

# Program Review - Academic - Economics Latest Version

## Overview

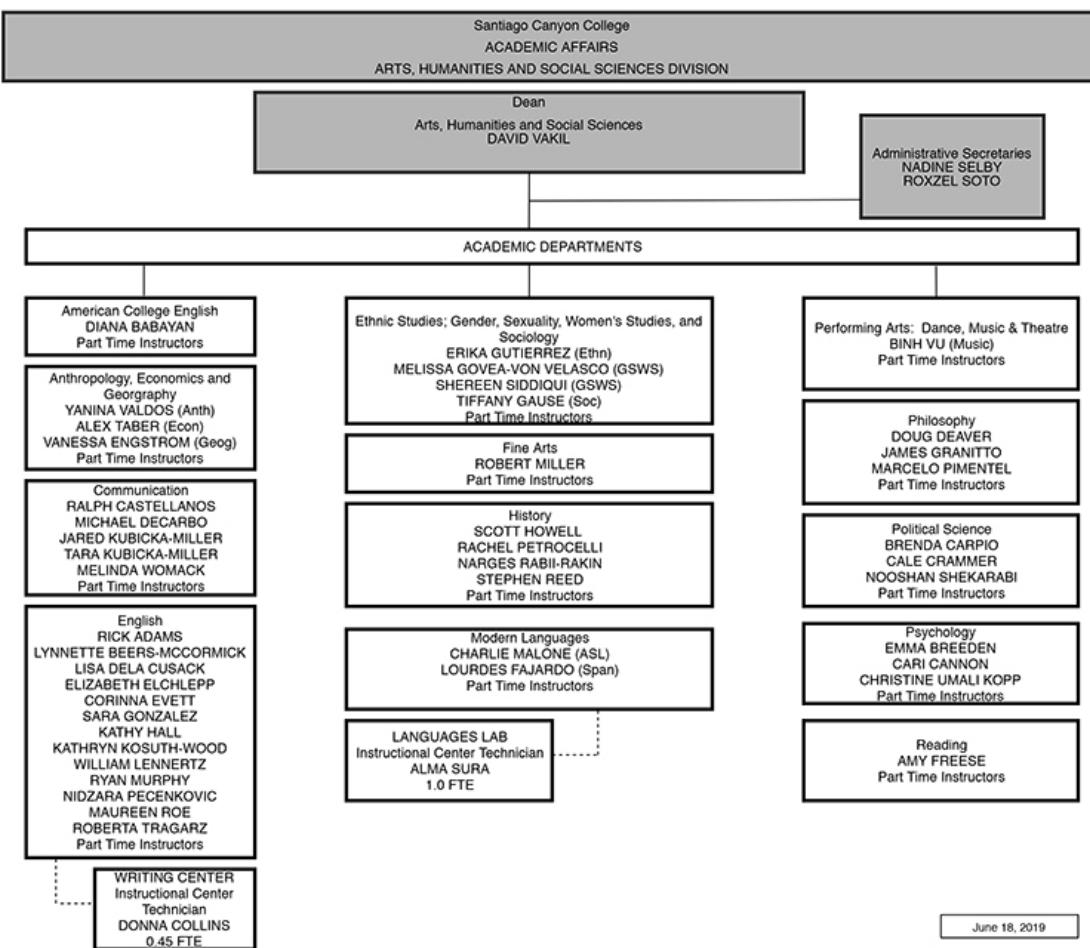
### Program Review - Collaborators : Version by Taber, Alexander on 10/26/2019 21:01

Collaborators
Alexander G Taber

### Program Review Overview - Organizational Chart : Version by Taber, Alexander on 11/30/2019 22:41

Please insert the organizational chart for this program or service area.

The Economics department consists of one full time faculty/department chair. The number of part-time faculty varied from four to five over the period from 2014-2018.



### Program Review Overview - Award Programs : Version by Taber, Alexander on 10/26/2019 21:02

The Economics department offers two degrees: the Economics AA degree and the Economics AA-T degree.

