academic ability or other qualifications of the applicant.
- E. Statement of academic and/or long range goals.
- F. Verification of financial status (for all international students).

### Admission Status:

The applicant's admission status is valid for only the semester to which the student is accepted. Applications for those who do not register or who withdraw from the University are voided but retained for a period of one year. Students may reapply for admission the next year by notifying the Graduate Office of Admissions and submitting another application fee.

### Minimum Criteria for Admission:\*

An applicant must:

1. have earned a baccalaureate degree from a regionally-accredited U.S. college or university or its equivalent from a recognized non-U.S. institution of higher learning;
2. have earned a cumulative grade point average of 3.0 or higher (on an A = 4.0 scale);
3. have taken and submitted General Graduate Record Exam (GRE) scores;
4. have ensured that three letters of recommendation have been submitted by references who have observed or supervised the applicant's performance and can attest to the academic ability of the applicant to pursue graduate study or other qualifications of the applicant;
5. have earned a TOEFL score of 550 or higher (paper version) or 213 or higher (computer version) if she or he is a non-native speaker of English or has attained a baccalaureate or higher degree from a non-English speaking institution;
6. have submitted a personal statement of academic and/or long range goals.

Please Note: A minimum of one year of college-level Chinese language or its equivalent is recommended for non-native speakers of Chinese.

### Transfer of Credits:

Requests for transfer of graduate credits must be made during the first semester in which the student is enrolled in the program. Courses which may be eligible for transfer will be reviewed by the CHUS program to determine program credit. Only classes with a grade of B (3.0) or higher from accredited universities or colleges will be considered for transfer. Transfer credit hours must have been completed within five years preceding the date upon which the advanced degree is to be conferred by UH Hilo.

### International Credentials:

A statement describing minimum academic qualifications expected of international application may be obtained from the Graduate Office of Admissions. These qualifications must be completed prior to enrollment.

## Graduation Requirements

1. Completion of at least 30 semester credits;
2. Minimum of 24 semester credits in courses numbered 600 or above. Remainder of credits may be taken from courses numbered at 400 or above at the discretion of the China-U.S. Relations program chair. Courses numbered 499 may not be used for graduate credit. Also, credits used to meet requirements for an undergraduate degree may not be used to meet graduate program requirements.
3. Completion of the program with a GPA of at least 3.0;
4. Minimum of two semesters of full time study beyond the baccalaureate degree;

5. Successful completion of a thesis (Plan A) or a series of papers (Plan B);
6. Successful completion of a thesis oral examination (Plan A) or an exit oral examination (Plan B).

### Frequently Asked Questions

1. How long does it take to complete the program? The program is designed to be completed in 3-4 semesters, or 2-3 semesters including summer sessions, with additional time needed for writing the thesis (Plan A).
2. Do I need to write a Master's Thesis? Plan A requires 24 semester credits of course work and a thesis of original research. Plan B requires 30 semester credits of course work and research papers.
3. What are the entrance requirements? See section entitled Minimum Requirements for Admission.
4. Do I have to take the GRE? Yes. Applicants are required to submit official General GRE scores to UH Hilo.
5. Can I transfer credits? Yes, subject to program approval (see section entitled Transfer of Credits).
6. How much will it cost to live in Hilo? In-state students should budget approximately \$13,000 per year for tuition, books, housing, food, and personal expenses; out-of-state students should budget approximately \$18,000.
7. Is financial aid available? Contact the UH-Hilo Financial Aid Office for information (808-974-7323).
8. Do I need a computer? Yes, or at least daily access to one.
9. Are summer graduate courses available? Yes. UH Hilo and Peking University co-sponsor the Summer Institute in Chinese Thought and Chinese Culture. The program includes lectures on Chinese culture as well as field trips to various historical sites, ancient cities, and cultural centers in China.
10. Do I have to know Chinese in order to be admitted to the program? At the discretion of the program Admissions Committee, students with no formal Chinese language training may be admitted to the program. See Chinese Language Requirement below.

### Program Curriculum

Total Semester Credit Hours Required: 30

- At least 24 semester hours must be in courses numbered 600 or higher.
- Up to 6 semester hours in 400-level courses can be used to meet the required 30 credits.

Required Core Courses (9 credits):

CHUS 600 (3)	Approaches & Perceptions: Understanding China and America
CHUS 610 (3)	Problems and Issues of Contemporary China
CHUS 695 (3)	Seminar: Comparative Study of China and the U.S.

Required Area Courses (9 credits selected from the following):

CHUS 621 (3)	Seminar in Chinese Philosophy
CHUS 622 (3)	Chinese Religions and the West
CHUS 623 (3)	Chinese Immigrants in the United States
CHUS 640 (3)	Chinese & U.S. Economies: A Comparative Approach
CHUS 641 (3)	Seminar: U.S.-China Environmental Issues
CHUS 643 (3)	Advanced Graduate Study on Contemporary Chinese Politics
CHUS 650 (3)	Intercultural Communication: China and the United States
CHUS 661 (3)	Comparative Political Economy: U.S. and Greater China

**Electives:** In addition to the 18 semester hours required in the core and area courses above, students need a minimum of 12 semester hours in electives.

**Chinese Language Requirement:** Non-native Chinese speakers are required to take two semesters of Chinese language courses or the equivalent with approval of the Program Chair. Credits in Chinese language earned at other institutions are transferable to meet this requirement. Credits in Chinese language **DO NOT** count toward the required 30 semester hours for the Program.

**Plan A:** Thesis required (in addition to 30 semester hours of credit and the Chinese language requirement)

**Plan B:** Exit oral examination required (in addition to 30 semester hours of credit and the Chinese language requirement)

## MASTER OF ARTS (M.A.) IN COUNSELING PSYCHOLOGY

### Program Chair:

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### Faculty:

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### Program Description:

Counseling psychology as a psychological specialty aims at facilitating personal and interpersonal functioning across the life span with a focus on emotional, social, vocational, educational, health-related, developmental, and organizational concerns. Through the integration of theory, research, and practice, and with a sensitivity to multicultural issues, this specialty encompasses a broad range of practices that help people improve their well-being, alleviate distress and maladjustment, resolve crises, and increase their ability to live more highly functioning lives. Counseling psychology is unique in its attention both to normal developmental issues and to problems associated with physical, emotional, and mental disorders. (Counseling Psychology Division of the American Psychological Association, <http://www.div17.org/Students/whatis.htm>)

### Mission Statement:

The mission of the Master of Arts program in counseling psychology is to provide cross-cultural, student-centered, graduate training in counseling psychology. The program is designed to train students to become knowledgeable, skillful, ethical counselors who will be able to help people in need of professional counseling services. The program assigns a high priority to meeting the educational and personal needs of its students.

### Program Goals:

1. To provide students with the knowledge and skills to counsel clients from different ethnic, socio-economic, and educational backgrounds;
2. To provide students with a broad understanding of general counseling theory and practice;
3. To provide students with the knowledge of the social, psychological, health, and economic problems that citizens of

Hawai'i face along with the professional skills to help people cope with and manage these problems in the future;

4. To prepare students for the academic requirements of a doctoral degree in counseling psychology or a related field.

### Prospects for Graduates:

Graduates of the program will be able to seek employment as professional counselors. Graduates who later obtain a doctoral degree in counseling or clinical psychology will be able to seek employment as professional psychologists. Employment prospects for professional counselors are good in Hawai'i and in many other areas of the United States. Currently a shortage of qualified counselors exists, and employment opportunities in this field are expected to grow at a faster than average rate over the coming years. Professional counselors may find employment in a wide variety of settings, including the following:

- Community mental health clinics
- Public and private elementary and secondary schools
- Colleges and universities
- Correctional facilities
- Vocational rehabilitation centers
- Job training and career counseling centers
- Residential care facilities
- Drug and alcohol rehabilitation programs and agencies
- Private practice settings
- Mental hospitals and psychiatric wards
- General medical hospitals and other healthcare facilities
- Employee Assistance Programs
- Child welfare and other family assistance agencies
- Military settings

See the program Website for detailed information about employment opportunities and for information about professional licensure.

### Admission Requirements:

To be eligible for admission to the Master of Arts in Counseling Psychology program, students must meet the following minimum requirements:

1. A baccalaureate degree from a regionally-accredited institution;
2. A cumulative GPA of 3.0 on a 4.0 scale;
3. A strong background in psychology or a closely-related field, with a minimum of 15 semester hours of course work in psychology; strongly recommended are an introductory or survey of psychology, statistical techniques, research methods, and at least two 300-level or higher psychology courses. For these 15 semester hours, similar courses in closely-related fields of study may also be acceptable;
4. At least one 3-credit course in statistics and one 3-credit course in research methods from any discipline;

5. A score of 550 on the TOEFL (required of applicants for whom English is not their native language and whose undergraduate degree was earned in a non-English speaking country).

Meeting the minimum requirements does not guarantee admission. Eligible applications are reviewed by the Psychology Graduate Admissions Committee which uses multiple criteria for the assessment of applicants. Admission is selective. Priority will be given to students applying for full-time enrollment. Depending on program needs, a few outstanding applicants for part-time enrollment may be admitted.

### Application Procedure:

Currently the program is accepting applications for Fall 2008 only. The application deadline for Fall 2008 is February 1. Applications received in the UH Hilo Graduate Office of Admissions after the deadline will be considered only on a space available basis by the program. Students who submit applications after the February 1 deadline may be ineligible for certain types of financial aid.

Complete applications that meet the minimum admission requirements will be forwarded to the Psychology Department's Graduate Admissions Committee which will review each application. Admission decisions will be made by this committee and forwarded to the UH Hilo Graduate Office of Admissions.

The UH Hilo Graduate Office of Admissions receives applications and supporting documents and maintains the applications through final notification. In general, for applications received by the priority deadline, Admissions will notify each applicant of acceptance or rejection by March 1.

