# **UHM Department of Economics Assessment Report**

## **November 1, 2002**

This report summarizes our progress in establishing learning objectives for our students, reviewing assessment tools in use at other institutions, pilot testing specific assessment instruments during the Spring 2002 semester, and preliminary plans for use of assessment results. A University Assessment Fund Award-received in March 2001-was instrumental in starting the Department's Undergraduate Economics Major Assessment Program and allowed us to make progress towards the goals listed above. The Department of Economics will be meeting in November/December 2002 to consider a proposal-still being finalized-for institutionalizing assessment activities in the Department. We plan to begin implementing approved assessment instruments during the Spring 2003 semester.

The Economics Department Assessment Committee is composed of Department Chair Sumner La Croix, Economics Adviser Gary Kikuchi, Undergraduate Chair Carl Bonham, and Byron Gangnes.

### I. Learning Outcomes and Objectives.

The assessment committee has worked with the UHM Economics Department faculty to develop the following statement of expected learning outcomes for Economics Majors:

Consistent with the Department's Strategic Plan (1999), the objective of our undergraduate program is to provide majors with a high-quality educational experience that enables our graduates, whether as practitioners of economics or as informed citizens, to understand the range of economic challenges facing Hawaii, the U.S. and the Asia-Pacific region.

In order to accomplish these goals, the Department intends that each student:

- 1. Be conversant with fundamental economic concepts necessary for informed citizenship and general business discourse. An indication of such competence is satisfactory knowledge of the core content of principles and intermediate theory courses in macro and micro.
- 2. Master analytical methods, research skills, and empirical techniques appropriate for applied economic analysis in career-track government or private sector employment, or for advanced study in business and economics. Skills include appropriate application of intermediate-level conceptual models, ability to conduct and document academic research, facility with elementary statistical methods and standard data sources.
- 3. Demonstrate the ability to think critically about economic issues and to apply economic reasoning appropriately to analyze policy problems. Correctly identify economic choices and fallacies in practical application. Evaluate effects of policies.
- 4. Develop expertise needed to effectively communicate results of economic research and analysis to colleagues and decision-makers through written reports and oral presentations.

In addition to these learning objectives, the Department also seeks to:

- 5. Achieve placement of all qualified graduates in rewarding career paths and advanced study.
- 6. Maintain a vibrant academic climate in the department that attracts highly-qualified majors. This requires offering courses that are attractive to students as well as co-curricular activities to engage them.

To assess our progress in achieving these objectives, we have developed the following methods and tools.

### II. Assessment Tools Evaluated Spring 2002

A primary goal of our Undergraduate Economics Major Assessment Program-initiated in March 2001-was to evaluate the usefulness, costs, and barriers to implementing a range of potential assessment instruments. We have completed pilot testing of these assessment instruments. The department will initiate use of a selection of these instruments beginning in the Spring 2003 semester.

The additional candidate assessment methods that were pilot tested during the Spring 2002 semester are described below.

1. Commercial Objective Testing. We used the ETS Economics Assessment Exam to assess the theoretical knowledge attained by our majors. All students enrolled in 400-level economics courses were invited to take the exam, which was offered on alternative dates in March. Faculty teaching a 400-level Economics course agreed to award up to five percent credit toward the final exam for students taking the ETS exam, with the credit awarded proportional to student performance.

Since ETS provides comparison national norms, the exam may be used to determine how our students rank vis-à-vis the rest of the nation. However, a very poor participation rate for the voluntary exam severely limits the information content from this initial administration. Of the 89 students enrolled in 400-level courses, only 24 students took the exam. The average score for these students was very low, placing them in only the 22nd percentile nationally. While these results are troublesome, there are a number of factors that may contribute to the low scores, including potential selection bias toward lower-performing students who most needed the extra credit, and a higher proportion of juniors and non-economics majors than in the national comparison group. (See 6 May 2002 letter to ETS Economics Assessment Exam Takers, March 2002.)

There are important barriers to using the ETS exams in ongoing assessment. First, they are very costly, \$13 per student. Second, as indicated by the low turnout, it will be difficult to get a representative sample of economics majors to participate unless the tests are made a mandatory part of the curriculum. Because the exams run two hours, it is not possible to administer them during normal classroom hours. We plan to repeat voluntary testing using our existing supply of test materials, and hope to get a better idea of whether these practical barriers can be overcome.

We will, if possible, try to increase participation rates and find a way to separate economics majors from other test takers.