Award Programs
Economics, AA
Economics, AA-T

### Program Review Overview - Course Offerings: Unique Courses : Version by Taber, Alexander on 10/26/2019 21:02

For each academic year, the Economics department offered two unique courses: Economics 101 (Principles of Microeconomics) and Economics 102 (Principles of Macroeconomics).

Unique Courses in 2014-2015	Unique Courses in 2015-2016	Unique Courses in 2016-2017	Unique Courses in 2017-2018
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Lawyers	108,000	53,300	10,600	10.9%	\$155,593* (salary)
Management Analysts	144,300	130,600	16,800	13.2%	\$84,149* (salary)
Managers, All Other	116,900	8,820	11,500	10.9%	\$70.26* (hourly wage)
Operations Research Analysts	19,200	1,440	4,400	29.7%	\$46.70* (hourly wage)

\* I listed the data for California overall.

\*\* For Economics Teachers, no data was available for any county nor for the state.

For all of these occupations for which data is available, projected employment growth is positive and modest to strong. All figures have increased since the prior academic program review cycle.

As mentioned above, growth in projected employment in occupations for which the program prepares students is positive and modest to strong. The program plans to expand course offerings gradually as enrollment demand indicates. This will most likely involve adding three to four additional sections (based on an estimate of 15% to 20% growth in number of students taking both Econ 101 and 102) over the next decade.

Please provide comment on the rates of progress through the basic skills course sequence within your program using the California Community College Chancellor's Office Data Mart [Basic Skills Progress Tracker](#) ([http://datamart.cccco.edu/Outcomes/BasicSkills\\_Cohort\\_Tracker.aspx](http://datamart.cccco.edu/Outcomes/BasicSkills_Cohort_Tracker.aspx)).

Not applicable.

Please provide comment on student survey results administered by the program, if any.

Not applicable.

Please provide comment on program exit exams or other assessments of graduating students, if any.

Not applicable.

Please provide the number of students who take and pass external license examinations, if relevant to the program.

Not applicable.

Please provide data on former students' post-SCC experiences (e.g. transfer success, career advances, post-graduation surveys), if any.

Not applicable.

Please provide data pertaining to the instruction or delivery of service, if any.

Not applicable.

## Outcomes Assessment

### Program Review Outcomes Assessment - Course and Section Count : Version by Taber, Alexander on 02/04/2020 03:59

Courses	Section Count
ECON101 - Principles/Micro	14
ECON101 - Principles/Micro	5
ECON102 - Principles/Macro	11
ECON102 - Principles/Macro	4

### Program Review Outcomes Assessment - CSLOs : Version by Taber, Alexander on 02/04/2020 03:59

Student Learning Outcomes	CSLO Count	CSLOs Measured
ECON101 - Principles/Micro		
Analyze and explain economic behavior and formulate predictions at the individual consumer, firm, and industry levels.	1	1
Explain the processes through which a market system allocates scarce resources at the individual level and analyze the efficiency of and the effects of government policies on the resulting allocation.	1	1
ECON102 - Principles/Macro		
Analyze and explain economic behavior and formulate predictions at the aggregate economic level.	1	1
Explain the processes through which a market system allocates scarce resources at the aggregate level and analyze the efficiency of and the effects of government policies on the resulting allocation.	1	

### Program Review Outcomes Assessment - PSLOs : Version by Taber, Alexander on 02/04/2020 03:59

<b>Program Student Learning Outcomes</b>	<b>PSLO Count</b>	<b>PSLOs Measured</b>
<b>Economics*</b>		
PSLO	1	1
Economics, AA	1	1
Describe the economic approach to analyzing and explaining human behavior, communicate using basic economic terminology, interpret relevant economic data, and follow and construct fundamental economic arguments using verbal, graphical, and basic mathematical tools.	1	1
Apply analytical reasoning and problem solving skills to formulate predictions and deduce cause-and-effect relationships in hypothetical scenarios and actual real world situations.	1	1
Identify study skills, methods, and strategies that are effective for the student's learning style and likely to be effective for the student in further study of economics and other fields.	1	1
Economics, AA-T	1	1
Identify and explain the fundamental economic problem of allocating scarce resources and the role of positive economics in explaining choices.	1	1
Communicate using basic economic terminology, interpret relevant economic data, and follow and construct fundamental economic arguments.	1	1

