

Three year Review following 2014-15 Academic Program Review for  
UMBC Department of Economics  
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In response to the Academic Program Review Action Plan developed for the Department of Economics following its 2014-15 APR, what follows is a summary of department progress regarding each recommendation of the Action Plan

### **1)Reconfiguration of Teaching Resources.**

#### **A. Shift to large lecture courses for introductory and intermediate theory courses with structured rotation of upper level course offerings.**

In Fall of 2016 and Spring of 2017, large lecture sections were introduced in Econ 101, Principles of Microeconomic, and Econ 102, Principles of Macroeconomics, respectively per the recommendations of outside reviewers. The Fall, 2016 Econ 101 section garnered enrollments of over 150 students. The Spring, 2017 Econ 102 section only enrolled slightly over 80. On a simple measure of outcomes, DFW rates were not higher and if anything were somewhat lower for these two sections than overall course averages. The DFW rate for the Fall, 2016 “jumbo” section of Econ 101 had a DFW rate of 10.2% well below the course average of 18.6 percent and had the second lowest DFW rate out of 8 sections. SEEQ scores for this section were roughly similar to course averages. The DFW rate for the Spring, 2017, Econ 102 “jumbo” section was 6.8 percent, well below the course average of 11.4 percent and had the third lowest DFW rate out of 4 sections. Dr. Bing Ma, the lecturer who taught the jumbo section of Econ 101, noted 3 elements she found important in successful teaching of a very large section course: 1)development of on-line modules to facilitate pre-lecture learning 2)use of active learning methods in the lecture sessions based on follow-up small group work after introduction of a concept 3)mentoring and deploying an effective team of TA’s. Tim Gindling in his large enrollment Econ 102 section made use of required online, auto-graded homework modules and also had four undergraduate TA’s. He found that these enhancements were effective. While few students made use of T.A. office hours, those few did seem to appreciate the extra help. These experiments have not been repeated for a number of reasons: a)the Econ 102 section did not draw the jumbo enrollments expected b)there are constraints on the availability of lecture halls large enough to hold jumbo enrollment sections c)other commitments arose for the instructors who tried out the large sections. . In general there has not been a perception of great unevenness between adjunct taught sections for these courses and those by regular faculty. But this bears further monitoring given the importance of introductory courses in recruiting new students to our majors. The two experiments do suggest that it could be feasible to introduce jumbo sections in introductory courses in the future.

A full-time accounting lecturer has suggested that introductory accounting courses, Econ 121 and 122 could be taught in somewhat larger sections, say in the range of 80 students rather than the current cap of 40 students. Putting students in larger sections with established full-time lecturers could yield improved outcomes and lower DFW rates in these two courses by reducing reliance on adjunct instructors.

**B. Evaluate the potential Role of Hybrid and online delivery formats for economics courses.**

Hybrid and online formats have been employed since 2015 in both introductory economics and accounting courses both during the regular semester and in Summer and Winter sessions. When courses in hybrid and online format have been offered during the Fall and Spring semesters for introductory courses, these courses are also available in face-to-face format. DFW rates have not been higher and if anything have been lower for sections offered in hybrid and online format than face-to-face. For example, in Fall of 2018, the online section of Econ 101 had a DFW rate of 9.3 percent compared with 17.4 percent overall for the course. Enrollments have been good in summer and winter sessions in online versions of introductory economics courses; so this does seem to be a format that appeals to some though not necessarily all students for this level of course.

**2) Define learning objectives for introductory courses and undergraduate degree programs. Update pedagogical methods.**

**Student learning objectives and assessment**

**Introductory Courses.** The learning objectives for introductory courses, Econ 101 and 102 were specified in the Department's assessment plan approved in 2007-8 and have remained the same. The three learning goals for these courses are 1) to prepare students to enter the Economics and Financial Economics Major 2) to prepare students to understand basic economic concepts and apply them thus addressing the "the Scientific and Quantitative Reasoning" and "Critical Analysis and Reasoning" functional competencies of UMBC's General Education Program. 3) To provide background knowledge and concepts required by students in other majors such as Information Systems, Health Administration and Public Policy, and Global Studies. Recent assessment cycles have alternated between Introductory Micro and Macro economics courses using a standardized battery of multiple choice questions administered pre and post-test to ascertain improvements in concept mastery.

A recent survey by myself as department chair of Econ 101 and 102 course syllabi suggest common coverage of topics whether the instructor is adjunct or full-time. Instructors whether full-time or adjunct choose from a small number of standard textbooks in teaching these courses. Bing Ma, a Lecturer in our department was awarded an Hrabowski innovation grant in 2017 to introduce more active learning methods into introductory economics courses. Dr. Ma introduced team based learning approaches to the introductory microeconomics course. She reports quite positive results based both on informal student feedback and on pre and post-test administration of standardized questions from the Test of Understanding College Economics.