#### Applicants must submit all of the following items:

1. UH Hilo Graduate application form;
2. Application fee;
3. Official transcripts from all colleges or universities attended (must be received directly from the institution or in a sealed envelope if submitted with your application);
4. Personal statement (see the program website);
5. Resume;
6. Three professional recommendation letters, which may use the special recommendation forms (not required, however) included with the application materials. The recommendations should be sent directly to the UH Hilo Graduate Office of Admissions by the referees;
7. GRE general test scores (sent to UH Hilo directly by the testing service).

#### In addition, international applicants must submit the following items:

- Supplementary Information Form for Foreign Students (<http://www.uhh.hawaii.edu/forms/index.php>);
- TOEFL scores (if English is not the applicant's native language);
- Official college transcripts in the original language accompanied by official translations into English.

Applications will be considered only when all of the above documents have been received. For more detailed information and to download application forms, students may use the program website. Application forms also may be obtained from the UH Hilo Graduate Office of Admissions:

UH Hilo Graduate Office of Admissions  
 Student Services Building  
 200 West Kawili Street  
 Hilo, HI 96720-4091  
 TEL: (808) 974-7414 or (808) 897-4456  
 FAX: (808) 933-0861  
 uhhadm@hawaii.edu  
<http://www.uhh.hawaii.edu/studentaffairs/admissions/>

#### Transfer of Credits:

Requests for transfer of credits must be made during the first semester in which the student is enrolled in the program. Students will need to obtain departmental approval for all credit transfers. Only credit hours with a grade of B or better from accredited universities are transferable. Credit hours for practicum and internship courses are not transferable. Transfer credit hours must have been completed within five years prior to admission.

#### Program Curriculum:

Total semester hours required: 60

Required courses (50 semester hours):

- PSY 601 (4) Applied Multivariate Statistics
- 602 (3) Research Methodology and Program Evaluation
- PSY 603 (3) Psychological Assessment
- PSY 604 (3) Professional Identity, Ethics, and Legal Issues
- PSY 611 (3) Lifespan Human Development
- PSY 612 (3) Career Development
- PSY 613 (3) Psychopathology over the Lifespan
- PSY 620 (3) Counseling Theory
- PSY 622 (4) Group Work and Counseling
- PSY 623 (3) Social and Cultural Foundations
- PSY 624 (3) Counseling Skills
- PSY 640 (6) Counseling Practicum
- PSY 659 (9) Internship

Electives (10 semester hours required):

- PSY 614 (3) Family System
- PSY 641 (3) School Behavior, Adjustment, and Problems
- PSY 642 (3) Educational and Vocational Assessment
- PSY 643 (3) School and Career Guidance and Consultation
- PSY 651 (3) Theories of Family Counseling
- PSY 652 (3) Couple Counseling
- PSY 694 (3) Advanced Topics
- PSY 699 (3) Directed Studies
- PSY 700 (3) Thesis Research (repeatable)

## MASTER OF EDUCATION

### Program Chair:

Alton Okinaka, Ph.D.  
 alton@hawaii.edu  
 Social Sciences Division Office  
 University of Hawaii at Hilo  
 200 West Kawili Street  
 Hilo, HI 96720  
 TEL: 808-974-7370

### For Information Contact:

Madeline Sehna, Education Department  
 sehna@hawaii.edu  
 TEL: 808-974-7582  
 FAX: 808-974-7737

### Faculty:

Richard Biffle, Ph.D.  
 Nina K. Buchanan, Ph.D. ninab@hawaii.edu  
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 Anneliese Worster, Ph.D. anneliese.worster@hawaii.edu  
 Jan L. Zulich, Ph.D. jzulich@hawaii.edu

### Program Description:

The Master of Education degree (M.Ed.) is a 33-semester-hour program designed to foster professional growth and renewal of licensed teachers. It is a cohort program that requires five semesters and two summers to complete. Courses are offered in the evening and/or on Saturdays. While the teaching force on Hawaii Island is a natural target population, the M.Ed. also is designed for licensed teachers throughout the state and in select areas of the countries of the Pacific Rim. The program promotes teacher leaders who will engage in school renewal and reform through curriculum development, school decision-making, and community outreach.

The M.Ed. is a generalist degree designed to address the unique professional development needs of Hawaii Island teachers who choose neither to relocate nor to enroll in a specialized degree program. It is designed to be broadly useful and is, therefore, interdisciplinary. The curriculum focuses on philosophical, psychological, and curriculum foundations. It emphasizes research and teaching tools including technology, assessment, research methodology, and advanced instructional strategies to facilitate instructional school-based leadership.

### M.Ed. Graduates Will Be Able To:

- Analyze and apply current trends and issues in education including school change initiatives, reform movements, infusion of technology throughout schools, and methods of addressing the needs of diverse student populations;
- Engage in critical and reflective analysis enabling them to integrate and apply a variety of research-based methods, materials, and processes in their classrooms;
- Conduct and report action research which will enable them to contribute to the positive intellectual climate of their schools and to assume instructional leadership roles.

### Admission Requirements:

Admission is based upon previous preparation and requires previous completion of a baccalaureate degree and evidence of eligibility for the initial basic license to teach as defined by the UH Hilo Education Department. Generally, an applicant must have earned a minimum grade point average of 3.0 (4.0=A scale) or the equivalent in the last four semesters or approximately 60 semester credits of his/her undergraduate record and in all post-baccalaureate work. Applications and a detailed description of requirements are available from the Education Department or from the UH Hilo Graduate Office of Admissions. Interested potential students may contact the Education Department at 808-974-7582 for more information.

### Following are the major requirements for admission:

- Baccalaureate degree from an accredited institution;
- A cumulative grade point average (GPA) of 3.0 (4.0 = A scale) or the equivalent in the last four semesters or approximately 60 semester credits of the undergraduate record and in all post-baccalaureate work;
- Evidence of eligibility for an Initial Hawaii Basic License to teach;\*
- Three letters of recommendation from references who have observed or supervised the applicant's performance and are able to comment on the quality of the applicant's teaching experience, ability to pursue graduate study, and general character.

\*Applicants who do not hold a license to teach should meet with an Education Department Advisor (808-974-7582 for appointment) prior to submitting documentation of eligibility for an initial basic license. These applicants will be considered for acceptance into the program on a case-by-case basis. Applicants must submit evidence of their eligibility by documenting the following:

- Development of knowledge, skills, and dispositions described in the Hawaii Teacher Standards Board's Teacher Performance Standards;
- Experience teaching;
- Ability to participate in the study of education at the level of sophistication required in a graduate program.

The UH Hilo Education Department M.Ed. Admissions Committee will evaluate above evidence submitted as one of the components in the M.Ed. application.

Application packets will be reviewed only when they are complete. International applicants also must provide verification of financial status. An official TOEFL score report may be required for international applicants.

## Course and Graduation Requirements:

### M. Ed. Course Requirements

- ED 600 (3) Education of Ethnic Groups in Hawai'i
- ED 602 (3) Technology in Education
- ED 608A, B, C (3) Fundamentals of Educational Research
- ED 610 (3) Foundations of Education
- ED 611 (3) Advanced Educational Psychology
- ED 616A, B, C (3) Assessment and Evaluation in Education
- ED 620 (3) Individual Differences: Learner Characteristics
- ED 622 (3) School Curriculum
- ED 625 (3) Seminar in Teaching Field
- ED 635 (3) Advanced Instructional Strategies
- 600+ Elective in Content Area

### M. Ed. Graduation Requirements

- Students must complete all program courses, including the elective content-area course.
- To remain eligible for continuance in the M.Ed. and to be awarded the graduate degree, students must maintain progress toward completion of the program and must have a B average (3.0 GPA) for all courses completed in the program.
- Each student must complete a culminating experience; this is an independent project that integrates what he or she has learned during the five semesters of the program. The project must be completed independently of any course and will not be associated with program course credit.

### Cohort and Other Requirements

- Students enroll in the M.Ed. program as members of a cohort which is expected to complete all requirements in five semesters and two summers.
- So that students can continue to teach while pursuing the degree, courses are offered during the evening and/or on Saturdays.
- Typically, all students in a cohort will take courses together and in the sequence prescribed by the department.
- New cohorts will be established based on student demand and available resources.

### Faculty Advising and Guidance:

Each student will be assigned a faculty advisor who will meet with the individual student to review, approve, and provide guidance for the culminating project.

### Coursework:

Courses in the M.Ed. program are taught by Education faculty and occasionally faculty from other departments.

**MASTER OF ARTS IN HAWAIIAN LANGUAGE AND LITERATURE****Program Chair:**

William H. Wilson, Ph.D.  
 pila\_w@leoki.uhh.hawaii.edu  
 234 Kanakaole Hall  
 University of Hawaii at Hilo  
 200 W. Kawili Street  
 Hilo, HI 96720  
 808-974-7454

**Faculty:**

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 Kauanoë Kamana, M.A. kauanoë@leoki.uhh.hawaii.edu  
 Larry L. Kimura, M.A. larry\_k@leoki.uhh.hawaii.edu  
 Charles Langlas, Ph.D. langlas@hawaii.edu

**Program Description:**

Note: The following program requirements are approved for students admitted to the graduate program beginning Fall, 2005.

The M.A. in Hawaiian Language and Literature was UH Hilo's first graduate program and the first focusing on a Native American language in the United States. The program draws upon the tremendous wealth of Hawaiian literary resources from the 19<sup>th</sup> and 20<sup>th</sup> centuries—regarded by some scholars as the largest repository of any indigenous people in the world.

The M.A. seeks to produce graduates prepared to meet the increasing demands for in-depth knowledge of Hawaiian language and literature in all sectors of contemporary life in Hawaii. With government promotion of the language mandated by the Hawaii State Constitution, Hawaiian is the language area of greatest need in Hawaii's public schools. The only language other than English used as a full medium of instruction in the public schools, Hawaiian is presently the medium through which a full academic curriculum is delivered to nearly 2,000 children on all islands except Lanai. In addition, Hawaiian language-learning programs throughout the University of Hawaii system and in high schools enjoy large enrollments and, by constitutional mandate, are a part of the education of all elementary public school children. The substance, stability, and growth of such programs will depend heavily upon individuals with graduate level training in Hawaiian language and literature.