## Program Review Outcomes Assessment - Assessment of CSLOs and PSLOs : Version by Taber, Alexander on

02/04/2020 05:55

How does the program/service area systematically assess student learning outcomes and/or service area outcomes using specific and measurable performance criteria? Each course has 2 student learning outcomes.

### Econ 101 - Microeconomic Principles

- Econ 101 SLO 1: Apply analytical reasoning and problem solving skills to explain cause-and-effect relationships and formulate predictions at the individual consumer, firm, and industry levels.
- Econ 101 SLO 2: Explain the processes through which a market system allocates scarce resources at the individual level and analyze the efficiency of and the effects of government policies on the resulting allocation.

### Econ 102 - Macroeconomic Principles

- Econ 102 SLO 1: Apply analytical reasoning and problem solving skills to explain cause-and-effect relationships and formulate predictions at the aggregate economic level.
- Econ 102 SLO 2: Explain the processes through which a market system allocates scarce resources at the aggregate level and analyze the efficiency of and the effects of government policies on the resulting allocation.

The department currently uses 20 embedded questions to assess the student learning outcomes in each course. A subset of these questions is geared toward assessing student learning outcome 1 and another subset is geared toward assessing student learning outcome 2. There is some degree of overlap across the two subsets of questions - a single question can be used to assess both student learning outcome 1 and student learning outcome 2.

The program has established at least 70% of students scoring at least 70% on the 20 questions as its criterion for success:

#### Econ 101 Course SLO 1

11 of 20 questions embedded throughout exams

Criteria for success: 70% of students with at 70% of the questions correct

#### Econ 101 Course SLO 2

11 of 20 questions embedded throughout exams

Criteria for success: 70% of students with at 70% of the questions correct

#### Econ 102 Course SLO 1

11 of 20 questions embedded throughout exams

Criteria for success: 70% of students with at 70% of the questions correct

#### Econ 102 Course SLO 2

11 of 20 questions embedded throughout exams

Criteria for success: 70% of students with at 70% of the questions correct

Before making significant changes to the questions, the department analyzes data over two to four full assessment cycles to evaluate its effectiveness in helping students achieve the

student learning outcomes.

What is your assessment cycle, how are assessments carried out, and who is involved in the assessment process?

Course student learning outcomes are assessed once per academic year. All (2) student learning outcomes for both classes are assessed during the same semester. The department currently uses 20 questions that all instructors ask on exams.

There are two student learning outcomes and a subset of the 20 questions is geared toward assessing each outcome. For example, of the 20 questions used in Econ 101, questions 1, 2, 3, 4, 7, 10, 11, 12, 13, 14, and 18 are used to assess student learning outcome 1 while questions 1, 5, 6, 8, 9, 10, 15, 16, 17, 19, and 20 are used to assess student learning outcome 2. There is some overlap: for example questions 1 and 10 are used to assess student learning outcomes 1 and 2.

Similarly, of the 20 questions used in Econ 102, questions 1, 2, 3, 4, 7, 9, 10, 13, 19, and 20 are used to assess student learning outcome 1 while questions 1, 5, 6, 11, 12, 14, 15, 16, 17, 18, and 20 are used to assess student learning outcome 2.

During department meetings and/or by email, the full time and part time faculty agree in advance upon the 20 questions to ensure that all instructors cover the material similarly. Individual instructors can edit the wording of the questions so long as the essence and integrity of the question is not affected (for example, some instructors use the term "potential GDP" while others may use the term "full employment output" – these commonly used terms refer to the same concept and instructors may substitute these terms to more closely align with the language the instructor typically uses.)

