

**Oregon State University
Department of Applied Economics
Undergraduate Program Review March 3-5, 2019
Joan Fulton, Christine Wilson, Michele Swift and Michael Harte**

1. Overall Recommendation:

- Expand
- Maintain
- Restructure**
- Reduce
- Suspend
- Discontinue
- Other (include brief explanation)

2. Objective, Logistics and Participants for this Review Process

This section serves as an introductory summary of the review process.

a. Objective of the review and brief summary of the logistics of the site visit

As requested by the Curriculum Council, in-depth reviews of undergraduate programs at Oregon State University (OSU) are conducted approximately once every ten years. However, the last review of the Applied Economics' undergraduate program was conducted in 2001. Therefore, the faculty in the Applied Economics department was eager to have the current review conducted. The review process gives faculty and administrators the opportunity to evaluate program performance and plan for the future. The objectives of these reviews are to evaluate the following areas for the purpose of improving the quality of undergraduate programs:

1. The focus of the academic program and its fit with the institutional mission and strategic direction
2. The extent to which the programs are evolving along national trends;
3. The adequacy of resources for quality delivery of the programs;
4. The learning environment and the extent to which learning outcomes are achieved;
5. The areas where Oregon State University can further develop its strengths; and potential areas for collaboration and interdisciplinary initiatives.

b. Overview of Program (brief description)

The history of the Department of Applied Economics (AEC) dates back to the earliest years of the university. At its inception, the department focused its teaching mission on the traditional constituency of students interested in the economics of agricultural production and farm management. Over time, the Department's research expertise broadened and the graduate program developed a strong focus and national reputation in rural studies and environmental

and resource economics. In 1975, the department established an undergraduate degree in Agricultural and Resource Economics (AREC) and in 1984 added a second undergraduate degree: Agricultural Business Management (ABM). It has undergone several changes in the 18 years since the programs were last reviewed (2001). A major restructuring of the undergraduate program happened in 2003 when the Department terminated the AREC degree with options, replacing it with a degree in Environmental Economics, Policy, and Management (EPPM). In 2011, the Department replaced the EPPM major with a degree in Environmental Economics and Policy (EEP), which was offered both as an on-campus and as an Ecampus degree program. Since 2011, the majors offered by the undergraduate program have remained the same - ABM (on-campus only) and EEP (on-campus and Ecampus), although some modifications have been made to shift ABM course content to a more general agribusiness and food-system focus. This has resulted in changes to some course titles and the addition of the word "Food" to the ABM major name (Agricultural and Food Business Management). Finally, in 2013 the department changed its name to Applied Economics.

c. Participants in the site visit

External Reviewers:

- Dr. Joan Fulton, Professor and Associate Department Head, Department of Agricultural Economics, Purdue University.
- Dr. Christine Wilson, Professor and Director of Undergraduate Programs, Department of Agricultural Economics, Kansas State University.

Faculty Senate Curriculum Council Reviewers:

- Dr. Michele Swift, Senior Instructor and Professional Development Coordinator, Management, College of Business, Oregon State University (OSU).
- Dr. Michael Harte, Professor, College of Earth, Ocean and Atmospheric Sciences, Oregon State University (OSU).

OSU's Office of Academic Programs, Assessment and Accreditation Representative:

- Dr. Alix Gitelman, Vice Provost, Office of Undergraduate Education and Professor of Statistics, OSU.

OSU's Applied Economics Department in the College of Agricultural Sciences, OSU

- Department Head
- Faculty (tenure/tenure track), Instructors, Advisor
- Students
- College of Agriculture Administration (Dean, Executive Dean)

3. Detailed Program Evaluation and Assessment

This is the main body of the report, identifying strengths, weaknesses and challenges of the program and provides a rationale for each recommendation. The subsections of the report may vary depending upon the unit and nature of the program being reviewed.

a. Programmatic Strengths

- The department has dynamic and engaged faculty at all levels. They are engaged researchers that have a record of publishing in high quality journals. Several of the

faculty have also received teaching awards.

- The instructors are highly committed non-tenure track faculty providing instruction in key areas, including rural development and environmental policy and law. They also have a personal commitment to the College and the Department in that several are alum of the Department.
- There is strong departmental leadership. The review team observed a high level of respect for Dr. Alix-Garcia as Department Head from both faculty and staff. The department meets regularly and Jen sends a Qualtrics survey follow-up after department meetings to solicit additional faculty input. Early career faculty also each have an active mentoring committee.
- The curricula offered in both degrees is current and relevant (consistent with other programs around the country). Both degrees are highly marketable and employers are positive about the quality of the students who graduate from the programs.
- Given the number and range of agricultural commodities in Oregon, the programs do an excellent job developing students who can be placed across a variety of industries and jobs.
- The program has a dynamic and engaged student body. As noted in the self-study, students who elect to major in ABM and/or EEP are committed to the major and have a high graduation rate. This sentiment appeared to be shared by the students who met with the reviewers. Those students noted they had deliberately chosen to major in ABM and/or EEP as opposed to other similar majors on campus.
- Students receive high quality advising. Tjodie Richardson is knowledgeable and provides the students with good relevant information for course selection and timely program completion.
- Students frequently take courses from other programs in the College for their electives, especially Crop and Soil Science, and Animal Science promoting cross-disciplinarity. This represents an opportunity to promote the department's minors.