**Entrance Requirements**

1. B.A. or B.S. degree from an accredited college or university;
2. 30 upper division credits in HAW or HWST courses with no grade lower than a "B" and a minimum 3.5 grade point average;
3. Three letters of recommendation;
4. Successful completion of an examination in Hawaiian language and culture;
5. Interview by Hawaiian Studies faculty;
6. Graduate Record Examination scores.

**Graduation Requirements****Plan A**

Complete all 8 of the following requirements for a total of 36 semester hours:

1. Earn 12 semester hours from the following 4 courses: HAW 630, 631, 654; and HWST 663.
2. Earn 3 semester hours from HWST 661 **or** 662.
3. Earn 3 semester hours from HWST 664 **or** 665.
4. Earn 3 semester hours of HAW 690 **or** HWST 699V (course must be approved by program chair).
5. Earn 6 semester hours in HAW 700.
6. Earn 9 semester hours in upper division and graduate Hawaiian Language or Hawaiian Studies courses from the following list: HAW or HWST 400-498, 600-700 (except HAW 600); KED 470-474; KANT 486.
7. Earn no grade lower than a "B."
8. Pass an exit examination in Hawaiian language and culture.

**Plan B**

**(allowed only with permission from all Hawaiian Language and Literature graduate faculty)**

Complete all 5 of the following requirements for a total of 36 semester hours:

1. Earn 24 semester hours from the following 8 classes: HAW 630, 631, 654; HWST 661, 662, 663, 664, 665.
2. Earn 3 semester hours of HAW 690 **or** HWST 699V (course must be approved by program chair).
3. Earn 9 semester hours in upper division and graduate Hawaiian Language or Hawaiian Studies courses from the following list: HAW or HWST 400-498, 600-700 (except HAW 600); KED 470-474; KANT 486.
4. Earn no grade lower than a "B."
5. Pass an exit examination in Hawaiian language and culture.

## MASTER OF SCIENCE IN TROPICAL CONSERVATION BIOLOGY AND ENVIRONMENTAL SCIENCE

### Program Chair:

**Donald Price, Ph.D.**

donaldp@hawaii.edu  
Natural Sciences Division Office  
Life Sciences 2  
University of Hawaii at Hilo  
200 West Kawili Street  
Hilo, HI 96720  
TEL: 808-974-7383

### Faculty:

Jim Beets, Ph.D., Marine Science, beets@hawaii.edu  
Daniel Brown, Ph.D., Anthropology, dbrown@hawaii.edu  
Marta deMaintenon, Ph.D., Marine Science, demainte@hawaii.edu  
Don E. Hemmes, Ph.D. Biology, hemmes@hawaii.edu  
Patrick Hart, Ph.D., Biology, pjhart@hawaii.edu  
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Jon-Pierre Michaud, Ph. D., Chemistry, jonpierr@hawaii.edu  
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Donald Price, Ph. D., Biology, donaldp@hawaii.edu  
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Michael Shintaku, Ph.D., Plant Pathology, shintaku@hawaii.edu  
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Misaki Takabayashi, Ph.D., Marine Science, misakita@hawaii.edu  
Jason Turner, Ph.D., Marine Science, jpturner@hawaii.edu  
Tracy Wiegner, Ph.D., Marine Science, wiegner@hawaii.edu

### Program Description

The primary purpose of the Master of Science in Tropical Conversation Biology and Environmental Science is to provide graduate training in conservation biology and environmental science to those with baccalaureate degrees and those currently working in the field. The program will utilize the extraordinary biological, physical, and cultural complexity of the island of Hawai'i as a focus of investigation and study. The program will prepare students for technical positions and for entry into Ph.D. programs in related fields.

### Program Objectives:

- Foster knowledge of current trends and issues in conservation biology and environmental sciences including basic and applied research and natural resource problems;
- Provide participants with experiences in conceptual and technical research in ecology, evolutionary genetics, geographic analysis, environmental monitoring and assessment in marine and terrestrial environments;
- Promote research and scholarly activities that will enable participants to enter the scientific research community.

### Graduates Of The Program Will Be Able To:

- Perform scientific research in the interdisciplinary field of conservation biology and environmental science;
- Develop skills in natural resource and protected area management;
- Use advanced technological equipment, perform quantitative analysis, and interpret complex data;
- Present scientific results in oral and written publications;
- Interpret and critique professional scientific literature.

### Application Process

Applications will be examined beginning February 1 for admission the following Fall semester. After February 1 applications will be accepted on a space available basis until May 1. The UH Hilo Graduate Office of Admissions receives applications and supporting documents and maintains the applications through final notification. If you do not hear from the Graduate Office of Admissions within 30 days of submission of your application, please contact the office at 808-974-7414.

Applications that meet the requirements will be forwarded to the Tropical Conservation Biology and Environmental Science Admissions Committee for a comprehensive review. Admission decisions made by the committee will be forwarded to the Graduate Office of Admissions which sends the final notification to the applicant.

**Admission Status:** The applicant's admission status is valid only for the semester to which the applicant is accepted. Applications for students who do not register or who withdraw from the University are voided but retained for a period of one (1) year. Students may reapply for admission to the next year by notifying the Graduate Office of Admissions and submitting the application fee.

### Admission Requirements

1. A baccalaureate degree from a regionally-accredited U.S. institution or from a nationally-recognized foreign institution.
2. Communicate with a potential advisor(s) from the list of participating faculty with similar research interests (see Internet

Web Site). In the personal statement, list advisor(s) from the TCBS faculty who agrees to sponsor the application and to serve as primary advisor upon acceptance to the program.

3. A minimum combined verbal and quantitative score of 1000 on the General Graduate Record Exam (GRE).
4. Three letters of recommendation submitted by references who have observed or supervised the applicant's performance and are able to comment on the quality of the applicant's academic achievement, ability to pursue graduate study, and general character.
5. Grade point average of 3.0 (on a scale where A = 4.0) or the equivalent in the last four semesters of approximately 60 semester credits of undergraduate work and/or in all post-baccalaureate work.

**Note:** In special circumstances acceptance may be granted at the discretion of the selection committee for those students who meet some, but not all, the above requirements.

**Note:** Recommended Baccalaureate Courses for Admission to the Program:

- 2 years of chemistry
- 1 year of calculus
- 1 course in geographic information or remote sensing
- 1 course in statistics
- 2 courses in life sciences
- 2 additional courses in physical sciences

## Transfer of Credits

Requests for transfer of graduate credits must be made during the first semester in which the student is enrolled in the program. Only credit hours with a grade of B or better from accredited universities are transferable. Transfer credit hours must have been completed within five years preceding the date upon which the advanced degree is to be conferred by UH Hilo. The TCBS program will decide which credits will be transferred.

## International Credentials

A statement describing minimum academic qualifications expected of international applicants may be obtained from the Graduate Office of Admissions. These qualifications must be completed prior to enrollment.

## M.S. TCBS Check List (Reminder: Priority application deadline is February 1):

- Completed UH Hilo Graduate application form
- Personal statement of objectives
- Application fee
- Official transcripts from all colleges or universities (must be received directly from the institution, or in a sealed envelope if submitted with your application)
- General Test, Graduate Record Exam
- Three Letters of Recommendation received at UH Hilo by February 1

- Official TOEFL score report, if required
- Verification of financial status (for international applicants) [[www.uhh.hawaii.edu/forms/index.php](http://www.uhh.hawaii.edu/forms/index.php)]

## Frequently Asked Questions

1. How long does it take to complete the program? The program is designed to be completed in 3-4 semesters, with additional time needed for writing the thesis or completing the internship.
2. What are the entrance requirements? See Check List and Admission Requirements sections.
3. Do I have to take the GRE? Yes. Applicants are required to submit General GRE scores to UH Hilo.
4. Can I transfer credits? Yes, subject to program approval.
5. How much will it cost to live in Hilo? In-state students should budget approximately \$13,000 per year for tuition, books, housing, food, and personal expenses; out-of-state students should budget about \$18,000.
6. Is financial aid available? Contact the UH-Hilo Financial Aid Office for information (808-974-7323). Teaching and research assistantship positions are sometimes available. Contact Dr. Price: ([donaldp@hawaii.edu](mailto:donaldp@hawaii.edu))
7. Do I need a computer? Yes, or at least daily access to one.
8. Is there a website for the program? Yes, the website has information on faculty research interests as well as other pertinent program information: <http://www.tcbs.uhh.hawaii.edu>
9. Do I need to identify an Academic Advisor in the program? Yes. It is required that you contact individual faculty members whose research interests are similar to your own. Faculty information can be found on the TCBS Program website.
10. Do I need to write a Master's Thesis? Plan A requires course work and a thesis of original research. Plan B requires course work, an internship, and research papers.

## Program Curriculum

Total Credits Required:

- Plan A = 30 credits
- Plan B = 36 credits

**Core Courses (8) credits required for all M.S. TCBS students):**

CBES 600 (3)	Conservation Biology and Environmental Science
CBES 601 (3)	TCBS Field and Laboratory Methods
CBES 602 (1)	Research Seminar in TCBS
CBES 603 (1)	Natural Resource Management Seminar

**Elective Courses\*:**

Plan A: 16 elective credits of 600-level CBES courses.

Plan B: 25 elective credits of 600-level CBES courses.

\*A maximum of 6 credits of 400-level courses may count toward these elective credits.