In recent years, the questions have remained more or less the same for two or three years. This is done so that the department has several cycles worth of assessments to evaluate before making significant changes.

Once the department members have agreed on the 20 questions, instructors ask the questions on exams spread throughout the semester. Each exam will contain some of the questions. Some of the questions relate to material covered early on in the course and instructors will typically ask these questions on midterm 1. Questions relating to material covered later in the course will appear on later midterms or on the final exam. Not all instructors give the same number of exams: some give two midterms and a final exam; others give 3 midterms and a final exam. However, all of the questions are asked by each instructor during the semester.

At the end of the semester, the data is given to the full time faculty/department chair who consolidates it and analyzes the results. At the first department meeting during the subsequent semester, the results are discussed and faculty share experiences and ideas for improving student outcomes and/or improving the process.

Upon review of *course student learning outcome assessment data*, give at least one specific example of:

1. A *course student learning outcome* which students have definitely met and why you think students were successful.
2. A *course student learning outcome* which students have definitely not met and why you think students were unsuccessful. What changes have you considered making?

The program has established at least 70% of students scoring at least 70% on the 20 questions as its criterion for success

The program currently does not have an example of a course student learning outcome which students have definitely met. Percentage success rates have varied but are typically in the mid/upper 50s to mid 60s. During the 2017-2018 assessment cycle, the 65% success rate for Econ 102 Course SLO 1 (65% of students scoring 70% or higher) is the closest to a case where the outcome has been met, so I will analyze that example.

Course SLO 1 for Econ 102 states that a student who successfully completes the course should be able to "Apply analytical reasoning and problem solving skills to explain cause-and-effect relationships and formulate predictions at the aggregate economic level."

The questions used to assess this SLO involve setting up and solving either qualitative or quantitative problems. Coverage of these skills occurs early in the semester and these skills are used and reinforced repeatedly subsequently throughout the course. Further, the success rate tends to be slightly higher in Econ 102 than in Econ 101. This is most likely because, although Econ 101 and Econ 102 are not officially sequential (students can take either course first), the majority of students take Econ 101 first. While the content and applications differ across the two courses, the way of thinking and methods of solving problems are similar - many students in Econ 102 already have one semester of training in Economics. There is also some degree of sample selection bias present: some students who were not successful in Econ 101 might not advance to Econ 102 or, to put it another way, students who were successful in Econ 101 are more likely to be present in a sample of Econ 102 students.

During the 2017-2018 assessment cycle, the 59% success rate for Econ 101 Course SLO 2 (59% of students scoring 70% or higher) is an example where the outcome has not been met.

Course SLO 2 for Econ 101 states that a student who successfully completes the course should be able to "Explain the processes through which a market system allocates scarce resources at the individual level and analyze the efficiency of and the effects of government policies on the resulting allocation."

The questions used to assess this SLO also involve setting up and solving either qualitative or quantitative problems. These topics, especially several examples of government policy such as regulation of monopoly, externalities, and public goods, are covered later in the semester (usually in the last two to three weeks) and they are not used and reinforced as repeatedly as other topics subsequently throughout the course. While the concept of efficiency is introduced earlier, it is more abstract and harder for students to grasp than the concepts that SLO 1 covers. As mentioned above, unlike in Econ 102, many of the individuals in a sample of Econ 101 students will not have had prior exposure to Economics at the college level. One change that the department has considered making involve moving some of this material earlier in the semester to the extent that this is possible.

What changes has the program already made based on its assessment of *course student learning outcomes*? Give specific examples and describe how you know if the changes have increased success?

