



ANNUAL PROGRAM REPORT

College	Business and Economics
Department	Economics
Program	MA Economics
Reporting for Academic Year	2016-2017
Last 5-Year Review	2013-2014
Next 5-Year Review	2018-2019
Department Chair	Jed DeVaro
Date Submitted	October 20, 2017

I. SELF-STUDY *(suggested length of 1-3 pages)*

A. Five-Year Review Planning Goals

The major goal of the last five-year plan was to rebuild the depleted ranks of the Department’s faculty. The Department had wasted away due to a combination of retirements, quits, and failures to replace vacated positions (due to budget cuts and other reasons). Another major goal was to revise the MA Economics program, which had not undergone a major review for quite some time. Some changes were needed both in the direction of the program and in its leadership.

B. Progress Toward Five-Year Review Planning Goals

Great progress was made achieving the planning goal of rebuilding the Department. Christian Roessler, Ryan Lampe, Brian Adams, Joseph Kuehn, Jung You, Filippo Rebessi, Kai Ding, and Wes Blundell were all hired in the last 5 years, and only 1 of them (Brian Adams) has left, plus a few people completed FERPs and 2 more started them. On the issue of program revision, great progress has been made. The first major change is that the former “graduate advisor” (Professor Adrian Stoian, who is no longer with CSUEB) for the MA Economics program was replaced by Professor Christian Roessler, one of the new faculty who joined in 2013 in the Department’s first wave of rehiring. Professor Roessler became the program director and was charged with overseeing all aspects of the graduate program, from admission to degree completion. He worked closely with the Department faculty and chair to make key changes to the graduate program to make it more appealing, relevant, and marketable. One important program change is that the comprehensive exam (which had been required in both microeconomic theory and macroeconomic theory) was eliminated, and core courses were offered annually, as opposed to every other year. Both changes were designed to speed up the degree completion time.

C. Program Changes and Needs

Report on changes and emerging needs not already discussed above. Include any changes related to SB1440, significant events which have occurred or are imminent, program demand projections,

notable changes in resources, retirements/new hires, curricular changes, honors received, etc., and their implications for attaining program goals. Organize your discussion using the following subheadings.

Overview:

The program has changed significantly during the last few years, and more radical changes will go into effect in Fall 2018 when the University opens its doors under the semester system. The biggest program change that we are most excited about is a new concentration in Quantitative Business Modeling (QBM) which will launch in Fall 2018. That innovative concentration allows students, after having completed the graduate core in economics, to take some of their electives in areas of quantitative business other than economics (e.g., finance, business analytics). This program change leverages some of the growing strengths of expertise within the College (e.g., in the area of business analytics) and creates a unique market niche for our program, given that none of our local competitors offer such a concentration.

Curriculum:

Curriculum changes were driven heavily by the Quarter-to-Semester (Q2S) conversion requirement. The entire graduate program was rethought and reconstructed. Some of the big changes have been described above. Another significant feature of the program is that all courses will be 4 units, and the program is 32 units in all. This allows for the degree to be completed in one year (one course per weeknight, Monday through Thursday, in both Fall and Spring semesters). The core of the degree has been redesigned. It now begins with a “Foundations” course that lays out the needed quantitative skills for the rest of the program. The macroeconomic theory segment of the core has also been significantly revised and modernized and is now being taught by faculty who received their PhDs within the last 2 years with emphasis in Macroeconomics. Additionally, some exciting new electives have been created that have made our program distinctive and that are receiving strong reviews from students. For example, Professor Joe Kuehn (who joined our faculty 2 years ago) just launched a new elective on “Strategic Pricing”, which equips students to design pricing strategies for the firms they will work for in the future.

Students:

It is anticipated that the students will be (at least when they graduate from our program, if not when they enter it) more technically inclined, and skilled, than in past generations of students. This is consistent with the shift of the program towards a more quantitative direction (indeed, it is being remained “Master of Science” from “Master of Arts”). The new concentration in QBM will likely attract a new segment of the market, namely students who want graduate training in economics but also some exposure to marketable skills in other areas of quantitative business.

Faculty:

The faculty are the Department’s core strength at the moment. The rebuilding effort (after the Department lost many of its best faculty) took 5 years, but the Department is now finally

operating reasonably close to a fully-staffed level. The faculty's expertise is concentrated most heavily in the area of applied microeconomics, but two recent hires in macroeconomics have that field well covered too.

Staff:

The Department continues to have the support of Denise Crozier, who is the Department Assistant. She is fantastic and is an essential element of the Department's operational success. Additionally, the Department is supported by the team in the College of Business and Economics's Graduate Office (led by Professor Joanna Lee), which provides top-notch support.