CBES 610 (3)	Environmental Chemical Analysis
CBES 615 (3)	Global Environmental Change
CBES 620 (3)	Research Techniques in Molecular Conservation Biology
CBES 630 (3)	Near shore Monitoring and Analysis
CBES 635 (3)	Physical Environment of Ecosystems
CBES 640 (3)	Advanced Remote Sensing and Digital Image Processing
CBES 645 (3)	Applying Social Science to Marine and Coastal Resource Management
CBES 650 (3)	Oceanographic Monitoring and Analysis
CBES 655 (3)	Ecological Physiology
CBES 665 (3)	Environmental Toxicology
CBES 670 (3)	Advanced Techniques in Geographic Information Systems
CBES 675 (3)	Conservation Genetics
CBES 680 (3)	Advanced Statistical Analysis and Research Design
CBES 685 (3)	Behavioral Ecology and Evolutionary Analysis

**Other Courses**

CBES 690 (3)	Internship (Plan B: 3 credits required)
CBES 694 (1-3)	Special Topics in Tropical Conservation Biology and Environmental Sciences
CBES 699 (1-3)	Directed Research
CBES 700 (1-6)	Thesis Research (Plan A: 6 credits required)

## COLLEGE OF PHARMACY DOCTOR OF PHARMACY (PHARM.D.)

### Program Dean:

John M. Pezzuto, Ph.D.

University of Hawai'i at Hilo

640 N Aohoku St., Rm 132

Hilo, HI 96720

Email: [pharmacy@hawaii.edu](mailto:pharmacy@hawaii.edu)

808-443-5900

Website: <http://pharmacy.uhh.hawaii.edu/>

### Executive Administrative Specialist:

Dyanne D. Affonso, Ph.D.

### Professors:

Edward Fisher, Ph.D., R.Ph., Associate Dean, Academic Affairs

Mark P. Okamoto, Pharm.D., R.Ph., Chair, Department of Pharmacy Practice

John M. Pezzuto, Ph.D., Dean of College

Associate Professors:

Robert P. Borris, Ph.D., FLS, Associate Dean, Research

Anthony Wright, Ph.D., Chair, Department of Pharmaceutical Sciences

Assistant Professors:

Leng Chee Chang, Ph.D.

Ghee T. Tan, Ph.D.

Instructor:

Anita E. Ciarleglio, Ph.D., R.Ph.

Clinical Coordinator:

Carolyn Ma, Pharm.D., BCOP, CHTP/I

Director of Student Services:

Elizabeth A. Seese, B.A.

Pharmacy/Health Sciences Librarian:

Amy Knehans, M.L.I.S.

Laboratory Manager:

Tamara Kondratyuk, Ph.D.

## Program Description

The University of Hawai'i at Hilo College of Pharmacy is a four-year educational and experiential program through which students pursue the Doctor of Pharmacy (Pharm.D.) degree. The UH Hilo-CoP's Pharm.D. program prepares the student for entry into the pharmacy profession. During the four years at UH Hilo-CoP, students will complete a total of 148 semester hours of credit; 95 hours in required courses, 9 credit hours in elective professional courses, and 44 credit hours in clinical/experiential education

## Mission Statement

The mission of the University of Hawai'i at Hilo College of Pharmacy is to prepare competent pharmacy practitioners who are committed to patient care, who reflect humanistic values, who embrace change, and who contribute to the renewal of the profession. The College of Pharmacy embodies a spirit of community, in which cooperation, trust and mutual respect are valued.

Inherent in this education is the acquisition by students of a relevant knowledge base as well as professionally related experiences, capabilities, understandings, skills, attitudes and values. It is the mission of the College of Pharmacy to build and deliver a quality, multidisciplinary health professions program, in which role models teach the student to learn and adopt the application of that knowledge throughout our environment.

## Program Goals

1. Implement academic curricula that lead to a flagship Pharm.D. program, which produces graduates committed to serving people via science-based practice.
2. Accountability to the Institute of Medicine's core competencies for the health professional workforce.
3. Conduct research that advances pharmaceutical sciences and makes a difference for humanity inclusive of effects on global health.
4. Cultivate culturally competent, intellectually inquisitive, self-directed, caring pharmacists who are critical thinkers, problem solvers and life-long learners in a changing healthcare environment.

## Prospects for Graduates

Graduates of the Pharm.D. program at the University of Hawai'i at Hilo will be able to seek employment as pharmacists in a variety of professional settings. Their professional duties may include, but are not limited to, distribution of drugs prescribed by physicians and other health care practitioners, providing information about prescriptions and their use to their patients and customers, advising health care professionals on the prescription and interaction of drug therapies, compounding, pharmaceutical research, hiring and supervision of staff, business operations of pharmacies, administering of vaccinations, etc. The job outlook for pharmacists is extremely good nationwide and in Hawai'i. There is currently a shortage of community, clinical and research pharmacists. It is expected that the field of pharmacy will grow at a "faster than average" rate over the next decade ([www.bls.gov/oco/ocos079.htm](http://www.bls.gov/oco/ocos079.htm)). In order to practice as a registered pharmacist (R.Ph.), state licensure is required.

## Admission Requirements

To be eligible for admissions into the University of Hawai'i at Hilo College of Pharmacy, students must meet the following requirements:

1. A minimum overall GPA of 2.8 on a 4.0 scale. A minimum science GPA of a 2.9 on a 4.0 scale.
2. Completion of the prerequisite courses including:

Course	Credits
Human Anatomy & Physiology	8
Biology with lab	8

Microbiology with lab	4
General Chemistry with lab	8
Organic Chemistry with lab	8
Quantitative Reasoning/Math/Calculus	3
English Composition	3
World Cultures	6
Humanities	9
Social/Behavioral Sciences	9
Total Credits	66

Please Note: the most current listings of prerequisite courses can be found on our website (<http://pharmacy.uhh.hawaii.edu/>). Prerequisites are subject to change at the end of each application cycle.

3. Completion of the PCAT ([www.pcatweb.info](http://www.pcatweb.info)) and submission of official scores to PharmCAS ([www.pharmcas.org](http://www.pharmcas.org)).
4. Completion and submission of the PharmCAS application ([www.pharmcas.org](http://www.pharmcas.org)) and completion and submission of the supplemental application to be sent by UH Hilo-CoP to applicants meeting the minimum qualifications.
5. International Applicants must also complete a minimum of 30 semester hours of coursework in the United States at any regionally-accredited college or university. Of the 30 require semester hours, 15 semester hours must be allocated to non-remedial science courses.

Note: Meeting the minimum qualification requirements does not guarantee admission. All eligible applications are reviewed by the UH Hilo-CoP Admissions Committee which applies multiple criteria for the assessment of applications and selection of candidates to be interviewed.

### UH Hilo-CoP annually accepts 80 students for Fall admissions.

## Application Procedure

UH Hilo-CoP operates on a competitive, rolling application basis. In order for students to be eligible for consideration, the students must meet the minimum requirements listed above and complete the following application procedure.

1. Students complete, or are in the process of completing, their prerequisite coursework.
2. Students take the PCAT. UH Hilo-CoP suggests that students take the PCAT at least the year prior to seeking entry. Please note that PCAT scores must be processed by Harcourt and submitted to PharmCAS in time to meet the designated application deadline.
3. Students complete and submit the PharmCAS application and fee(s) ([www.pharmcas.org](http://www.pharmcas.org)) along with official transcripts from all attended regionally-accredited colleges and/or universities, two (2) letters of recommendation, and PCAT scores by the designated application deadline posted on the PharmCAS website.
4. Students who meet the minimum requirements will receive a supplemental application from UH Hilo-CoP. The supplement-

tal application must be completed and returned along with the supplemental application fee.

Upon submission of all required application components, the complete file and applicant profile will be reviewed by the CoP Admissions Committee. At said time, the committee will decide to invite the candidate for an interview, place the candidate on hold for further review, or reject the applicant. All candidates who are invited for an interview will be contacted via mail and email. After the personal interview, the applications and interview scores are presented to and reviewed by the Admissions Committee for final admissions decisions.

## Program Curriculum

### First Professional Year (P-1)

#### Fall Semester (16 semester hours)

PHPP 501(1)	Introductory Pharmacy Practice Experiential (IPPE) I
PHPP 511(1)	Inter-professional Health Care
PHPP 512 (2)	Culture and Pharmaceutical Care I
PHPS 501 (4)	Biochemistry I
PHPS 503 (1)	Pharmaceutical Calculations
PHPS 504 (3)	Pharmaceutical Immunology
PHPS 505/L (4)	Pharmaceutics/Drug Action I

#### Spring Semester (17-18 semester hours)

PHPP 502 (1)	Introductory Pharmacy Practice Experiential (IPPE) II
PHPS 502 (4)	Biochemistry II
PHPS 506/L (4)	Pharmaceutics/Drug Action II
PHPS 508 (3)	Statistics
PHPS 509 (3)	Pathophysiology I
ELECTIVES (2-3 semester hours)	

#### Summer

First Professional Year IPE Forum: IOM Core Competency - Patient-centered Care and Patient Safety

### Second Professional Year (P-2)

#### Fall Semester (17-18 semester hours)

PHPP 503 (1)	Pharmacy Practice Experiential (PPE) I
PHPP 514 (2)	Evidence-based Medicine and Critical Literature Review
PHPP 515 (4)	Integrated Therapeutics I
PHPS 507 (3)	Pharmaceutics/Drug Action III
PHPS 510 (3)	Pathophysiology II
PHPS 511 (3)	Pharmacokinetics I
ELECTIVES (1-2 semester hours)	

#### Spring Semester (17-18 semester hours)

PHPP 504 (1)	Pharmacy Practice Experiential (PPE) II
PHPP 516 (6)	Integrated Therapeutics II
PHPP 519 (1)	Patient Interviewing, Assessment, and Education
PHPS 512 (3)	Pharmacokinetics II
PHPS 520 (3)	Pharmacy Law and Ethics
PHPS 521 (3)	Applied Pharmaceutical Care
ELECTIVES (0-1 semester hours)	

**Summer**

Second Professional Year IPE Forum: IOM Core Competency  
- Interdisciplinary Healthcare Team and Inter-professional  
Education