b. Programmatic (Internal) Weaknesses

- Undergraduate teaching does not appear to be emphasized to the same extent as graduate teaching and research.
- Faculty turnover has shifted the tenured and tenure track faculty towards environmental economics. This has resulted in greater faculty depth to support the EEP program and less to support the ABM program. However, undergraduate student enrollments are higher in ABM. This is exacerbated by the need for tenured faculty to focus on the graduate student population which is focused on environmental economics.
- Resource allocation in the department is not necessarily aligned with the university new funding model. 70% of funding for faculty salaries comes from undergraduate tuition fees. Inefficient use of teaching FTEs coupled with retirements and a focus on research and graduate education has contributed to insufficient tenured and tenure-track faculty

resources to teach undergraduate curriculum offerings. This is especially problematic given the university funding model. A strong undergraduate program is also necessary to support graduate programming.

- The number of tenured faculty with Extension appointments has decreased over the last 10 years because of retirements. The implication of this is that faculty who would have normally bridged Extension with the ABM program no longer exist. Furthermore, the connections with producers around the state are weakened as is that component of the Land Grant mission.
- There's a disconnect between the ABM and EEP undergraduate majors, especially in the lower division courses. One specific example is the split in the lower division introductory economics courses. The ABM majors tend to take AEC 251 and EEP majors take AEC 250. The result of this is that students are deprived of the opportunity to see the perspective of the other group - something very important in today's world.
- There is limited diversity among the tenured and tenure-track faculty. Further, the faculty does not appear to reflect the program's undergraduate student population. For example, the review team noticed that of the tenured and tenure-track faculty there is one female in a teaching role, yet more than 50% the undergraduate majors identify as female. In contrast, the instructors appear to more closely reflect the undergraduate student population.
- There is also a question about diversity among the student population in that the undergraduate student population in the majors does not appear to reflect the demographics of the state population. For example, given the current demographics of the state population the LatinX population could be better represented.
- The review team did not observe any apparent development plan with OSU Foundation and/or Agriculture Research Foundation to increase funds.
- There is limited financial support for undergraduate students. The total amount of scholarships awarded annually from 2014 to 2018 ranged from \$22.2K to \$28.4K with the average scholarship amount per student ranging from approximately \$1,000 to \$1,500.
- Instructional faculty (non tenure track) are at full capacity and appear under-resourced (e.g. little to no TA support) to deliver teaching loads and generally feel under-recognized. Recent initiatives by the Department Head to improve transparency and consistent teaching load/remuneration have been appreciated.
- There is a single adviser supporting undergraduate on-campus and Ecampus students and providing administrative support to the graduate program.
- Recruiting efforts for undergraduate students appear ad hoc and unstructured. There is also limited engagement with Community Colleges and other programs within the College and beyond which inhibits the department's ability to recruit majors and minors.
- Four minors are offered, each with relatively low enrollment. This appears to be too many for the size of the program and number of courses that can be effectively taught. One minor in food systems cannot be offered because a required course is not presently taught.

- The department may not be fully taking advantage of Ecampus incentives for program development and overall revenue generation for the program. Faculty did not appear to be aware of the opportunities Ecampus offers.

c. Programmatic (External) Challenges

- Tenure and tenure-track faculty have low teaching FTE relative to other OSU instructional programs. Although this is consistent with peer applied economic programs elsewhere, given the low enrollments in the Applied Economic program and the university new funding model, this may not be sustainable.
- The priority staffing model being used by the College is not necessarily aligned with the needs of the department, especially if recent and pending retirements are not replaced.
- There appears to be limited to non-existent communication and curricula coordination between faculty in applied economics and faculty in economics in the College of Liberal Arts.
- There are 220 agricultural commodities in Oregon, which is a very large number of groups of producers to maintain connections and engagement. This makes it challenging to ensure alignment between the programs and industry.
- There appears to be limited recruitment of non- Applied Economics students to take minors in Department.

4. Summary of Findings (inputs of resources and outcomes of program performance)

- a. **Undergraduate Degree Programs Offered** (Mission of the program, and its relationship and alignment with the mission of the academic college(s), and that of the University)

Majors

The Department of Applied Economics offers a B.S. in Agriculture Business Management (ABM) and a B.S. in Environmental Economics Policy (EEP). Both degrees are offered in Corvallis and EEP is also offered via Ecampus.