- 2. Objective Mini-Tests. We have explored the possibility of using mini-exams in select classes, as a lower-cost alternative to use of commercial objective tests. During the Spring 2002 semester, instructors in two courses (one in Intermediate Micro Theory-ECON 301-and one in Intermediate Macro Theory-ECON 300) included a handful of targeted questions in the final exams for their courses and reported the results of those questions to the assessment committee. An initial review of the results for these mini-tests suggests that they may help to identify areas of strength and weakness in student achievement, across topical areas but also for various types of skills or analytical ability. For example, results from the intermediate macro theory questions show that students had a particularly difficult time with questions requiring quantitative calculations, but did much better on relatively standard analytical questions.
- **3.** Course-Specific Objectives and Evaluation. Individual instructors will formulate course objectives prior to the semester, and then include exam questions designed to test whether students have successfully met these objectives. The goal is to encourage instructors to think carefully beforehand about course objectives, and to have them plan the course to teach these objectives. Gary Kikuchi tested this approach during the Fall 2001 semester for his Macro Principles Courses (ECON 131). He reports that the exercise was particularly useful in identifying to him unexpected areas of basic knowledge with which students were having difficulty, and that might therefore be holding them back from more advanced understanding. He suspects that more drilling in basic terminology as well as more problem-solving opportunities could improve student performance. Gary Kikuchi's report is attached.
- **4. Departmental Review of Students' Work Product.** In order to evaluate the written work product of Econ majors, we collected essays from two upper-division courses, and then asked other faculty members to review the work with an eye toward the learning objectives articulated by the faculty over the past year (see Oct. 1, 2001 report). The reports of the two faculty "outside readers" suggest that this may a useful way of evaluating progress toward broad learning objectives, as well as assessing how coursework supports these objectives. For example, in reviewing papers for a course in International Monetary Economics (ECON 461), UHM Economics Professor Theresa Greaney found substantial evidence that students are able to apply analytical tools to real world policy analysis, but less evidence that they are able to use the key economics graphical tools to support their analysis effectively. She found generally positive evidence of the ability to use writing to communicate economic ideas. Another reviewer, UHM Economics Professor James Moncur, noted that term papers from a class covering China's Economy (ECON 416) displayed considerable institutional knowledge, but made little reference to relevant principles of economic analysis and made little use of data to support positions. The reports of Professors Greaney and Moncur are attached.

This selective review process can be continued in the future, including perhaps having a committee member attend oral presentations given by students where appropriate.

**5.** Surveys. We have developed survey instruments for incoming majors (administered at the time of major declaration), graduating seniors (at the time they complete the goldenrod form),

and recent graduates. The surveys are intended to assess satisfaction with the program, the usefulness and appropriateness of courses offered, success of the curriculum in building specific skills, and the career placement record. The surveys include objective questions designed to permit comparisons of responses at different stages of the program. Opportunities for subjective evaluations are also provided.

The content of the survey instruments is close to final form. The Undergraduate Advisor has been giving out the surveys to the new majors and graduating seniors, and the response rate has been very high. The Chair has reviewed the returned surveys and has found the responses useful, although the sample to date is small. The surveys need to be professionally prepared in order for students and the Department to use them appropriately. We plan to have final layout and printing done by a private firm in February/March 2003. The alumni survey will be administered during the 2003-2004 academic year. Copies of the surveys for new majors and graduating seniors are attached.

### **B.** Assessment Methods for Possible Future Considerations

- **6. Portfolios.** We could help students construct a file that documents their work product as an economics major. These portfolios could include transcripts, term papers, research work, records of internships, community work, honor societies, and other information, and would serve as a resume package for the student upon graduation.
- **7. Capstone Course.** We could develop a final course experience where majors demonstrate their knowledge by completing a research paper or other culminating experience. At the moment, our best students can petition to do such research as an independent study activity, but there is no formal requirement.
- **8.** Advisory Board. We could establish an external advisory board to give us ongoing appraisal of our program. Members may include emeritus professors, former graduates, key business people, politicians, and possibly faculty members from other departments. The board would be charged to give us an honest appraisal of our program in meeting our learning objectives and to give us recommendations on the steps we should take to strengthen our program. This relationship could yield additional benefits to the program by building a working relationship with the government and the business community that could encourage expanded internship and job opportunities for our graduates.

### III. Use of Assessment Results

To date, assessment committee efforts have been focused on identifying and pilot testing alternative assessment instruments. The next important step, to be undertaken in November/December 2002, will be for the Department faculty to select a limited number of assessment tools to be used in ongoing program assessment and to begin to evaluate the results obtained to date. Areas where the results may be useful include:

- a. Allocation of teaching resources to courses for which students indicate interest;
- b. Revising of advising procedure to address unmet needs;

- c. Changes in emphasis within existing courses to meet students' needs;
- d. Identifying effective teaching methodologies;
- e. Pinpointing our areas of current strength and weakness.