**Third Professional Year (P-3)****Fall Semester (16-18 semester hours)**

PHPP 505 (1) Pharmacy Practice Experiential (PPE) III  
PHPP 513 (2) Culture and Pharmaceutical Care II  
PHPP 517 (6) Integrated Therapeutics III  
PHPP 522 (2) Pharmacy Practice Management  
ELECTIVES (5-7 semester hours)

**Spring Semester (17-18 semester hours)**

PHPP 506 (1) Pharmacy Practice Experiential (PPE) IV  
PHPP 518 (6) Integrated Therapeutics IV  
PHPP 523 (2) Wellness, Prevention, and Disease Man-  
agement  
PHPP 524 (2) Health Economics and Outcomes Assess-  
ment  
PHPP 525 (2) Marketing of Professional Services  
PHPS 513 (2) Parenteral Products and Pharmaceutical  
Compounding  
ELECTIVES (2-3 semester hours)

**Summer**

Third Professional Year IPE Forum: IOM Core Competency—  
Evidence-based Practice and Utilizing Informatics

**Fourth Professional Year (P-4)****Fall, Spring, and Summer Semesters**

Advanced Professional Practice Experiences: 42 weeks for a  
total of 35 semester hours

PHPP 507 (5) Advanced Pharmacy Practice Experience  
(APPE)—Ambulatory Care  
PHPP 508 (5) Advanced Pharmacy Practice Experience  
(APPE)—Community  
PHPP 509 (5) Advanced Pharmacy Practice Experience  
(APPE)—Medicine  
PHPP 510 (5) Advanced Pharmacy Practice Experience  
(APPE)—Specialty  
ELECTIVE (5)  
ELECTIVE (5)  
ELECTIVE (5)

Professional Electives: Students must complete a minimum  
of 12 semester hours of elective credits. Examples of options  
available are as follows:

Academic Pharmacy  
Cardiology  
Critical Care  
Culture & Pharmacy  
Drug Information  
Emergency Medicine  
Geriatrics (Long-term Care)  
Health Outcomes  
Home Health

Infectious Disease  
Industry  
Neonatology  
Nuclear Pharmacy  
Nutritional Support  
Oncology  
Patient Safety  
Pacific Islanders & International Pharmacy  
Pediatrics/Child Health  
Pharmacy Management  
Plant/Natural Products Durg Discovery  
Poison Prevention/Control  
Prescription Benefit Management  
Psychiatric/Mental Health/Psychological Behavioral Health  
Diseases  
Research



# Graduate Courses

## CHINA – U.S. RELATIONS: MASTER OF ARTS

**CHUS 500 Graduate Studies (1) (S)** Used for continuous enrollment purposes. Must be taken as C/NC. Does not count toward fulfillment of degree requirements. Pre: Master's or doctoral candidacy and consent of instructor.

**CHUS 600 Approaches & Perceptions: Understanding China and America (3) (Y)** Critical analysis of issues and problems in American studies of China and Chinese perceptions of America. Also historical and comparative survey of traditional Chinese culture and American civilization.

**CHUS 610 Problems and Issues of Contemporary China (3) (Y)** Multidisciplinary examination of problems and issues affecting lives and institutions of contemporary China: economic development, population growth, urbanization, political and social change.

**CHUS 621 Seminar in Chinese Philosophy (3) (AY)** Examines major philosophical ideas in the development of Chinese culture from the modern and the post-modern perspectives and studies their impact upon the life of peoples in the Pacific and the United States.

**CHUS 622 Chinese Religions and the West (3) (AY)** Exploration of the ways Chinese religious/philosophical traditions have influenced/been influenced by Western religious, philosophical, and scientific thought. Emphasis on traditions of Confucianism and Taoism, with some attention to Buddhism.

**CHUS 623 Chinese Immigrants in the United States (3) (AY)** Examines the experience of Chinese immigrants in North America. Studies the formation of Chinese immigrant communities and basic processes of ethnic self-identification.

**CHUS 640 Chinese & U.S. Economies: A Comparative Approach (3) (AY)** This course provides for and focuses on an economic analysis of the Taiwanese, the People's Republic of China, and the United States economies. The economic analysis is supplemented by utilizing a historical, comparative, and interdisciplinary approach.

**CHUS 641 Seminar: U.S.-China Environmental Issues (3) (AY)** United States and Chinese environmental attitudes and policies in comparative context. Comparative domestic policies over a wide range of environ-

mental issues and bilateral cooperation and conflict in international environmental affairs. Pre: GEOG 326 or graduate standing.

**CHUS 643 Advanced Graduate Study on Contemporary Chinese Politics (3) (AY)** Examines contemporary Chinese political issues and problems in the post-Deng transitional period for China. Focus of the course is on informal-elite politics, institutional development, erosion of ideology, military role, central-provincial tension, and regionalism. This course may be repeated once for credit, with a total of 6 credits possible. Pre: POLS 351.

**CHUS 650 Intercultural Communication: China and the United States (3) (AY)** This course provides an overview of major theories of intercultural communication between the Chinese and U.S. Americans and engages in theory-based comparisons of culture and communication in Chinese and U.S. societies.

**CHUS 661 Comparative Political Economy: U.S. and Greater China (3) (AY)** The political economy of the United States, people's Republic of China, Hong Kong, and Taiwan. Emphasis will be on U.S. and Greater China economic relations and the effect of the political relations on international trade of these two countries.

**CHUS 694 Special Topics in China-U.S. Relations (1-3)** Advanced topics chosen by the instructor. The course content will vary. May be repeated for credit, provided that a different topic is studied. Pre: To be specified when course is offered.

**CHUS 695 Seminar: Comparative Study of China and the U.S. (3) (Y)** Comparative study of Chinese and American cultures employing perspectives arising out of two basic core course: focus may be on past or current events, ancient or modern texts, or some other phenomena.

**CHUS 699V Directed Research (1-3) (repeatable)**

**CHUS 700V Thesis Research (1-6) (repeatable)** Graduate level thesis research, theoretical development, and writing. Students may register for 1 to 6 credit hours per semester for a maximum of 6 credits for M.A. Plan A. Pre: consent of instructor, thesis committee, and program chair; completion of "Thesis Form for Master's Degrees" CHUS 700.

## COUNSELING PSYCHOLOGY: MASTER OF ARTS

**PSY 500 Graduate Studies (1) (S)** Used for continuous enrollment purposes. Must be taken as C/NC. Does not count toward fulfillment of degree requirements. Pre: Master's or doctoral candidacy and consent of instructor.

**PSY 601 Applied Multivariate Statistics (4) (Y)** Advanced statistical techniques used in psychological research and assessment. Strategies of multivariate data screening, transformation, analysis, and interpretation. Computerized statistical packages designed for multivariate analyses.

**PSY 602 Research Methodology And Program Evaluation (3) (Y)** Basic research methodology including quantitative, qualitative, action research, and context-based research. Theoretical knowledge and practical experience in program design and evaluation. Strong emphasis will be given to the importance of research and program evaluation and the opportunities and difficulties encountered when conducting these in the counseling profession. Pre: PSY 601

**PSY 603 Psychological Assessment (3) (Y)** Principles of psychological assessment. Historical perspective on psychological assessment. Assessment methods. Scales used in psychological assessment: Assessment of personality, abilities, achievement, interests, and values. Assessment of environment. Quality of assessment. Assessment design and implementation. Interpretation of the assessment results. Cross-cultural aspects of assessment. Legal and ethical issues. Pre: PSY 601

**PSY 604 Professional Identity, Ethics And Legal Issues (3) (Y)** Ethical issues in counseling and psychological research. Ethical decision making, confidentiality, and ethical obligations. Research ethics and psychologists in the legal system. Ethical standards and guidelines.

**PSY 611 Lifespan Human Development (3) (Y)** Psychological, social, and physical development over the life span. Interaction among genetic make-up, human activity, and context in the process of development. Stages and mechanisms of development. Normative development and deviations from the norm. Theories of development. Research on developmental processes in various domains. Cross-cultural perspective on human development. Current research issues.

**PSY 612 Career Development (3) (Y)** Work and work-related behavior over the life span. Relationships between life style and career development. Theories of vocational development. Career development of women and minorities. Occupational information and decision making. Impact of changing technology and job market. Application to career counseling with diverse populations.

**PSY 613 Psychopathology Over The Lifespan (3) (Y)** Abnormal development across the lifespan. DSM-IV classification of disorders and methods of appraisal. Etiology, diagnosis and treatment of child, adult, and geriatric disorders.

**PSY 614 Family System (3) (IO)** Family as an open system. Family structure, processes, and context. Family dynamics. Interaction among psychological, social, economic, and biological aspects of family functioning. Reciprocal relationships in the family. Interaction between families and their contexts. Cross-cultural differences in family organization and functioning. Problems in the family and ways of coping.

**PSY 620 Counseling Theories (3) (Y)** A pre-practicum course designed to help students gain an in-depth understanding of various counseling theories. Through reading, discussions, in-class exercises, and homework assignments, students will learn the theories.

**PSY 622 Group Work And Counseling (4) (Y)** Group purpose, type, development, dynamics; leadership and diversity; group work and counseling theories, methods and skills; evaluation of group work and counseling; application of group work and counseling in family, school and workplace settings. Students participate in an experiential learning group over the course of the semester.

**PSY 623 Social And Cultural Foundations (3) (Y)** Interaction between society and the individual. Socio-economic status, ethnicity and culture as determinants of behavior. Characteristics of multicultural and diverse societies and their effects on individual and group behavior.

**PSY 624 Counseling Skills (3) (Y)** A pre-practicum course designed to help student develop effective counseling skills. Through reading, discussions, in-class exercises, and homework assignments, students will learn therapeutic skills.

**PSY 640 Counseling Practicum (6) (Y)** Supervised experience in community practice counseling settings, including 100 hours of supervised client contact. Repeatable if different field placement. Pre: PSY 602,603, and consent of instructor.

