

Assessment Report Standard Format

July 1, 2004 – June 30, 2005

DEPARTMENT/PROGRAM(S) ASSESSED: M.S. in Social and Applied Economics

ASSESSMENT COORDINATOR: Leonard J. Kloft

OUTCOMES:

1. Students will develop an understanding of economic theory. (LO-1)
2. Students will integrate and apply their knowledge to public policy, business problems, and social issues. (LO-2)
3. Students will be proficient in analyzing and communicating quantitative and qualitative information. (LO-3)
4. Students will demonstrate the ability to apply economics to solving problems. (LO-4)

MEASURES EMPLOYED:

- 1 **Internship Report Review:** A subcommittee of the Graduate Studies Committee (Department of Economics) reviewed the completed internships for the academic year 2004-2005. Each subcommittee member evaluated each internship based on the following criteria:
 - a) Statistical Analysis Capabilities
 - b) Writing and Other Communications
 - c) Analytical (Modeling) Skills
 - d) Creativity and Originality
 - e) Knowledge of Economic Institutions
- 2 **Core Course Key Skill Assessment:** Each faculty member, who teaches a core course in the M.S. in Social and Applied Economics Program (faculty who teach elective courses can but are not required to submit key skill assessment forms), completed a key skill evaluation of each student based on the following criteria:
 - a) Statistical Analysis Capabilities
 - b) Writing and Other Communication Skills
 - c) Creativity and Originality
 - d) Knowledge of Economic Theory
 - e) Knowledge of Economic Institutions
 - f) Other Key Skills (Identified on the form)
 - g) Comments
- 3 **Major Papers Portfolio:** A subcommittee of the Graduate Studies Committee (Department of Economics) reviewed each student's major papers and projects completed during the student's progress through the program. Each subcommittee member evaluated each internship based on the following criteria:
 - a) Statistical Analysis Capabilities
 - b) Writing and Other Communications
 - c) Analytical (Modeling) Skills
 - d) Creativity and Originality
 - e) Knowledge of Economic Institutions
 - f) Improvement

FINDINGS:

Internship Report Review:

Eight graduate student internship reports were completed during the 2005 academic year. The internship reports, date completed, Faculty Adviser and Faculty Reader for each report are presented in Table 1. One report was co-authored by two students while the other seven reports are single-authored. Each of the internship reports met all of the requirements for successfully completing the graduate internship requirement of the M.S. Program in Social and Applied Economics.

The Subcommittee's purpose was to conduct an *ex post* evaluation of the 2004-2005 internship reports to help determine to what degree the internship program is fulfilling its critical role in helping the M.S. Program fulfill its mission.

Table 1. 2004-2005 Graduate Internship Reports			
Internship Report Titles	Faculty Supervisor	Faculty Reader	Date Completed
The Economic Impact of the Hospitals of the Greater Dayton Area Association in Dayton, Ohio	Fichtenbaum	Premus	9/15/2005
A Price Analysis for InWord	Traynor	Osborne	9/1/2005
The Determinants of Current Account Dynamics in the Medium Run: An International Approach	Premus	Dung	8/18/2005
The Role of Gender and Race in Determining Returns to Higher Education: Evidence from Annual Demographic Survey	Renas	Premus	7/18/2005
The Government Acquisition Process and the February 2005 C-40C Pricing Methodology	Traynor	Premus	6/30/2005
Xenia's Best Kept Secret: Measuring the Economic and Social Impacts of The Legacy Center on the Xenia Community and Greene County	Blair	Traynor	1/18/2005
The Chinese Telecommunications Manufacturing Industry: An Economic Analysis	Dung	Traynor	12/20/2004
Customer Satisfaction and Loyalty Analysis for the Reynolds and Reynolds Company	Traynor	Fichtenbaum	9/16/2004

An examination of the reports revealed a diverse set of research techniques and methods were employed by student members of the 2004-2005 class. Multiple regression, time series studies, panel regressions, logit regressions, benefit cost analysis and impact multiplier analysis were the main techniques employed by the students. The internship reports reflect a diverse set of research topics, including military procurement, telecommunications in China, the impact of hospitals on the region, a customer satisfaction study of a major corporation and the returns to higher education by race and gender. The Subcommittee concluded that the diversity of research

techniques and research topics reflects the academic goal, purpose and agenda of the M.S. Program.