Minors

The Department offers 4 minors: Agricultural Business Management, Food Economics & Policy, Natural Resource and Environmental Law and Policy, and Resource Economics. However, no students have graduated with a minor in Food Economics & Policy and currently no students are enrolled in the minor.

- b. **Administrative Structure** (Quality of organizational support)

The Department of Applied Economics is one of 13 academic units within the College of Agricultural Sciences. The department has a department head (a position held by Jen Alix-Garcia since Fall 2017) filled by a departmental search committee with input from the Dean.

There's an undergraduate curriculum committee that operates informally and consists of a blend of tenured, tenure-track, and instructional faculty.

c. **Faculty** (Quality of personnel and adequacy to achieve mission and goals)

The Department of Applied Economics on the Corvallis campus currently has 19 tenured or tenure-track faculty, 2 full-time instructors, and approximately 5 part-time instructors. The majority of the faculty have between a .30 and .50 FTE teaching appointment, with the remaining FTE allocated to research and other activities. Full-time tenure or tenure track teaching loads average 3 courses per year (some faculty may carry a higher teaching load according to their position description).

There is one head advisor who handles all on-campus and Ecampus undergraduate students as well as provides administrative support to graduate students.

The Program's use of TAs is inconsistent across faculty and instructors. Most faculty and instructors who teach large sections utilize TAs but some instructors do not. It appears this may be due to cost considerations, but the policy for allocating TAs to classes is unclear and this may be leading to imbalances in the amount of time instructors spend teaching per credit hour.

d. **Students** (Recruitment and enrollment trends of students, admissions selectivity and other indications of selecting high quality students)

As of 2016 there were 126 ABM majors and 54 EEP majors (30 Corvallis and 24 Ecampus), down from a high of 130 (in 2013 and 2015) and 71 (in 2014) respectively. Enrollment in both ABM and EEP was relatively flat from 2012 to 2016.

As of Fall 2018 there were 27 minors in the following programs:

- 19 Agricultural Business Management.
- 7 Natural Resources and Environmental Law and Policy.
- 1 Resource Economics.

AEP has generated 13-33 graduates per year (average 26 per year, 2008-2017) and EEP has generated 2 - 9 graduates per year in Corvallis (average 6 per year, 2008 - 2017) and 21 graduates since 2012, with 18 graduating since 2015.

e. **Facilities and Resources** (Level and quality of infrastructure)

Department faculty are located in Ballard Extension. Space and facilities have been renovated when resources to do so have been available. The department has an undergraduate student lounge, undergraduate student computer lab, conference room, faculty research lab, and newly designed seminar space. Ballard Extension Hall does not have any classroom space. Classroom instruction occurs in a variety of lecture halls and classrooms across campus.

f. **Degree Program Structure, Courses, Curricular Innovations**

The BS in ABM and in EEP prepare students for careers within the agricultural, food, environmental, and natural resource sectors.

- ABM majors take a variety of management, marketing, and finance courses both within AEC and through the College of Business.
- EEP students take a sequence of upper division applied economic courses and are also

- able to take courses within the economics department in the College of Liberal Arts.
- Both majors have an experiential learning requirement that generally takes place between a student's 3rd and 4th year.
- A distinguishing feature of both majors is the emphasis on understanding the legal environment within which economic activities take place.

The accelerated master's platform (AMP) offers a pathway for students to complete their undergraduate degree and Master's in Applied Economics in 5 years. Students take 9 credit hours of master's level 400/500 courses during their senior year of their undergraduate program and can matriculate after completing the core master's sequence, additional MS-level courses, and a research paper during their 5th year.

- g. **Outcomes and Impacts** (Student learning outcomes and assessment of learning, placement and success of graduates, satisfaction of students and graduates with their education, Professional or national rankings/ratings, etc.)

The primary mode of course evaluation is the electronic Student Evaluation of Teaching (eSET) system. Students also recognize teaching performance in the department's annual "Students' Choice for Outstanding Teacher" which is presented at the end of each Spring term.

An exit survey is conducted annually with graduating seniors. Beginning in 2018 the survey was conducted through Qualtrics. Students are asked about their satisfaction with their degree program, academic advising, quality of teaching, quality of course content, rigor of course content, class size, interaction with faculty, internship experience, and computer facilities. Results indicate most graduating seniors have been satisfied or very satisfied in all of the above areas.