**PSY 641 School Behavior, Adjustment, And Problems (3) (IO)** School adjustment in children at all school levels. Factors contributing to academic success and effective social interaction. At-risk children. Coping processes. School adjustment among culturally diverse children and children with special needs. The role of school, family, and community in the child's academic performance and school behavior. Prevention and intervention strategies.

**PSY 642 Educational And Vocational Assessment (3) (IO)** Principles and goals of educational and vocational assessment and counseling applications. Assessment settings, populations, and procedures. Educational assessment methods. Vocational assessment methods. Interpretation and use of the assessment results. Cross-cultural, social, legal, and ethical issues. Pre: PSY 601, 603.

**PSY 643 School And Career Guidance And Consultation (3) (IO)** History, principles, and goals of guidance and consultation in educational and work settings. Academic and career guidance. Individual and group guidance. Problem-specific, cultural, and developmental approaches to guidance and consultation. Guidance settings, populations, and procedures. School guidance and K-12 curriculum. Career services. Computerized guidance systems. Social, legal, and ethical issues. Pre: PSY 612, 641, or consent of the instructor.

**PSY 651 Theories Of Family Counseling (3) (Y)** Theoretical approaches used by systemic family therapists to assess and treat family problems.

**PSY 652 Couple Counseling (3) (IO)** Theory, research and practice in couple counseling from a systems perspective. Counseling process and outcome in distressed and dysfunctional couples, including cultural factors.

**PSY 653 Treating Families In Crisis (3) (IO)** Historical roots of family stress theory and basic theoretical approaches used by family therapists to assess and treat family stress and its symptoms.

**PSY 654 Gender And Cultural Issues In Families (3) (IO)** Gender and cultural issues in the family system; historical aspects of gender; gender systems; gender issues related to marriage and family therapy; development of culture; cultural similarities and differences in human development; multi-cultural and multiracial families.

**PSY 655 Systemic Sex Therapy (3) (?)** Human sexuality from the systems perspective. Common sexual attitudes and behavior problems. Analysis and intervention with sexual dysfunctions. Sex therapy with diverse populations of clients.

**PSY 659 Internship (9) (Y)** Supervised clinical experience in community practice counseling settings, including 200 hours of supervised client contact. Pre: PSY 640 and instructor's consent.

**PSY 694 Advanced Topics (3) (IO)** Advanced-level topic chosen by the instructor, with course content varying with each offering. May be repeated for credit provided that a different topic is studied.

**PSY 699 Directed Studies (3) (IO)**

**PSY 700 Thesis Research (?)** Supervised research, data analyses, literature review, and writing up of an original empirical study designed to develop and demonstrate the ability to do research and competence in

scholarly exposition. Students are expected to work on their thesis under the supervision of their faculty and have their work reviewed by their thesis committee.

## EDUCATION: MASTER OF EDUCATION

**ED 500 Graduate Studies (1) (S)** Used for continuous enrollment purposes. Must be taken as C/NC. Does not count toward fulfillment of degree requirements. Pre: Master's or doctoral candidacy and consent of instructor.

**ED 600 Education of Ethnic Groups in Hawai'i (3) (AY)** Survey of social-psychological learning characteristics, heritage, identity problems of Hawai'i ethnic groups, study of prejudice and inter-ethnic hostilities as related to education and teaching.

**ED 602 Technology in Education (3) (AY)** Selection, evaluation and utilization of instructional materials for systematic achievement of curriculum, goals, investigation of innovative technological advances for use in teaching and training. Pre: acceptance into the M.Ed. program or consent of instructor.

**ED 608A Fundamentals of Educational Research I (1) (AY)** Systematic study of the purposes of educational research, evaluation and use of research, and introduction of research design principles with emphasis on classroom applications. Pre: acceptance into the M.Ed. program or consent of instructor.

**ED 608B Fundamentals of Educational Research II (1) (AY)** Principles of research design, methodology, and analysis as applied to field research. Pre: successful completion of ED 608A or consent of instructor.

**ED 608C Fundamentals of Educational Research III (1) (AY)** A synthesis and application of research skills which culminates in an original research proposal. Pre: successful completion of ED 608A & B or consent of instructor.

**ED 610 Foundations of Education (3) (AY)** Social and intellectual history of education. Historical and contemporary relationships between schools and society. Foundations of the major philosophies of education. Contemporary educational theory and practice as related to major historical, philosophical and social factors in American culture. Pre: acceptance into the M.Ed. program or consent of instructor.

**ED 611 Advanced Educational Psychology (3) (AY)** Foundations of educational psychology through the vehicle of an exploratory study. Inquiry approach stresses learning theory, measurement techniques, and research skills in education. Pre: acceptance into the M.Ed. program or consent of instructor.

**ED 616A Assessment and Evaluation in Education I (1) (AY)** Systematic study of the theory and technology of measurement, assessment and

evaluation in educational settings, emphasizing the development and use of traditional techniques. Pre: acceptance into the M.Ed. program or consent of instructor.

**ED 616B Assessment and Evaluation in Education II (1) (AY)** Systematic study of the theory and technology of alternative assessment and evaluation in educational settings with emphasis on field-based applications. Pre: successful completion of ED 616A or consent of instructor.

**ED 616C Assessment and Evaluation in Education III (1) (AY)** Synthesis and application of measurement, assessment and evaluation in the use, adaptation, and/or creation of appropriate techniques in an original research proposal for a project or thesis. Pre: successful completion of ED 616A and B.

**ED 620 Individual Differences: Learner Characteristics (3) (AY)** Systematic study of the conceptual framework of inclusive education which consists of special education, gifted and talented education and compensatory programs. Emphasis will be placed upon individual student characteristics and strategies for effective instruction. Pre: acceptance into the M.Ed. program or consent of instructor.

**ED 622 School Curriculum (3) (AY)** Development and improvement of curriculum. Explanation of contemporary curricular issues which impact teaching and learning in the classroom. Emphasis on school reform and renewal. Pre: acceptance into the M.Ed. program or consent of instructor.

**ED 625 Seminar in Teaching Field (3) (AY)** Study in trends, research, and problems of implementation in interdisciplinary teaching. Pre: acceptance into the M.Ed. program.

**ED 635 Advanced Instructional Strategies (3) (AY)** An examination of various instructional strategies including information processing, social interaction, and personal development. Theory and research in the development, selection, implementation and evaluation of instructional models. Pre: acceptance into the M.Ed. program or consent of instructor.

**ED 694 Special Topics in Education (arranged)** Selected topics in education curriculum chosen by the department. The course content will vary. Course may be repeated provided a different topic is studied. Pre: Consent of instructor.

**ED 699 Directed Studies (arranged)** Statement of planned reading or research required. Pre: Master's candidacy and consent of instructor.

## HAWAIIAN LANGUAGE AND LITERATURE: MASTER OF ARTS

**HAW 500 Graduate Studies (1) (S)** Used for continuous enrollment purposes. Must be taken as C/NC. Does not count toward fulfillment of degree requirements. Pre: Master's or doctoral candidacy and consent of instructor.

**HAW 630 Research Methods in Hawaiian Language (3)** Seminar in which students explore and choose thesis topics. Pre: Concurrent enrollment in HAW 631.

**HAW 631 History of Hawaiian Language and Literature (3)** Hawaiian language and literature since contact with Europeans. Styles of language and types of literature. Relationships between Hawaiian and other languages, especially Hawaii Creole English. Recommended Pre: LING 331.

**HAW 632 Teaching Hawaiian as a Second Language (3)** Teaching Hawaiian to speakers of other languages, particularly Hawaii Creole Eng-

lish. Problems faced by students in acquiring native-like fluency. History of Hawaiian language teaching. Pre: HAW 453, 454. Recommended: HWST 431, LING 351.

**HAW 654 Advanced Hawaiian Grammar (3)** Advanced aspects of Hawaiian grammar. Pre: HAW 453,454; LING 321.

**HAW 690 Study in the Hawaiian Speaking Community (3)** Off-campus field work experience. Pre: HAW 453, 454, and 631. See Graduate Program Chair for overseas minority language study option substitute for this course.

**HAW 694 Special Topics in Hawaiian Language (3)** Specialized topics at the graduate level. Course content will vary; may be repeated for credit provided a different topic is studied. Pre: HAW 454.

**HAW 699V Directed Studies in Hawaiian Language (3)** Study outside regular classroom under faculty direction. Permission of instructor and statement of planned reading or research required.

**HAW 700 Thesis Research (1-6)** Research and writing of thesis. Pre: HAW 630.

**HWST 661 Advanced Hawaiian Music (3)** Examination of indigenous and foreign forms found in acculturated Hawaiian music. Conducted in Hawaiian. Pre: HWST 471, 473.

**HWST 662 Applied Hawaiian Chant (3)** Applied study of the performance of various Hawaiian chant styles. Conducted in Hawaiian. Pre: HWST 462, 473, 474.

**HWST 663 Traditional Hawaiian Literature (3)** Focuses on indigenous oral and written literature forms and their relationships to folk tales. Conducted in Hawaiian.

**HWST 664 European-influenced Hawaiian Literature (3)** Hawaiian literature developed on European models, such as biographies, late nineteenth century histories, and journals. Conducted in Hawaiian.

**HWST 665 Ethnological and Historical Narratives (3)** Descriptions written in Hawaiian regarding traditional Hawaiian culture and history. Cultural topics range from religion and court life to farming and fishing. Conducted in Hawaiian. Pre: HAW 453m HWST 663. Recommended: ANTH 385, 386; HWST 213.

**HWST 694 Special Topics in Hawaiian Culture (3)** Specialized topics at the graduate level. Course content will vary; may be repeated for credit provided a different topic is studied. Conducted in Hawaiian.

**HWST 699V Directed Studies in Hawaiian Culture (3)** Study outside regular classroom under faculty direction. Permission of instructor and statement of planned reading or research required. Conducted in Hawaiian.

## TROPICAL CONSERVATION BIOLOGY AND ENVIRONMENTAL SCIENCE: MASTER OF SCIENCE

**CBES 500 Graduate Studies (1) (S)** Used for continuous enrollment purposes. Must be taken as C/NC. Does not count toward fulfillment of degree requirements. Pre: Master's or doctoral candidacy and consent of instructor.