Resources: (*facilities, space, equipment, etc.*)

Facilities are adequate for our needs. Space is not a concern because the program is not large, and classes are small, so room size is never an issue. In terms of equipment, the Department's needs are modest, and so far those needs are being met. The resource needs fall mostly within the area of marketing. The Department has assembled a great, distinctive program. But marketing it presents challenges, because the Department has little expertise in the area of marketing degree programs. The Department would like assistance, both financial and personnel, to help with the marketing issues.

Assessment:

Assessment is taken extremely seriously the Department, in large part because every 5 years the College comes up for AACSB accreditation, and assessment is the centerpiece of that review. Assessment is well developed in the economics major. Formal assessment protocols are in the process of being developed within the College, and Economics is actively a part in all of those.

Other: (*e.g., major program modifications*)

The major program modifications have been discussed earlier in this report.

II. **SUMMARY OF ASSESSMENT** (*suggested length of 1-2 pages*)

A. **Program Learning Outcomes (PLOs)**

List all your PLO in this box. Indicate for each PLO its alignment with one or more institutional learning outcomes (ILO). For example: "PLO 1. Apply advanced computer science theory to computation problems (ILO 2 & 6)."

1. Generate solutions to economic optimization problems under constraints.
2. Construct equilibria in models of strategic behavior. (ILO 1: Thinking & Reasoning)
3. Identify and apply appropriate empirical techniques for estimation problems.
4. Estimate models informed by economic theory using specialized software for data analysis. (ILO 2: Communication)

B. Program Learning Outcome(s) Assessed

List the PLO(s) assessed. Provide a brief background on your program's history of assessing the PLO(s) (e.g., annually, first time, part of other assessments, etc.)

Spring 2015 Assessments:

PLO 1: Show an advanced understanding of economic theory.

PLO 2: Show an advanced understanding of econometrics.

PLO 3: Experienced in addressing strategic and policy issues.

PLO 4: Examine and analyze economic data using appropriate specialized software.

Learning objective statements underwent revision during the 2015-2016 quarter-to-semester conversion process. Updated statements are reflected in the Winter/Spring 2017 assessment reports. This explains the differences between the learning statements listed under the Spring 2015 assessments and the learning statements listed under the Winter/Spring 2017 assessments.

Winter/Spring 2017 Assessments:

PLO 1: Generate solutions to economic optimization problems under constraints.

PLO 2: Construct equilibria in models of strategic behavior.

PLO 3: Identify and apply appropriate empirical techniques for estimation problems.

PLO 4: Estimate models informed by economic theory using specialized software for data analysis.

C. Summary of Assessment Process

Summarize your assessment process briefly using the following sub-headings.

Instrument(s): (include if new or old instrument, how developed, description of content)

CBE measures each student's work using a rubric, which lists certain parameters or traits on which to assess the student work. Each work is then scored on each rubric trait as "below expectations," "meets expectations," or "exceeds expectations" (rubrics may have more scoring categories depending on faculty desires) relative to a benchmark level of performance agreed upon by the faculty. As programs undergo revisions, rubrics are revised and/or modified with faculty consultation for effectiveness. To download the rubrics for MA Econ, click [here](#).

Sampling Procedure / Sample Characteristics:

CBE follows the guidelines set by our discipline-specific accreditation body, AACSB, when it comes to sampling. AACSB requires a "statistically significant" sample, as defined by the college. That being said, CBE has made efforts to increase sample sizes where they have been historically low. Overtime, as we continue to develop our assurance of learning system and continue to work towards creating a culture of assessment throughout the college, we hope to involve more and more faculty in our assessment activities. This will allow us to steadily increase sample sizes (where they are low) over time. Where sample sizes are sufficient, an increase in the number of participating faculty will allow for a reduction in the number of assignments assessed by any one individual faculty, making the overall workload more manageable.

Data Collection: (include when, who, and how collected)

Each quarter or semester, the Manager of Assurance of Learning (AOL) contacts the Department Chair where faculty are scheduled to do assessments in their courses. The Department Chair, with input as needed from the Manager of AOL, will arrange for faculty to do assessments. These faculty members are responsible for using the pre-approved assessment measures (rubrics, test questions, etc.) as supplied by the Manager of AOL.

Data Analysis:

Faculty provide the results of their assessments to the Manager of AOL within four weeks of the end

of term. The Manager of AOL then analyzes the assessment findings for each learning objective and prepares a report of the results that show, at a minimum, the number of students assessed and the percentage of students meeting or not meeting the benchmark by rubric trait.