Preliminary information from the draft surveys in use during 2002 suggest that students want more opportunities for active involvement in the program, including more regular information about department news, internships, faculty interaction, and job placement. We have already begun to respond to these concerns with concrete change. Among the efforts already underway are:

- 1. Curriculum Reform. The department is providing limited release time on a competitive basis for new course development and renovation of existing courses. A new course, the Economics of Tourism-ECON 320-is being offered by UHM Economics Professor James Mak during the Fall 2002 semester. A second new course, Economic Forecasting-Econ 427, will be offered by UHM Economics Professor Byron Gangnes during the Spring 2003 semester. The Department submitted two new courses to the University for approval this fall, and we plan to offer them in Fall 2003, if approved. UHM Economics Professor Ekaterina Sherstyuk has developed Games and Economic Behavior-ECON 356, and UHM Economics Professor Sang-Hyop Lee has developed Mathematics for Social Sciences-SOCS 121. The Department, in conjunction with the Department of Sociology and Political Science, has submitted two certificate programs for majors and non-majors to the University for approval. We are also changing some of the prerequisites for our courses to better suit the needs of our students. For example, ECON 301intermediate microeconomics-will now require only ECON 130 or faculty approval instead of both ECON 130 and 131. Finally, the Department has reviewed all prerequisites for 300- and 400-level courses and have comprehensively revised them in preparation for the new UHM registration system to be implemented Fall 2003 and to allow more non-majors to take selected upper division courses in our Department.
- **2. Internships.** The Department has just completed setting up a more formal internship program with the Cooperative Education Program. Students will be required to give oral/written presentations at the end of their internship. We have received approval of two new courses, ECON 397 and 398, for the internships and Co-ops, respectively. ECON 397 concentrates on short-term work experience using economics skills, and ECON 398 concentrates on a longer-term work experience for more advanced students; it requires a two-semester commitment.
- **3. Faculty Mentoring.** Beginning with the 2001-2002 academic year, a faculty member has been assigned as a mentor for each Econ major. The faculty mentor is expected to provide advice on academic and career issues and may be asked to review student work or to grade presentations of students who enroll in internships.
- **4. Career Placement.** The Department is developing stronger ties with career services and is advising students on how to go about looking for a job after they graduate. The Department, in conjunction with the student-led Economics Club, held a Career Night for our majors/minors/potential majors in early April 2002, with guest speakers ranging from the Career Office Counselor to our faculty to recent UHM economics graduates. The Economics Club is sponsoring another career night in the Spring 2003 semester.

- **5. E-mail and Web.** The Department is close to finishing an overhaul of its undergraduate program web site to include more comprehensive and timely program information (http://www.economics.hawaii.edu). We have also established an e-mail list of all economics majors and minors so that we can quickly distribute important department information; this list has been extensively utilized to publicize events, speakers and opportunities for our majors and minors. Information about seminars, workshops, department events, and student opportunities is now regularly posted on the Department website. Students and potential UH students now have easier access to departmental information. Positive comments have been received about the website revisions
- **6. Exchange programs.** We have initiated international exchange programs with Thammasat University in Thailand and Nihon University in Japan, and are encouraging students to participate in other foreign study programs. Extensive information about these programs is now also available on our Department website. During the Spring 2002 semester, the Department hosted an International Night to publicize the exchange opportunities and internationally-oriented department activities more generally. During the Fall 2002 semester, the Department hosted a pizza lunch for students interested in the Thammasat exchange program and a representative from Thammasat University.
- **7. Clubs and societies.** The Department's Undergraduate Committee has resurrected two important undergraduate institutions-the Economics Club and the Omicron Delta Epsilon Honor Society-to increase student involvement and recognition in our program. We have added new members to ODE every semester since Fall 2001, and the Economics Club now numbers about 30 students. Two of the Club's major projects include the organization of career night and the coffee shop design project for Saunders Hall, a project that was requested by the Dean of the College of Social Sciences.

#### IV. Observations on the Assessment Process

While our assessment work is at an early stage, we have already drawn a number of lessons from this experience and our review of efforts at other institutions.

- 1. Successful Assessment Programs tend to start out small without a grandiose plan involving wholesale changes to the existing programs. These programs use a small but effective set of tools to gather data, and then add or subtract the tools as experience warrants. Successful programs recognize that the needs and objectives of assessment may change over time, and that participants must be willing to change as well.
- 2. Successful Assessment Programs do not use tools that are prohibitively costly to implement. Assessment that is too expensive in faculty time, staff time, or budget will not be sustained over the long run. Because assessment programs are a relatively new concept and data about their success/failure are scarce, it is particularly important to experiment with alternative tools to identify those that can meet a cost-benefit test.
- 3. Successful Assessment Programs do not use tools that alienate the faculty. Faculty support is crucial in making the program work. Some departments have used tools that were deemed useful

by the committee but ended up scrapping them after the faculty rejected them. One example is a case where faculty strongly voiced their displeasure about a comprehensive exam, objecting that they were losing control of their classes and their ability to teach effectively. We have to make sure that the methods we implement have the full support of the faculty.

4. Successful Assessment Programs are not afraid to try various tools and discard the ones that don't work. The ability to experiment seems to be a key component in programs that work.

## V. Questions and Suggestions?

Please contact Professor Sumner La Croix, Chair of UHM Economics, if you require additional information or have suggestions concerning our assessment program. He can be reached at (808) 956-8496 or lacroix@hawaii.edu.