One area of extended effort over the past three years has been in developing clearer learning objectives and assessment plans for the undergraduate majors. In the first year after the APR (2015-16), an ad hoc assessment committee developed a set of student learning objectives for undergraduate majors in both Economics and Financial Economics. The learning objectives for both of the department's undergraduate majors were integrated under UMBC's five functional competencies as follows: 1) Written and Oral Communication: communicating effectively in spoken, written, and graphical formats about specific economic issues. 2) Scientific and Quantitative Reasoning: interpreting statistical results, conducting appropriate statistical analysis and explaining the statistical problems involved, evaluate a policy question using empirical evidence, critically analyze an existing empirical piece of work, replicate an empirical analysis, ability to appropriately interpret graphs. 3) Critical Analysis and Reasoning: apply economic analysis to personal decision making, to evaluation of specific policy issues;

identifying an issue within the framework of economic models, compare two or arguments that have different conclusions to a specific issue or problem, understanding the role of assumptions in arguments and how they lead to different conclusions of the same question. 4)Technological competency: demonstrate proficiency in Stata, R, Excel, or SAS 5)Information Literacy: obtain or collect data relevant for applying specific research methods to an economic or policy issue.

The learning objectives committee then proceeded to develop a spreadsheet for ascertaining the extent to which particular upper level courses either required or elective for the major cover given learning objectives. Faculty teaching these courses were asked to complete these spreadsheets. Thanks to the efforts of department faculty, we now have a profile of courses completed and implied learning objectives mastered. This work should provide a solid foundation for further formulation of direct measures of student achievement in the major along the lines of assessment methods for the major developed by Political Science in its assessment plan.

The Department has finally developed a plan for Department Honors based on meeting GPA requirements in core courses, completing independent research projects and graduate level courses.

The Department is also aiming to develop more research experiences for undergraduates. It has developed a course in research methods and has provided for undergraduate course credit for RA and TA experiences. This is consistent with aims of its Sloan grant. The department has not had as much participation in the URA and URCAD competition as it would like. We hope that these new research experience activities will facilitate more such participation.

### **3.Advising: Assign Advising Duties to a full-time lecturer**

Since the 2015 APR report, one of the department's full-time lecturers, Mark Thomas, has reduced his teaching load in half and has taken on a substantial amount of the department's advising duties. He holds mandatory advising group sessions for new majors and he has taken on a substantial proportion of the majors who get advising. The advising burden on remaining faculty, however, continues to be substantial. Dean Casper has indicated that a full-time professional adviser would be assigned for departments in the Public Policy Building with undergraduate programs with the Department of Economics forming the largest clientele for this person's services. This should help further in relieving the advising burden.

Particular attention should go to advising new transfer students. Issues frequently rise in the week or two before the start of a given semester regarding meeting prerequisites for courses transfer students want to take but cannot enroll because the prerequisite courses have not been appropriately transferred-in at this point through the transfer credit report. It is important that an adviser be on duty during this pre-semester period to address these issues. In particular, these issues can arise for courses offered by adjunct instructors who can be difficult to reach by email before the start of the semester.

### **4.Related Programmatic Efforts---Joint Economics and Mathematics Undergraduate program:**

A number of exciting opportunities have emerged since the 2015 program review for joint efforts at the undergraduate level between the economics and mathematics/statistics undergraduate programs. This can be seen as reflecting long-standing propensities for capable undergraduates to combine majors and interests in mathematics and economics. This was encapsulated in the selection of Mark Doms as Outstanding CNMS Alumni of the year for 2018 based on his career accomplishments as a professional economist. Dr.Doms double majored in mathematics and economics as an undergraduate at UMBC.

Perhaps the most salient development was the successful application by the Economics Department to the Sloan Foundation for a Sloan Foundation Grant for Post-baccalaureate experiences in Economics. In fall of 2017, UMBC was awarded a \$1.3 million grant for this proposal. This has led to number of important activities. These include: Information sessions, research and internship opportunities including continuing involvement with the University of Chicago Becker Friedman/Booth summer program and new involvement with the Brookings Institute Summer Internships.

Staffing resources will be required for effective follow-up on the grant. A plan has been developed with the CAHSS Dean's and Provost's office in conjunction with the Meyerhoff Scholars program for the grant project to have use of a staff person to be shared in conjunction with the Meyerhoff Scholars program.

There has collaboration with Math/Stat and the Dean of CNMS on enhancing the Actuarial Sciences Track in Math/Stat through joint funding of a part-time professor of the practice to promote this track.

One current aim of the department is obtain approval from Math/Stat to offer Econ 310, Data Analysis for Economists and have it meet the quantitative/Stat core requirement for Econ and FIEC majors. Our department wants to offer this new course due to a) a shortage of sections of Stat 351 b) somewhat different topical coverage of the course and c) interest of current full-time economics faculty in teaching such a course. Efforts to communicate with the Math/Stat department on this request have yielded uncertain results to date.