The following discussion presents the Subcommittee’s assessment of how well the M.S. Program is meeting its goal of preparing students with a professional skill set so they can be successful as applied economists when they leave the university and enter the world of full time work. The assessment was carried out by rating each of the individual student internship reports for quality of writing, modeling and statistical skills of the authors (students), as reflected in their respective internship reports. Table 2 presents the numerical assessment of the Subcommittee’s independent analysis of each skill characteristics for each student, as reflected on a scale of 1 (low) to 5 (high).

Table 2: Internship Reports Assessed 2004-2005

	Statistical Analysis Capabilities	Writing and Other Communication Skills	Creativity and Originality	Knowledge of Economic Theory	Knowledge of Economic Institutions
Mean	3.92	3.67	3.54	3.54	3.67
Standard Deviation	0.974	0.963	1.062	0.932	1.007

Overall, the results seem to indicate that the perception of the strengths and weaknesses of the students varies considerably among the evaluators. The average scores range between 3 (average) and 4 (strong) for most of the skill sets. The average score across all skill sets is 3.67. Of the various skills, statistical abilities ranked the highest and creativity and originality the lowest. Most of the faculty evaluators felt that the respective student internship reports reflected above average capabilities in writing and other communications skills. In general, the results suggest that, from the perspectives of the evaluators, the internship component of the M.S. Program is meeting its objective of preparing students with a professional skill set they will need when they enter the job market.

In summary, the Subcommittee unanimously concluded that the M.S. Program, as reflected in the 2004-2005 internship reports, is effectively meeting its goal of equipping its graduating students with a portfolio of skills they will need to have successful careers in applied economics.

Core Course Key Skill Assessment:

The M.S. in Social and Applied Economics Program requires a minimum of 48 credit hours, which are spread across eight core courses, three elective courses, and the internship. Each faculty member in the core courses was provided a key skills assessment form for each student. Forms were returned for students in EC 717 Applied Macroeconomics (Fall 2004), EC 724 Development of Economic Thought (Fall 2004), EC 715 Applied Microeconomics (Winter 2005), EC 725 Economic, Sociological, and Ecological Economic Systems (Winter 2005), EC 712 Forecasting Economic Activity (Spring 2005), and EC 726 Contemporary Political Economy (Spring 2005). Key skill assessment is required only in core courses, but faculty, who taught elective courses, were provided the key skill assessment forms.

All Registered Students in Classes Assessed 2004-2005

	Statistical Analysis Capabilities	Writing and Other Communication Skills	Creativity and Originality	Knowledge of Economic Theory	Knowledge of Economic Institutions	Other Key Skills
Mean	3.88	3.25	3.35	3.29	3.08	3.06
Standard Deviation	1.038	1.051	1.114	1.071	.989	1.459
Valid N	34	84	84	84	65	31

The scores for the core course key skills ranged from 2 to 5, where 5 is the highest. Statistical Analysis Capabilities represent the highest rated skill set. Creativity and Originality, Knowledge of Economic Theory, and Writing and Other Communication Skills are closely scored together. Knowledge of Economic Institutions and Other Key Skills were the lowest scored categories. The Other Key Skills was an open category that a professor could report a skill which was not part of the established skill set. Four professors chose to report skills such as Critical Thinking, Application of Microeconomics Concepts, Work Ethic, and Leadership. Two of these Other Skills were not reported for all students in the class, but for only one or two students in a particular class.

Since the M.S. in Social and Applied Economics Program enrolls both full-time and part-time students, the information from the above table was separated by enrollment status into the two tables below.

All Registered Full-Time Students in Classes Assessed 2004-2005

	Statistical Analysis Capabilities	Writing and Other Communication Skills	Creativity and Originality	Knowledge of Economic Theory	Knowledge of Economic Institutions	Other Key Skills
Mean	3.91	3.16	3.30	3.27	3.05	2.96
Standard Deviation	1.058	1.001	1.089	1.059	.981	1.427
Valid N	32	77	77	77	58	28

All Registered Part-Time Students in Classes Assessed 2004-2005

	Statistical Analysis Capabilities	Writing and Other Communication Skills	Creativity and Originality	Knowledge of Economic Theory	Knowledge of Economic Institutions	Other Key Skills
Mean	3.50	4.29	3.86	3.43	3.29	4.00
Standard Deviation	.707	1.113	1.345	1.272	1.113	1.732
Valid N	2	7	7	7	7	3

Full-time students appear to be stronger in Statistical Analysis Capabilities whereas part-time students rate higher in both Writing and Other Communication Skills and Creativity and Originality.