D. Summary of Assessment Results

Summarize your assessment results briefly using the following sub-headings.

Main Findings:

Spring 2015 Assessments:

PLO 1: Show an advanced understanding of economic theory.

- 95% met expectations (Click [here](#), for assessment report)

PLO 2: Show an advanced understanding of econometrics.

- 86% met expectations (Click [here](#), for assessment report)

PLO 3: Experienced in addressing strategic and policy issues.

- 84% met expectations (Click [here](#), for assessment report)

PLO 4: Examine and analyze economic data using appropriate specialized software.

- 92% met expectations (Click [here](#), for assessment report)

Winter/Spring 2017 Assessments:

PLO 1: Generate solutions to economic optimization problems under constraints.

- 63% met expectations (Click [here](#), for assessment report)

PLO 2: Construct equilibria in models of strategic behavior.

- 52% met expectations (Click [here](#), for assessment report)

PLO 3: Identify and apply appropriate empirical techniques for estimation problems.

- 95% met expectations (Click [here](#), for assessment report)

PLO 4: Estimate models informed by economic theory using specialized software for data analysis.

- 98% met expectations (Click [here](#), for assessment report)

Recommendations for Program Improvement: *(changes in course content, course sequence, student advising)*

PLO 1: Generate solutions to economic optimization problems under constraints.

- 2014/2015:

- Econ 6101 changed to emphasize method: mathematical and computational optimization techniques discussed; increase in content discussed.
- Implementation of modules requiring a pass discussed.
- Raised admissions standards to ensure students meet required quantitative skills.

- 2015/2016:

- AoL System Improvements: Assessment for learning objectives assessed in two courses instead of one. / Multiple faculty used in assessing objectives as opposed to one faculty in first round of assessment. / Rubrics were redesigned and/modified for all learning objectives.
- Econ 6101 changed to emphasize method: mathematical and computational optimization techniques planned for next course availability;
- In core courses, students will have to pass separately certain components that consist of blocks of problems related to specific learning objectives.
- By requiring satisfactory performance on each objective, we communicate to students what's important, and we influence instructors to allocate time accordingly.

- Modular design increases consistency across different instructors, helps identify best teaching practices, and makes assessment results comparable over time.
- Increase in content planned and developed for conversion system.
- Implementation of modules requiring a pass planned and developed for conversion system.

PLO 2: Construct equilibria in models of strategic behavior.

- 2014/2015:
 - Frequent, intensive practice, from small problems to more complex projects.
- 2015/2016
 - AoL System Improvements: Assessment for learning objectives assessed in two courses instead of one. / Multiple faculty used in assessing objectives as opposed to one faculty in first round of assessment. / Rubrics were redesigned and/modified for all learning objectives.
 - Theory courses emphasize model-building and programming skills in service of empirical applications.
 - New elective courses added: 'Corporate Governance' & 'Innovation & Intellectual Property'

PLO 3: Identify and apply appropriate empirical techniques for estimation problems.

- 2014/2015
 - Research Methods replaced with Applied Data Analysis - geared toward standard applications of econometric methods in multiple projects instead of 1 large assignment discussed.
 - Expansion of use of skills.
- 2015/2016
 - AoL System Improvements: Assessment for learning objectives assessed in two courses instead of one. / Multiple faculty used in assessing objectives as opposed to one faculty in first round of assessment. / Rubrics were redesigned and/modified for all learning objectives.
 - Research Methods replaced with Applied Data Analysis - geared toward standard applications of econometric methods in multiple projects instead of 1 large assignment underwent planning and development for 2018/19 implementation.
 - New empirical elective course added: 'Strategic Pricing'
 - Developed exercises where students designed empirical models, estimate them by appropriate means, and interpret results correctly in ECON 6400 and 6511.

PLO 4: Estimate models informed by economic theory using specialized software for data analysis.

- 2014/2015:
 - New track called "Quantitative Business Modeling" that allows students to choose from quantitative business courses as electives discussed.
 - Increase in programming language and computation throughout course;
 - Expanded from econometrics (STATA) to Foundations (Python, R) and macro.
- 2015/2016:
 - AoL System Improvements: Assessment for learning objectives assessed in two courses instead of one. / Multiple faculty used in assessing objectives as opposed to one faculty in first round of assessment. / Rubrics were redesigned and/modified for all learning objectives.
 - New track called "Quantitative Business Modeling" that allows students to choose from quantitative business courses as electives - planning and development for 2018/19 implementation.
 - Developed exercises where students designed empirical models, estimate them by appropriate means, and interpret results correctly in ECON 6400 and 6511.