**5. Research Enhancement** The APR plan recommends discussion of quality and frequency of publication for department faculty, especially those to be reviewed for promotion and tenure. At a recent department faculty meeting, there was clear consensus that it would be useful at upcoming faculty meetings for senior faculty to offer comments aimed at junior faculty regarding expectations regarding the appropriate quality of tiers of journals in which department faculty should aim to publish and about appropriate expectations for publication frequency for promotion and tenure reviews. The Department plans to schedule time for this discussion at upcoming faculty meetings later this spring and in the fall. The eminent scholar mentor program provides another vehicle for feedback to new assistant professors on publication and research strategy. The effectiveness of this program could be further evaluated. Also a mentoring program could be developed to facilitate associate professors in the department developing publication portfolios with a view to promotion to full professor. A second research dimension touched on by the APR plan concerned reviewing sources and means for funds to enhance existing research support. A number of faculty including junior faculty have been active in grant activity and have been working with MIPAR in administering these grants. Faculty have attended OVPR events. There will be Economics faculty participation in the April 12 Research forum sponsored in part by OVPR.

A final recommendation for developing research expectations was to formulate a clearer list and rationale for listings of peer departments in other institutions. As is described briefly below, this was done in Fall of 2015. One of the aims in developing this list was to obtain comparisons of research expectations for promotion and tenure.

### **6. Faculty Hiring Plan**

Since 2013, the Department has been fortunate to be able to hire 6 new tenure track faculty. However with Scott Farrow's impending (and officially announced) retirement effective August, 2019, 7 tenured or tenure track faculty will have left the department due to retirement or other circumstances since 2013. In addition 2 tenured faculty since 2013 have accepted

administrative appointments in the CAHSS Dean's and Provost's offices at UMBC. Thus, despite active and successful recruiting efforts, the number of Tenured and Tenure Track faculty has actually fallen substantially in recent years. In 2011, there were 18 tenured and tenure track faculty in the department. In the fall of 2014, at the time the last APR self-study was prepared, there were 16 tenure and tenure track faculty. In Fall of 2019, with Professor Farrow's retirement and the addition of one new assistant professor, there will only be 14 tenure track faculty active in the department. However, a major emphasis of the external reviewer's 2015 APR report was the importance of increasing the number of tenure and tenure track faculty given the number of majors and research expectations for faculty. Thus ongoing recruitment of faculty on a regular basis continues to be of high priority for the department in order to return to the already understaffed level of 2014. We would see the focus at this point as on quality and mastery of cutting edge research skills in areas such as computation, working with large and administrative data sets, behavioral and experimental economics rather than in specific applied fields of economics.

#### **7. Improved internal and External Communication with Potential Students**

Due to the Sloan grant there has been increased contact with the Meyerhoff Scholars program. In addition through the School of Public Policy efforts to publicize its offerings to UMBC undergraduates, the current GPD, Tim Gindling has been circulating information on the accelerated bachelors/masters program in Economic Policy Analysis. The development of the department's website by Christelle Viaoux has provided more opportunity to publicize its graduate offerings to undergraduates. The groups feature of the website could be employed more frequently to send out information about the ECPA MA program.

#### **8. Improved External Communication with Alumni and other potential donors**

A donate button has been added to the department website per the recommendation of one of the outside reviewers. The department sponsored three events at UMBC's 50<sup>th</sup> anniversary reception and these events were successful with good attendance and engagement.

The chair and associate chair have met regularly with representatives of OIA regarding meeting with potential alumni donors. A number of department alumni have received alumni of the year awards since 2015. OIA has facilitated a number of funding and grant opportunities. One salient example is the successful Sloan Foundation grant proposal in which Marie Lilly was instrumental in developing the proposal. Another example is the recent grant from T.Rowe Price to pioneer a course in finance aimed at STEM majors with strong quantitative skills. While both have provided exciting opportunities, there have been issues in both instances with scarcity of department resources to effectively follow-up on these grants. Efforts are being made to address these deficiencies but each episode points to the importance of good communication and deliberation regarding resource commitments.

Surveying graduating seniors on career and locational plans could facilitate subsequent follow-up with department alumni on career accomplishments and engagement with the department.

The department plans to use the commercial site Linked-In to provide a way of doing this with minimal resource and follow-up commitments.

#### **9. Peer and aspirational departments.**

A subcommittee of department faculty completed a report identifying 8 peer departments (classified as "actual" rather than "aspirational" peers) in fall of 2015. I sent a copy of this report with my executive summary to the CAHSS Dean's office in late December of 2015. The report identified peer departments with a view to comparing teaching loads, faculty salaries, new faculty start-up packages, and research expectations for tenure. The department has also made curriculum comparisons with the peer departments.

## **10. MOU with Public Policy**

Dean Casper has indicated that action will occur “soon” on this in the context of a CAHSS-wide review of MOUs with graduate-only departments. One immediate reason why this should be addressed soon is that issues have arisen recently regarding arrangements for faculty housed in one program to teach courses for another program; clear policies on written MOU’s between departments would greatly facilitate such arrangements.

## **11. Consultation on Selection of the Next Director of the School of Public Policy.**

Professor Scott Farrow served on the search committee for the Director of the School of Public Policy.

**Final Concluding Comment regarding the Economics Department budgets.** The recent reconfiguration by the CAHSS Dean’s office of the FRAP budget process has been very helpful to the Economics Department in substantially reducing if not completely eliminating the extent to which the department has had to make use of funds from its revolving account to fund part-time instructional offerings during the regular academic year. I and my colleagues commend Dean Casper and his staff for conducting and completing this long over-due review of an admittedly complex process.