**CBES 600 Principles of Tropical Conservation Biology and Environmental Science (3)** Fundamental principles of tropical ecology, with an emphasis on the conservation and management of tropical ecosystems. The course discusses the various physical and biological factors that affect and shape tropical ecosystems, such as climate, topography, biogeography, biodiversity, productivity, and nutrient cycling. Tropical marine and terrestrial ecosystems around the world are compared, with a special focus on Hawai'i. Specific conservation and management challenges in each system are discussed. Restoration strategies for tropical ecosystems are also included.

**CBES 601 Field and Laboratory Methods in Tropical Conservation Biology and Environmental Sciences (3)** A practically oriented course introducing students to a range of laboratory and field methods and techniques used by practitioners in conservation biology and environmental sciences. A second goal of this course is to familiarize students with the biological and environmental diversity of the Island of Hawaii. Training in techniques is provided that can be used in thesis and internship projects. Students are introduced to methods used for studying, monitoring and experimenting upon plants and animals in a variety of habitats and measuring environmental variables in these habitats. Emphasis is placed on the choice of techniques for data collection, followed by rigorous analysis of results; training is given in the application of appropriate statistical techniques to ecological data. The data and information collected in this course will be more fully analyzed in CBES 605.

**CBES 602 Research Seminar in TCBS (1)** A research seminar course in tropical conservation biology and environmental science. Presentations will focus on research that is related to conservation biology and environmental science topics. Following the seminar there will be an open question-and-answer discussion session with the seminar speaker and students. Students also will give short presentations of their research or internship projects. These seminars will be critiqued by the instructor and the students for both the content of the project and presentation style.

**CBES 603 Natural Resource Management Seminar (1)** Seminars to be given by the TCBS faculty, visiting scientists from other universities, federal, state, and non-profit agency personnel working in fields related to TCBS. The seminars will focus on natural resource management issues. Following the seminar there will be an open question-and-answer discussion session with the seminar speaker and students. Students also will give short presentations of their research or internship projects. These seminars will be critiqued by the instructor and the students for both the content of the project

**CBES 610 Environmental Chemical Analysis (3)** Basic concepts of chemical measurements in environmental media. Analysis of environmental matrices with emphasis on water, in addition to soil, air and tissue. Topics include basics of instrument calibration and measurement, sample collection, sample lability, chemical interferences, matrix effects and reporting analyses of chemicals in the environment. Pre-req: CHEM 124, 125 with labs and CHEM 241 or equivalent, or permission of instructor. CHEM 330 and 330L recommended.

**CBES 615 Global Environmental Change (3)** Discusses the natural and anthropogenic processes that regulate the function of the Earth system. The basic understanding of the history and mechanisms of global change processes and the means by which human activities alter Earth system function at local to global scales will be examined, along with potential consequences of and solutions to global change. Course will focus on interrelationships of the atmosphere, hydrosphere, geosphere and biosphere and will provide students an understanding of the role that multidisciplinary science and technology have on research of the earth system.

**CBES 620 Research Techniques in Molecular Conservation Biology (3)** Major advances in molecular biology important to conservation studies are examined. Collection and molecular genetic analysis of plant and animals will be performed. Molecular techniques that are applied to conservation studies are performed including: PCR, RFLP, AFLP, DNA sequencing, and microsatellite analysis. Data analysis is examined including a number of popular genetics software packages that enable pairwise comparisons of large data sets and the construction of genetic distance matrices and networks. Pre-req: BIOL 357L and BIOL 481L or equivalent, or permission of instructor.

**CBES 625 - Tropical Ecosystem Analysis and Management (3)** This course is an introduction to concepts of ecosystem management and exploration of how those concepts apply to the tropics in general and Hawai'i in particular. The focus is on terrestrial and near coast marine ecosystems. The course explicitly recognizes that ecosystem management demands an integrated view of possible types of land use, with the appropriate mix being a function of societal objectives and scientific evaluation of what best meets those objectives. Pre-req: CBES 605 or permission of instructor.

**CBES 630 Nearshore Monitoring and Analysis (4)** The purpose of this course is to provide graduate students with a venue to learn techniques used to study the coastal environment in order to assess ecosystem health and/or quantify coastal impacts. Topics to be cover include, but are not limited to, species diversity, organism abundance, nutrient concentrations, sedimentation processes, sediment-water interface dynamics, and benthos quantification (i.e., percent cover). Students will learn how to collect field samples/data, conduct laboratory analysis, execute statistical analysis, and practice data interpretation. Pre-req: MARE 350/350L, CBES 605, or consent of instructor.

**CBES 635 (3). Physical Environment of Ecosystems (3)** Examination of the influences of climate, hydrology, geology, and soils on terrestrial and aquatic ecosystems. Emphasis on mechanisms of change, anthropogenic impacts, and monitoring networks. Pre-req: GEOL 100, 111, or GEOG 101; BIOL 251 or GEOG 309 or equivalent, or permission of instructor.

**CBES 640 Advanced Remote Sensing and Digital Image Processing (3)** Digital image processing of satellite-derived remotely sensed data for earth resource analysis and applications. Specific applications include image enhancement, classification, post classification analysis, special transformations, and multi-temporal analysis for land cover change detection. Pre-req: GEOG 470 or equivalent, or permission of instructor.

**CBES 645 Applying Social Science to Ecosystem Resource Management (3)** Social science methods for profiling natural resource dependent communities and assessing the social and economic impact of ecosystem management and regulation. Coverage of terrestrial resources with some emphasis on marine fisheries in the Pacific region. Relevant laws, policies and management agencies. Public input, best science, and the realities of management conflict and compromise. NEPA, social impact assessment. Case studies and public and professional roles in management.

**CBES 650 Oceanographic Monitoring and Analysis (4).** The purpose of this course is to provide graduate students with a venue to learn techniques used to study the oceanic environment in order to assess ecosystem health and/or quantify anthropogenic impacts. Topics to be covered include, but are not limited to, species diversity, organism abundance, nutrient concentrations, sedimentation processes, water column stratification/mixing dynamics, and benthic regeneration/coupling. Students will learn how to collect ship-based field samples/data, conduct land-based and ship-based laboratory analysis, execute statistical analysis, and practice data interpretation. Pre-req: MARE 350/350L, CBES 605, or consent of instructor.

**CBES 655 Ecological Physiology (3)** Physiological adaptations to environmental variation including physiological and biochemical mechanisms for food acquisition and digestion, thermal energetics, respiratory gas exchange, activity metabolism and osmoregulation.

**CBES 660 Population Ecology and Evolutionary Analysis (3)** Principles of population ecology and evolution with a focus on the analysis of populations for conservation biology. Research techniques in population ecology related to analyzing population growth and structure in geographically and age-structured populations. The importance of stochastic processes, reproductive strategies, habitat selection, foraging behavior, migration and movement patterns on the regulation of population sizes and evolution. Population, quantitative and species genetics as it relates to evolution, speciation, and biodiversity. Pre-req: CBES 605 or permission of instructor.

**CBES 665 Environmental Toxicology (3)** Biochemical basis for toxicity. Chemical distribution and fate in the body, and molecular mechanisms and effects of toxic action. Emphasis is on environmental toxicants. Pre-req: BIOL 410 and BIOL 443 or equivalent, or permission of instructor.

**CBES 670 Advanced Techniques in Geographic Information Systems (GIS) (3)** Advanced techniques in GIS including database creation and management, complex geographic data analysis and modeling, and benefits and limitation to methodology. Projects are drawn from Earth resource management, conservation and ecological studies, hazards, and cultural landscapes. Pre-req: GEOG 480 or equivalent, or permission of instructor.

**CBES 675 Conservation Genetics (3)** Basic concepts of population genetics and molecular evolution as it applies to Conservation Biology. Specific topics include population dynamics and inbreeding depression, and population genetic structure related to ecological parameters and requirements of an organism. Pre-req: BIOL 357 and BIOL 481 or equivalent, or permission of instructor.

**CBES 680 Advanced Statistical Analyses and Research Design (3)** An advanced examination of statistics and research design in conservation biology and environmental science. Emphasis is placed on specific applications and underlying assumptions, design of experiments, and observational schemes for research project. Extensive computer analysis is employed including MINITAB and SAS statistical software. Pre-req: CBES 605 or permission of instructor.

**CBES 690 Internship (3)** An internship for Plan B Masters Students in conservation biology and environmental science with a federal, state or non-government agency with projects in Hawai'i or other Pacific Islands. The internship project will be developed and carried-out in consultation with the host agency. The graduate committee in CBES must approve the internship project. The development of the internship is formalized through a written proposal, periodic written reports and meetings with the graduate advisor and host agency representative. A final report and oral presentation is required at the end of the internship.

**CBES 694 Special Topics in CBES (1-3)** The course content will vary as topics are chosen by the instructor. The course may be repeated for credit, provided that a different topic is studied.

**CBES 699 Directed Research for Plan B Students (1-3)** Research in conservation biology and environmental sciences for Plan B Masters Students. The development of the research project is formalized through periodic written reports and meeting with the graduate advisor. A final report and oral presentation is required at the end of the research project.

**CBES 700 Thesis Research (1-6).** Research in conservation biology and environmental sciences for Plan A Masters Students. The development of the research project is formalized through periodic written reports and meeting with the graduate advisor. A final thesis and oral presentation is required at the end of the research project.

## PHARMACY: DOCTOR OF PHARMACY

**PHPP 501 Introductory Pharmacy Practice Experiential (IPPE) I (1)** This course is the first in a sequential series. Content encompasses an introduction to the profession of pharmacy by affording students the opportunity to socialize in pharmacy practice experiences. This course specifically targets the health care dimensions of pharmacy practice through service-learning experiences in various community settings. Students will rotate among diverse community partnerships, which provide health services to multi-ethnic groups as part of the community-based interventions offered in Hawaii's health care systems. The course focuses on learning outcomes related to introducing students to service-learning as integral to health professional development; communications with people across the life span in the community via one-to-one and group interactions; how to teach health-related concepts in community practice settings; and increasing student capacity in human caring, compassion, patient care assessments and health promotion. Fall Semester, Year 1.