From the 2017-2018 exit surveys, 68% of exiting seniors had already lined up full-time employment at the time of their exit interviews.

h. **Key Issues**

The following key issues were identified:

- Tension and absence of coordination of academic programs between the Department of Applied Economics and the Economics program in the College of Liberal Arts.
- Undergraduate teaching does not appear to be emphasized and supported to the same extent as graduate teaching and research. For example:
 - The undergraduate curriculum committee operates informally and there is no formal director/coordinator for undergraduate programs.
 - There is inadequate FTE allocated to undergraduate teaching to offer the full range of courses listed in the OSU course catalogue and/or expected of a leading applied economic undergraduate program. This appears to be especially critical for the ABM degree where faculty retirements have reduced the expertise available to teach ABM courses.
 - There are limited recruiting and marketing efforts for the undergraduate program.
 - Limited financial resources for TA support for instructors and undergraduate student scholarships.
- Limited diversity of undergraduate student body compared to state demographics.

5. Recommendations

This section serves as the foundation by which the program will develop its Action Plan, with the identified strengths, weaknesses and challenges of the program providing a rationale for each recommendation suggested by the Review Team.

1. University (Provost office level) and College leadership should work to resolve the disconnect and increase collaboration and coordination between the Applied Economics department and the Economics program in the College of Liberal Arts. This would help encourage efficiencies in course offerings and minimize potential duplication.
2. Create a position of Director of Undergraduate Programs to support the Department Head, provide a focal point for the undergraduate curriculum committee and advocate for the success of undergraduate programs and students.
3. Allocate FTE for recruitment of students for the majors and minors and marketing of the program, including Ecampus and formalize this activity as appropriate in position descriptions.
4. Develop a targeted recruitment program for majors and minors, within and external to OSU, with a special emphasis on increasing diversity of students.
5. Be more efficient with allocation of teaching FTE and course offerings. For example, consolidate and restructure 300 and 400 level course offerings to reflect FTE availability, current and anticipated enrollment and the new budget model. Also review lower division and upper division courses - for example, offer a joint ABM/EEP 100 level course. This course could provide a mechanism for attracting AgSci college majors and Natural Resources and Environmental Science students to the Applied Economics majors or minors.
6. Rationalize/reduce minors offered, perhaps to two (e.g., minor in ABM or EEP).
7. Increase Ecampus offerings, possibly substituting some on-campus classes for Ecampus delivery (either hybrid or fully online) to make best use of limited teaching FTE. Also offer the ABM degree online to enable potential students not likely to attend the on-campus program to enroll.
8. Ensure P&T processes reflect position description so undergraduate teaching is appropriately recognized.
9. Examine the potential to offer experiential learning opportunities/requirements in more resource effective ways. This is because of the disproportionate FTE required to advise standalone experiential learning requirements. One possible example is greater use of experiential learning opportunities in existing courses.
10. Explore ways of increasing instructional FTE, potentially using non-tenure positions to meet teaching needs.
11. Develop a fundraising strategy that includes coordination with the OSU Foundation. Identify priority funding areas.
12. Expand diversity and inclusion efforts for faculty, staff and students.¹

¹ Specific actions related to recruitment and retention with attention to each of the groups of faculty, staff and students could include:

- a. Defining diversity with a broad brush to include diversity of thought, gender, race and ethnicity, disability status, LGBTQ identification;
- b. Identifying the significance of the specific measurement of diversity being used with data generated from reports;
- c. When necessary collect primary data to reflect a broad definition of diversity to have necessary data for analysis and comparison for determination of progress (or lack thereof);
- d. Ensure that all faculty on search committees have completed the diversity training for search committees;

6. Conclusions

The Department of Applied Economics is a valuable asset to the university. Its mission connects directly to all three signature areas of the university. It also has a strong faculty and a dedicated and enthusiastic student body. However, the lack of coordination between the Department of Applied Economics and the Economics Program in the School of Public Policy needs to be resolved. The department also needs to place a greater emphasis on undergraduate teaching and be more efficient with its teaching resources. Building on the programs' strengths while addressing its challenges and the review team's recommendations are expected to put the programs in a stronger position to attract and support undergraduate students and their success.

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- e. Establish deliberate and on-going relationships with the Cultural Centers and other support units on campus that provide care and compassion for individuals from marginalized populations;
 - f. Work to recognize and change policies that negatively impact individuals from marginalized populations;
 - g. Incorporate diversity into the curriculum. Individual faculty can adapt course syllabi to include greater diversity of: the authors in the reference list, examples used in class. For group projects the group membership can be deliberately set up to be diverse. In many cases diversity issues can be woven into course content as the diversity issues overlap with the course concepts;
 - h. Provide diversity training for faculty and staff;
 - i. Whenever possible celebrate success of all individuals and especially those from marginalized populations;
 - j. Recognize the importance of moving beyond diversity (which is counting of numbers of people) to inclusion (which is creating an environment where everyone feels included);
 - k. Ensure Inclusive Excellence is appreciated and supported to ensure access to Oregon State University which is consistent with the Land Grant Model.