Evidence suggests that the majority of students are attempting to put in the minimal time necessary to pass the course rather than the expected time of 2 hours outside of class for every hour in class. Further, the faculty in the program hope that students will strive to understand and be able to explain and apply the material rather than memorize content without deeper understanding. The major changes that the program has undertaken in response to the disappointing assessment results have focused on creating incentives and encouragement for students to spend more quality study time outside of class and to spend that time sharpening their skills in applying concepts to solve problems. These changes include:

Using the text's companion website for required homework, quizzes, review tutorials, and other activities that provide students with feedback and additional practice in mastering the material.

Spending less time in class on content (definitions are expected to be mastered outside of and prior to class). More class time is devoted to applying and discussing concepts – activities that are more suited to time in the presence of the instructor.

Making expectations clear to students. Syllabi and first day discussions attempt to impress upon students the level of mastery expected and that they are expected to arrive to class prepared and are expected to keep up with material each week. Especially early on in the semester, instructors emphasize the importance of proper study habits and personal responsibility

for the students' success.

The full time faculty has implemented an extra credit opportunity whereby students meet individually or in small groups with the instructor to discuss their backgrounds, expectations, apprehensions, and studying strategies early in the semester (within the first 3 weeks). It is hoped that this "ice breaker" early in the semester will encourage students to meet with the instructor subsequently should they have any questions about the course material or about how to best study for the course. Since it is an extra credit opportunity and thus optional, not all students meet with the instructor (about 75% do), but there appears to be a small but positive correlation between participating in this extra credit opportunity and subsequent visits to office hours, in-class participation, and successful performance in the course.

Emphasizing instructors' availabilities and office hours. Student support services are also emphasized and encouraged early in the semester.

Choosing engaging examples, in-class activities, discussion topics, and in-class experiments to maintain students' interest and keep class morale and enthusiasm high.

The program continues to make every effort to create incentives and to maintain a supportive environment for all students to succeed, but the program recognizes that a certain significant percentage of SCC students are lacking the motivation, preparation, and/or maturity to achieve the program's course SLOs.

Upon review of *program student learning outcome assessment data*, what patterns, trends, or anomalies did your program identify?

The questions used to assess the course SLOs are also used to assess the program SLOs. The program SLOs were most recently assessed during the 2018-2019 cycle. The results were

Econ 101 Course SLO 1

11 of 20 questions embedded throughout exams

Criteria for success: 70% of students with at 70% of the questions correct

Percent of students successful for SLO 1: 64%

Econ 101 Course SLO 2

11 of 20 questions embedded throughout exams

Criteria for success: 70% of students with at 70% of the questions correct

Percent of students successful for SLO 2: 60%

Econ 102 Course SLO 1

11 of 20 questions embedded throughout exams

Criteria for success: 70% of students with at 70% of the questions correct

Percent of students successful for SLO 1: 67%

Econ 102 Course SLO 2

11 of 20 questions embedded throughout exams

Criteria for success: 70% of students with at 70% of the questions correct

Percent of students successful for SLO 2: 62%

The Economics program considers the beginning of the ability to think like an economist to be an outcome common to any course a student takes within the program. The questions relate to the fundamental ideas of this process: scarcity, opportunity cost, optimization, relative prices, and incentives. Question 2 addresses scientific method.

The outcomes assessment data suggests that a significant number of students are attempting to put in the minimal time necessary to pass the course rather than the expected time of 2 hours outside of class for every hour in class.

Econ 101 and Econ 102 formerly had Mathematics 80 as a prerequisite. In response to AB705, this was modified to include enrollment through the Mathematics placement process. It may be too early to determine, but preliminary results suggest a slight decline in student performance since this went into effect. The department will monitor this over the next few assessment cycles.

The program recognizes that the types of questions being asked tend to be those that only the top students are prepared to answer. Since the SLOs are phrased using the preface "upon successfully completing a course, the student should be able to ..." and successful course completion means a grade of A, B, or C, the program will consider revising the questions so that students passing the course are more likely to be able to answer them correctly.

The program would like to hear from all former students about how they feel their participation in Economics classes at SCC impacted (positively or negatively) their subsequent academic and career experiences.