Next Step(s) for Closing the Loop: *(recommendations to address findings, how & when)*

Other Reflections:

- PLO 1: Generate solutions to economic optimization problems under constraints.
- Continue working on specifics of 2015/16 changes for implementation: examples of implemented changes beginning 2016/17 include changing textbook for Econ 6101, developed new lecture material, provided students summer work to prepare for course
- PLO 2: Construct equilibria in models of strategic behavior.
- See above.
- PLO 3: Identify and apply appropriate empirical techniques for estimation problems.
- See above.
- PLO 4: Estimate models informed by economic theory using specialized software for data analysis.
- See above.

E. **Assessment Plans for Next Year**

Summarize your assessment plans for the next year, including the PLO(s) you plan to assess, any revisions to the program assessment plan presented in your last five-year plan self-study, and any other relevant information.

In 2013/2014 the MA Economics program began to redesign its assurance of learning system. Since 2014, CBE underwent a number of changes, which coupled with the quarter to semester conversion, allowed for a reevaluation of various aspects of the program's assessment processes and procedures. As a result, the following AOL components have been developed for the MA Economics program.

1. A curriculum map that indicates in which courses each learning objective is being introduced, developed and mastered.
2. Assessment Tools – Identified, customized by departments
3. Assignments – To be used for each learning goal assessment.
4. A 5-year plan for assessment activity, including:
 - When learning objectives will be assessed.
 - In which course they will be assessed.
 - Which assignments will be used as artifacts.
 - When there will be program review of (1) assessment plans, (2) tools, (3) processes, (4) mappings, and (5) goals/objectives.
 - When reports of assessment results will be produced and shared w/Chairs & Program Directors (who would then share with faculty).
 - When assessment results will be reviewed and improvement actions are discussed.
 - When improvement actions will be tracked for impact.
 - These 5-year plans also align with the university quarter to semester conversion timeline, as well as the timeline for the university program review board (CAPR).

Currently, the MA Econ program has completed all scheduled assessments to fulfill its accreditation requirement that each learning objective is assessed twice in a five-year period. There are no scheduled assessments for any PLO for the 2017-2018 academic year.

The MA Econ program will (1) continue to implement the assurance of learning system in place by following appropriate processes and protocols and (2) prepare for the upcoming quarter-to-semester conversion.

III. **DISCUSSION OF PROGRAM DATA & RESOURCE REQUESTS**

Each program should provide a one-page discussion of the program data available through CAPR. This discussion should include an analysis of trends and areas of concern. Programs

should also include in this discussion requests for additional resources including space and tenure-track hires. Resource requests must be supported by reference to CAPR data only. Requests for tenure-track hires should indicate the area and rank that the program is requesting to hire. If a program is not requesting resources in that year, indicate that no resources are requested.

A. Discussion of Trends & Reflections

Notable Trends:

One notable and welcome trend that bears mentioning is the increasing headcount. It was 21 in 2012 and reached 31 in 2016. The Department has worked hard to improve the program during the last 5 years, so it is encouraging to see an uptick in enrollments. At the same time, more improvement is needed. Moreover, the 2016 number is actually a decrease from the preceding year, 2015, in which the headcount was 36. Clearly, progress has been made, but more work remains to be done.

Reflections on Trends and Program Statistics:

The headcount statistic is the one of greatest interest to the Department, given the pressure to grow the program's enrollments. The statistics reveal 2 facts: 1) the 5-year trend has been towards increased headcounts; 2) there is considerable year-to-year variability (e.g, even though the overall trend is increasing, the headcount dropped from 36 in 2015 to 31 in 2016). It should be noted that the 5-year review period represents a (relatively) prosperous period within the CSU system, at least compared to the state budget crisis that immediately preceded this period. The Department's goal is to steadily build the graduate program's enrollments such that the program will be sustainable even in the wake of a future budget crisis that will, as such crises inevitably do, threaten low-enrollment programs.

B. Request for Resources *(suggested length of 1 page)*

1. Request for Tenure-Track Hires

The Department is not requesting any tenure-track hire (or any other resources) at this time. Some of the curricular changes that are forthcoming or intended are likely to create a need for new faculty, but such needs will not become clear until after conversion to semesters in 2018.

2. Request for Other Resources

The only resources that the program need at this time are resources for marketing the program, and particularly the distinctive QBM concentration that sets CSUEB's program apart from all its local competitors.