Since this is the first year of assessment under the new assessment plan, there is no previous years' data available to compare this year's findings. As data is collected for additional years, a baseline for program effectiveness will be identified. Lacking this reference baseline, the M.S. in Social and Applied Economics Program provides a good knowledge of economic theory (LO-1), a good knowledge of public policy, business problems, and social issues (LO-2), a very good ability to analyze information (LO-3) and good ability to communicate information (LO-3), and a good ability to solve problems (LO-4).

In summary, the M.S. in Social and Applied Economics Program, as reflected in the 2004-2005 core course key skills, is achieving the learning outcomes specified and therefore is meeting its goal of equipping its students with a portfolio of skills, which they will need to have successful careers as economists.

Major Papers Portfolio:

Whereas the Internship Review examines the program's final product and the Core Course Key Skills reviews skills development course by course, the Major Papers Portfolio assesses longitudinally core skills development. Papers and projects were collected from the following courses:

- | | |
|--|---------------------------------------|
| Fall 2004 | Spring 2005 |
| EC 717 Applied Macroeconomics | EC 712 Forecasting Economic Activity |
| EC 724 Development of Economic Thought | EC 726 Contemporary Political Economy |
| EC 740 Cost-Benefit Analysis | EC 780 Economics Problem Seminar |

- Winter 2005
 EC 725 Economic, Sociological, and Ecological Systems

A subcommittee of the Graduate Studies Committee reviewed each student's papers/projects portfolio. Each portfolio was assessed on the same key skills components as the Core Course Key Skills except that the Other Key Skills category was replaced with Improvement. The Improvement category strives to capture the reviewers overall assessment of improvement from the start of the program to the completion of the program. Student portfolios were considered only if the student had items from each quarter evaluated.

All Students Who Completed Program during 2004-2005

	Statistical Analysis Capabilities	Writing and Other Communication Skills	Creativity and Originality	Knowledge of Economic Theory	Knowledge of Economic Institutions	Improvement
Mean	4.00	3.37	3.63	3.56	3.45	4.14
Standard Deviation	0.938	1.027	1.104	0.929	.923	1.459

The scores for the key skills ranged from 2 to 5, where 5 is the highest. Statistical Analysis Capabilities represents the highest rated skill set, as was the case in the Core Course Key Skills section. The other four key skills areas are closely scored together. The Improvement category suggests that the subcommittee found that the student papers and projects did substantially improve over the course of the program. This finding is particularly true for the average students in the Program. For those students, who started at a higher skill level, the amount of improvement was not as large. For those students, who started at a lower skill level, the amount of improvement also was not as large.

Since this is the first year of assessment under the new assessment plan, there is no previous years' data available to compare this year's findings. As data is collected for additional years, a baseline for program effectiveness will be identified. Lacking this reference baseline, the M.S. in Social and Applied Economics Program provides a good knowledge of economic theory (LO-1), a good to very good knowledge of public policy, business problems, and social issues (LO-2), a very good ability to analyze information (LO-3) and a good ability to communicate information (LO-3), and a very good ability to solve problems (LO-4). Moreover, the Improvement level suggests a very good to exceptional improvement in the overall skills set.

In summary, the M.S. in Social and Applied Economics Program, as reflected in the 2004-2005 Core Course Key Skills, is achieving the learning outcomes specified and therefore is meeting its goal of equipping its students with a portfolio of skills, which they will need to have successful careers as economists.

CONCERNS:

Internship Report Review:

Although the Subcommittee concluded that the internship program for 2204-2005 was a definite success, a number of issues emerged during the evaluation process, including selection bias and internship supervision problems.