**PHPP 502 Introductory Pharmacy Practice Experiential (IPPE) II (1)** The second course in the IPPE sequence will build on the skills and knowledge of PHPP 501 to develop pharmaceutical care practice through community outreach. This course specifically targets health care dimensions of pharmacy practice through community outreach experiences in a variety of community settings. Students will rotate among diverse community partnerships to collaboratively plan, design, implement and evaluate community outreach projects as part of health services delivery to diverse and multi-ethnic groups of people. Course learning outcomes are related to engaging students in the planning and design of pharmacy/health-related projects in community settings; engagement in community needs assessments as integral to pharmacy/health care planning; exploring innovative community approaches in developing competence in cultural diversity and health literacy among diverse population groups. Spring Semester, Year 1.

**PHPP 503 Pharmacy Practice Experiential (PPE) I (1)** Fall Semester, Year 2.

**PHPP 504 Pharmacy Practice Experiential (PPE) II (1)** Spring Semester, Year 2.

**PHPP 505 Pharmacy Practice Experiential (PPE) III (1)** Fall Semester, Year 3.

**PHPP 506 Pharmacy Practice Experiential (PPE) IV (1)** Spring Semester, Year 3.

**PHPP 507 Advanced Pharmacy Practice Experience (APPE)—Ambulatory Care (5)** Year 4.

**PHPP 508 Advanced Pharmacy Practice Experience (APPE)—Community (5)** Year 4.

**PHPP 509 Advanced Pharmacy Practice Experience (APPE)—Medicine (5)** Year 4.

**PHPP 510 Advanced Pharmacy Practice Experience (APPE)—Specialty (5)** Year 4.

**PHPP 511 Inter-professional Health Care (1)** The concept of the “health care team” is not new. However, the true implementation of this concept has eluded our current health care system. This course will allow students to use the Institute of Medicine 2003 report on Health Care Professions Education to examine the difference between the system that we now have and the system that we need. Students will learn first-hand that developing a health care team is only the beginning. They will use real-life examples to understand and resolve team conflicts and develop good communication skills, as well as to learn methods used to measure, evaluate and improve the efficacy of the health care team. Fall semester, Year 1.

**PHPP 512 Culture and Pharmaceutical Care I (2)** The richly multi-cultured state of Hawaii will serve as a practical laboratory for students to begin practicing the skills necessary for pharmaceutical care. Students will discover and discuss health care disparity issues and relate them to everyday experiences in the community. Video presentations, readings and in-person reports from local patient volunteers will be used to integrate didactic and experiential knowledge. Student groups will choose issues of culture in health care and present them to the class for discussion and suggested methods of resolution. Students will contribute to a perpetual “handbook of cultural competence in pharmacy” to be shared with all future students at the UHH-CoP. Students will continue throughout the curriculum to refine and make additions to this handbook as they gain first-hand experience in cultural pharmaceutical care. Fall semester, Year 1.

**PHPP 513 Culture and Pharmaceutical Care II (2)** Fall semester, Year 3.

**PHPP 514 Evidence-based Medicine and Critical Literature Review (2)** Fall semester, Year 2.

**PHPP 515 Integrated Therapeutics I (4)** Fall semester, Year 2.

**PHPP 516 Integrated Therapeutics II (6)** Spring semester, Year 2.

**PHPP 517 Integrated Therapeutics III (6)** Fall semester, Year 3.

**PHPP 518 Integrated Therapeutics IV (6)** Spring semester, Year 3.

**PHPP 519 Patient Interviewing, Assessment, and Education (1)** Spring semester, Year 2.

**PHPP 522 Pharmacy Practice Management (2)** Fall semester, Year 3.

**PHPP 523 Wellness, Prevention, and Disease Management (2)** Spring semester, Year 3.

**PHPP 524 Health Economics and Outcomes Assessment (2)** Spring, Year 3.

**PHPP 525 Marketing of Professional Services (2)** Spring semester, Year 3.

**PHPP 550 History of Pharmacy (3)** It is of value for students to appreciate the origin of pharmacy, and the manner in which ancestors of the field practiced their art. Forms of drug therapy have been utilized throughout history and recorded in sources such as the Ebers Papyri. From these ancient civilizations, through the Middle Ages and Renaissance, the profession continued to evolve. These historical aspects will be described, as well as techniques, tools, symbols, and art in pharmacy. Particular emphasis will be placed on the evolution of pharmacy in Europe and North America, and landmark drug discoveries that changed the world. Discussion will be offered as to how pharmacy is practiced now, and where the field is headed. Spring elective.

**PHPS 501 Biochemistry I (4)** This two semester course will lay the foundation for the understanding of medicinal chemistry, pharmaceuticals and pharmacology. The course will cover protein structure and the relationship to biological function, DNA and RNA structure, function, regulation and repair, and the fundamentals of signal transduction and thermodynamics. Cell structure and its relationship to how cells manufacture and metabolize proteins, lipids and carbohydrates will be discussed. The ultimate goal of this course is to present principles critical for understanding the biochemical basis for disease states and drug action. Fall semester, Year 1.

**PHPS 502 Biochemistry II (4)** This continuation of Biochemistry I will delve deeper into metabolism and bioenergetics. Principles of cell molecular biology will form the basis for understanding topics such as programmed cell death, cancer and the biochemistry of hormones. Clinical correlates will be discussed and students will gain a deeper understanding of the biochemistry of nutrition. Spring semester, Year 1.

**PHPS 503 Pharmaceutical Calculations (1)** In this course, students will learn the fundamentals of pharmaceutical calculations, including use of the International System of Units, methods of measurement, and expressions of concentration. In addition, they will learn what constitutes an accurate, legal, understandable prescription or medication order. Students will learn how to perform calculations necessary to prepare isotonic solutions, i.v. infusions, enteral and parenteral nutrition products and patient specific dosing. The preparation of stock solutions, use of alligations, and compounding of special formulas will be discussed. Throughout the course, students will learn a top priority in their dispensing activities: prevention of medication errors. Fall semester, Year 1.

**PHPS 504 Pharmaceutical Immunology (3)** Basic concepts of immunology, including innate immunity, antigen recognition, lymphocyte development and adaptive immunity, will lay the groundwork for understanding immunity in a clinical context. The student will understand how the immune system exists to protect the human host from infection, but how the development of allergy, autoimmunity, graft rejection and immunity to tumors are all variations of this function. Students will discover how to pharmacologically manipulate the immune system by vaccination and other means. They will also review biotech products available for therapeutic applications, including monoclonal antibodies, cytokines, clotting factors and gene therapies, and the techniques used to prepare these products. Fall semester, Year 1.

**PHPS 505L Pharmaceuticals/Drug Action I (4)** This course will draw on the basic principles of chemistry, biology and physics to provide an understanding of how drugs behave at the molecular level. Students will integrate these principles to understand issues in the rational choice of drugs, dosage forms and drug delivery systems as well as their role in drug discovery and development. The legal and professional issues in drug compounding will be discussed. Discussions of Good Manufacturing Practices and Good Compounding Practices will carry over into the lab portion of the class. Students will become comfortable with equipment, procedures and records used in the compounding of various dosage forms, and will practice clinical dispensing skills vital to shaping a truly professional pharmacist. Fall semester, Year 1.

**PHPS 506L Pharmaceutics/Drug Action II (4)** In this continuation of pharmaceutics, students will be exposed to more advanced dosage forms and concepts such as therapeutic variability and the basis for drug interactions. Practical labs will provide hands-on experiences. Students will begin their discovery of how to utilize various drug information resources for their own edification, as well as to answer the questions of patients. In addition, students will be introduced to state-of-the-art drug information technologies and their effective use and applications. Spring semester, Year 1.

**PHPS 507 Pharmaceutics/Drug Action III (3)** Fall semester, Year 2.

**PHPS 508 Statistics (3)** This course serves as the structural framework for a career that relies heavily on the ability to understand, evaluate and communicate medical information. The student will learn basic statistical and epidemiologic skills critical for the evaluation of medical literature and for conceptualizing what constitutes truly evidence-based medicine. As stated by the authors of the textbook... "the goal is to provide students with the tools and skills they will need to be smart users and consumers of medical statistics." Spring semester, Year 1.

**PHPS 509 Pathophysiology I (3)** Just as physiology sets the stage for understanding disease processes, pathophysiology will set the stage for understanding later courses in pharmacology and integrated disease management. This course will teach students critical thinking skills needed to understand how the disease process occurs and how the human body responds. It will build on these concepts to introduce how early detection and intervention can delay or prevent disease progression. Clinical applications will be emphasized and students will confront issues such as how pathophysiology applies to real-life global issues including bioterrorism and the global threat of infectious disease. Spring semester, Year 1.

**PHPS 510 Pathophysiology II (3)** Fall semester, Year 2.

**PHPS 511 Pharmacokinetics I (3)** Fall semester, Year 2.

**PHPS 512 Pharmacokinetics II (3)** Spring semester, Year 2.

**PHPS 513 Parenteral Products and Pharmaceutical Compounding (2)** Spring semester, Year 3.

**PHPS 520 Pharmacy Law and Ethics (3)** Spring semester, Year 2.

**PHPS 521 Applied Pharmaceutical Care (3)** Spring semester, Year 2.

**PHPS 550 Genetics in Medicine (3)** This elective course will introduce the student to the basics of genetics and molecular mechanisms of inheritance as they apply to the treatment of disease and to the response of patients to drug therapy. Students will learn how genetics may lead to new strategies in drug development and treatment, how genetics may be used to predict patient response to specific treatments, and how responses are mediated. Emphasis will be placed on clinical and research applications. Spring semester elective.