The fact that the Subcommittee only rated the quality of successfully completed internship reports inserts a selection bias into the evaluation of the internship program. To be successfully completed the student must have the "sign-off" of their Faculty Supervisor, the Faculty Reader and the Director of the M.S. Program. One problem is that to successfully complete the internship project a number of students had to extend their research well beyond the time period—one quarter—normally allocated to the internship requirement. Several students did not successfully complete their internship projects because they moved out of the area or became pre-occupied with their new jobs. Several students have been trying on and off for over a year to complete their internship requirement.

In the majority of cases the internship reports were well written and generally exceeded the minimum quality standards of the department. The problem is that the department maintains a research standard much higher than is normally required or expected by outside corporate or government internship sponsors. The result is an internship report that meets the academic standards of the department but at the same time is an "over kill" for the internship sponsors. The solution is to include a highly presentable and comprehensive executive summary of the study results and recommendations, but in most cases the Subcommittee found the executive

summary section of the internship reports to be inadequate for this purpose. A recommendation of the Subcommittee is that all future internship reports provide both a good technical analysis and a highly focused, well written executive summary that effectively communicates the results in the technical analysis in a way that effectively meets the needs of sponsoring organizations.

Several administrative issues emerged as well. One re-occurring problem in the department is that two or three faculty seemed to carry the majority of the burden of serving as Faculty Advisers or Faculty Readers, and some faculty did not participate at all. The fact that the majority of the internship studies begin in the early Summer C period complicates supervision for faculty who travel or who are conducting research for their own professional development. The Subcommittee recommendation is to increase the priority of faculty supervision activities in the Annual Faculty Evaluation Reports. A closer alignment of priorities and rewards will help resolve this issue.

Core Course Key Skill Assessment:

Although the M.S. in Social and Applied Economics Program was meeting its learning outcomes, the program can improve its performance on the following core course key skills: Writing and Other Communication Skills, Creativity and Originality, Knowledge of Economic Theory, and Knowledge of Economic Institutions. By strengthening these skill areas, the learning outcomes will be attained at a higher level, thereby improving the probability of successful careers for the Program's graduates.

In the comments section, several professors mentioned weak presentation skills of the students.

Major Papers Portfolio:

Although the M.S. in Social and Applied Economics Program was meeting its learning outcomes, the program needs to improve its performance on the following key skills (LO-3): Writing and Other Communication Skills. The Program meets the analyzing data portion of (LO-3) very effectively, but the communicating the analysis (LO-3) is not as effective. Both writing and presentation skills need improvement. By strengthening these skill areas, the learning outcomes will be attained at a higher level, thereby improving the probability of successful careers for the Program's graduates.

RECOMMENDATIONS:

Internship Report Review:

1. Eliminate the early summer bottlenecks by aligning students with internship projects one or two quarters prior the beginning of the internship.
2. Encourage faculty participation in internship supervision by a better alignment of department priorities and rewards.
3. Substantially improve the executive summary section of the internship reports.
4. Provide opportunities for student interns to make an oral presentation of their respective research findings.
5. Consider alternatives to the internship requirement for students who are already employed or who otherwise do not have the luxury of spending two or three quarters to complete their internship reports.

Core Course Key Skill Assessment:

1. Identify students who need assistance with writing and other communications skills.
Where appropriate, suggest ESL courses to International Students and inform all students with writing issues about the Writing Center.
2. Develop more in-class presentation opportunities.
3. Develop more opportunities to develop analysis skills.

Major Papers Portfolio:

- 1 Identify students who need assistance with writing and other communication skills.
Where appropriate, suggest ESL courses to International Students and inform all students with writing issues about the Writing Center's services.
- 2 Emphasize writing skills improvement on graded materials.
- 3 Develop more in-class presentation opportunities

CONCLUSION:

The M.S. in Social and Applied Economics Program had a successful academic year 2004-2005. With its new assessment plan, the Program has established its effectiveness in meeting its learning outcomes and thereby ensuring that its graduates have the requisite skills to be successful economists. Overall the Program continues to meet its mission, but in a process of continuous improvement, the Program has identified two areas for additional improvement: Skills components (Writing and Other Communication Skills) and program attributes (the Internship). The Graduate Studies Committee and the Department of Economics will examine these areas more closely and in consultation with the Program's various constituencies devise practices to improve the effectiveness of these components.